

पतञ्जलि विश्वविद्यालय, ( हरिद्वार )

पाठ्यक्रम - B.A. - दर्शन ( ऑनर्स )

वर्ष- 2021-22



# पतञ्जलि विश्वविद्यालय, हरिद्वार

## B.A. Darshan

2021 - 22

### Program Educational Objectives (PEOs)

- **PEO 1** – To inculcate human and moral life values in the student by learning the principles of Indian shaddarshan philosophies
- **PEO 2** – By imparting a proper sense of history, social science and political science to the student, by equipping the student with the glory of the past and the resolve of the golden future, to inculcate humanity in the family, social and political life.
- **PEO 3** – By giving understanding of Shrimadbhagwadgita and Upanishads, to equip the student with right devotion and right work.
- **PEO 4** – To awaken within the student the feeling of oneness, coexistence and universal brotherhood with self-realization by establishing individual and collective harmony by integrating the knowledge of body and universe with the understanding of Yoga science and Yajna science.
- **PEO 5** – To develop proficiency in English language along with national language and mother tongue.

### Program Specific Outcomes (PSOs)

After completing of the program, the students will be able to

- **PSO 1** – Build a divine personality and divine character by attaining the right understanding of the scriptures such as philosophy, political science, social science, Gita Upanishad, etc.
- **PSO 2** – Avoid (retire from) ignorance, mistrust and bad deeds, and gets engaged in good deeds and self-religion by being equipped with good knowledge and goodwill with the theoretical understanding of Vedic Philosophical schools.
- **PSO 3** – Become skilled and proficient in his overall physical, mental, intellectual and spiritual development while being equal in all dialectical situations with the knowledge and faith described in Shrimad Bhagvad Gita.
- **PSO 4** – Realise the Brahmavidya described in Upanishads and strong detachment from worldly attractions and complete loyalty and faith towards Guru and God.
- **PSO 5** – Destroy all the diseases and troubles present in himself and the society with the understanding of the science behind Yoga and Yagya.

**पाठ्यक्रम - B.A. - दर्शन**  
**प्रथम, द्वितीय एवं तृतीय वर्ष**  
**के कुछ सामान्य नियम**

- ❖ परीक्षा में 50% अंक प्राप्त करने वाले छात्र को ही उत्तीर्ण माना जायेगा।
- ❖ प्रस्तुत पाठ्यक्रम तीन वर्ष का होगा।
- ❖ प्रत्येक वर्ष 2 सत्र (Semester) में, 2 बार परीक्षाएं होंगी।
- ❖ प्रत्येक परीक्षा में छः प्रश्न-पत्र होंगे।
- ❖ दो प्रश्नपत्र दर्शनों से सम्बन्धित, तृतीय व चतुर्थ संस्कृत व्याकरण तथा पञ्चम पत्र संस्कृत साहित्य व छठा अंग्रेजी भाषा का होगा।
- ❖ अन्तिम सत्र में पर्यावरण विज्ञान विषय अनिवार्य होगा।
- ❖ सभी प्रश्न-पत्र 100-100 अंक के होंगे।
- ❖ प्रत्येक प्रश्न-पत्र में 30 अंकों की आन्तरिक परीक्षा एवं 70 अंकों की बाह्य परीक्षा होगी।
- ❖ कुल अंक प्रत्येक सत्र में 600, एक वर्ष में 1200 तथा तीनों वर्ष के मिलाकर - 3600 अंक होंगे।
- ❖ परीक्षा का माध्यम English Paper को छोड़कर शेष सभी पत्रों में हिन्दी या संस्कृत होगा।
- ❖ प्रत्येक परीक्षा का निर्धारित समय 3 घण्टे होगा।

**Subject: Modern Indian Language – English**

Note: The subject shall be taught in all the six semesters. In each semester the paper shall be of 100 marks – 70 marks for semester-end examination and 30 marks for sessional examination. The Paper is divided into five units. In semesters V and VI there shall not be any written examination for 70 marks in semester-end examination. There shall be a Practical examination in these semesters in place of theory papers.

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, प्रथम वर्ष**  
**Semester -I**

**Paper – 1 yogadarśana**

**Paper Code - BD-101**

(70+30=100)

**Course Objectives-**

- *samādhipāda-abhyāsa va vairāgya se prāpta hone vālī samādhi kā bodha*
- *sādhanaābhūta-aṣṭāṅgayoga kā jñāna* /
- *vibhūtipāda- dhāraṇā-dhyāna-samādhi evaṃ vibhinna siddhiyoṃ kā bodha* /
- *kaivalyapāda- dharmamedha samādhi tathā kaivalya kā jñāna* /

पातञ्जल योगसूत्र

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *samādhipāda:- abhyāsa evaṃ vairāgya pūrvaka samādhi kā paricaya* /
- *sādhana pāda:- aṣṭāṅga yoga kā paricaya* /
- *vibhūti pāda:- dhāraṇā - dhyāna - samādhi evaṃ vibhinna siddhiyoṃ kā paricaya* /
- *kaivalya pāda:- dharmamegha samādhi kā phala evaṃ kevalya svarūpa kā paricaya* /

**Paper - 2**

**sāṃkhyadarśana Paper Code - BD-102**

(70+30=100)

**Course Objectives-**

- *duḥkhatraya kā svarūpa evaṃ mukti kā jñāna* /
- *sr̥ṣṭi prakriyā evaṃ mahādādi ke svarūpa kā bodha* /
- *viśeṣoṃ kī utpatti evaṃ sūkṣma śarīra kā jñāna* /
- *buddhisarga evaṃ mukti kā bodha* /

सांख्यसूत्र-(1-3 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *duḥkhatraya kā svarūpa evaṃ mukti paricaya* /
- *suṣṭi prakriyā evaṃ mahadādi kā svarūpa* /
- *viśeṣoṃ kī utpatti evaṃ sūkṣma śarīra paricaya* /
- *buddhisarga evaṃ mukti kī yukti* /

निर्धारित पाठ्यपुस्तक- सांख्यदर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ- आचार्य आनन्दप्रकाश जी, विद्योदयभाष्य सहित, सांख्यदर्शन (आचार्य उदयवीर शास्त्री जी)

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

## Paper - 3

### *saṃskṛta vyākaraṇa- I* Paper Code - BD-103

(70+30=100)

#### Course Objectives-

- varṇāṅ ke sthānoṃ kā bodha।
- saṃjñā-saṃjñī kā jñāna।
- sāmānya (ac-saṃdhi) kā bodha।
- śabdarūpa evaṃ dhātu-rūpa kā jñāna।

प्रथम इकाई- वर्णोच्चारण शिक्षासूत्राणि,	- 14 अंक
द्वितीय इकाई- संज्ञाप्रकरणम्,	- 14 अंक
तृतीय इकाई- सन्धिप्रकरणम्,	- 14 अंक
चतुर्थ इकाई- शब्दरूप, धातुरूप (1-15 अभ्यास पर्यन्त)	- 14 अंक
पञ्चम इकाई- अनुवाद, संख्याएँ (1-100)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- varṇo ke sthānoṃ kā paricaya।
- saṃjñā - saṃjñī paricaya।
- sāmānya (aca-saṃdhi) paricaya।
- śabda rūpa - dhāturūpa paricaya।

निर्धारित पाठ्यपुस्तक- व्याकरण प्रवेश, प्रारम्भिक रचनानुवाद कौमुदी।

प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

## Paper - 4

### *saṃskṛta vyākaraṇa - II* Paper Code - BD-104

(70+30=100)

#### Course Objectives-

- abhyāntara evaṃ bāhya prayatnoṃ kā bodha।
- viśiṣṭa saṃjñāoṃ kā jñāna।
- paribhāṣāoṃ kā sāmānya bodha।
- pūrva-para rūpa saṃdhi kā jñāna।

प्रथम इकाई- शिक्षा प्रकरणम्	- 14 अंक
द्वितीय इकाई- संज्ञाप्रकरणम्	- 14 अंक
तृतीय इकाई- 1-15 परिभाषायें	- 14 अंक
चतुर्थ इकाई- संहिता (सन्धि) प्रकरणम्- अच् सन्धि	- 14 अंक
पञ्चम इकाई- संहिता (सन्धि) प्रकरणम्- हल् सन्धि	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- ābhyāntara evaṃ bāhyāntara prayatnoṃ kā paricaya।

- viśiṣṭa saṃjñāṃ kā paricaya।
- paribhāṣāṃ kā sāmānya jñāna।
- pūrva - para rūpa saṃdhi paricaya।

**निर्धारित पाठ्यपुस्तक-** व्याकरण चन्द्रोदय-पञ्चम खण्ड (श्री चारुदेव शास्त्री)

प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

### Paper - 5

**saṃskṛta sāhitya Paper Code - BD-105**

(70+30=100)

#### Course Objectives-

- upaniṣadoṃ kā sāmānya bodha।
- kenopaniṣad kā sāmānya bodha।
- kaṭhopeniṣad -naciketā ke dvārā pūche gaye tīna praśnoṃ kī jānakārī।
- gītā-dvītīya adhyāya sāmkhya siddhāntoṃ kā jñāna।

प्रथम इकाई- ईशोपनिषद्,	-15 अंक
द्वितीय इकाई- केनोपनिषद्,	-15 अंक
तृतीय इकाई- कठोपनिषद् प्रथम वल्ली	-15 अंक
चतुर्थ इकाई- गीता-द्वितीय अध्याय	-15 अंक
पञ्चम इकाई- गीता-तृतीय अध्याय	-10 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- upaniṣadoṃ kā samānya paricaya।
- kenopaniṣad kā samānya paricaya।
- kaṭhopeniṣad (naciketā ke yama se pūche gae tīna praśno)
- gītā dvītīya adhyāya sāmkhya siddhāntoṃ kā paricaya।

**निर्धारित पाठ्य ग्रन्थ-** उपनिषद्- एकादशोपनिषद् - डॉ. सत्यव्रत सिद्धान्तालंकार जी,

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48

गीता- श्रीमद्भगवद्गीता गीतामृत- स्वामी रामदेव जी, दिव्य प्रकाश, पतंजलि योगपीठ, हरिद्वार

**सहायक ग्रन्थ** - उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

**Paper - 6**  
**ENGLISH LITERATURE -1**  
**Paper Code - BD-106**

(70+30=100)

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

**1. Reading and Communication Skills:**

- 1.1 An Introduction to the International Phonetic Alphabet for English  
(Phonetic Symbols, Phonemes, Monophthongs, Diphthongs, Accent, Intonation, Stress etc.)
- 1.2 Use of Punctuations in Reading
- 1.3 Theory of Communication
- 1.4 Types and Modes of Communication

**Suggested Reading & Resources for Practice:**

- Dictionaries—
  - Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
  - Oxford English-Hindi Dictionary (Oxford University Press)
  - Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)
- Communication Skills —Sanjay Kumar & Pushpa Lata (Oxford University Press, New Delhi)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055, ISBN: 81-219-0009-3)
- Useful You Tube Channels and Other Helpful Mobile Applications

**2. Listening Skills :**

- 2.1 To Listen to the Good Speakers of English Language Having Good Contents

**Resources for Practice:**

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru
  - BK Shivani

**3. Grammar Skills:**

- 3.1 Parts of Speech
- 3.2 Articles
- 3.3 Vocabulary (Synonyms & Antonyms)
- 3.4 The Sentence—Parts, Types, Forms, Question Tags and Sentence Chart (Based on Structures)
- 3.6 Punctuations
- 3.5 Simple Present, Past and Future Tenses (Without Main Verbs—SHO i.e. *is, am, are, was, were, will/shall be; has/have/had/will/shall have* Type Sentences), Imperative Sentences

### 3.6 Simple Translation (Hindi to English and Vice-Versa)

#### **Suggested Reading & Resources for Practice:**

- Aao Saral Angrezi Seekhein Volume-1—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055)
- How to Write Correct English (Anglo-Hindi) —R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002)
- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **4. Writing Skills:**

##### 4.1 Short and Simple Messages

#### **Suggested Reading & Resources for Practice:**

- Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **5. Speaking Skills:**

##### 5.1 General Conversation & Expressions used in Day-to-Day Life

#### **Suggested Reading & Resources for Practice:**

- Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **Course Outcomes-**

- Course Specific Outcomes
- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

#### **वैकल्पिक प्रश्न-पत्र**

**विषय :** मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, प्रथम वर्ष**  
**Semester -II**

**Paper - 1**

***sāṃkhyakārikā* Paper Code - BD-201**

(70+30=100)

**Course Objectives-**

- duḥkhatraya kī ātyantika nivṛtti kā bodha।
- vyakta-avyakta evaṃ puruṣa ke paraspara meṃ sādharma -vaidharma kā bodha।
- 50 prakāra ke buddhisarga kā jñāna।
- jīvanamukti ke bāda bhī prārabdha karmāśaya ke bhoga kā jñāna।

सम्पूर्ण सांख्यकारिका

(कण्ठस्थीकरण, कारिकार्थ एवं विषय परिचय)

**Course Outcomes-**

- duḥkha traya kī ātyāntika nivṛtti kā upāya।
- vyakta avyakta evaṃ puruṣa ke paraspara meṃ sādharma - vaidharma kā paricaya।
- 50 prakāra ke baddhi sarga kā paraciya।
- jīvanamukta bhī śarīra dhāraṇa kaise rakhate hai? kā paricaya।

निर्धारित पाठ्यपुस्तक - सांख्यकारिका- गौडपादभाष्य सहित - आचार्य जगन्नाथशास्त्री।

प्रकाशक- 41 यू.ए. बंगलो रोड, जवाहर नगर, दिल्ली-110007

**Paper - 2**

***sāṃkhyadarśana* Paper Code - BD-202**

(70+30=100)

**Course Objectives-**

- vivekajñāna hetu vibhinna ākhyāpikāṃ kā bodha।
- dehātirikta caitanyavāda kā jñāna।
- dharmādharma kī siddhi kā bodha।
- prakṛti kī pravṛtti va puruṣa kī mukti kā jñāna।

सांख्यसूत्र (4-6 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- viveka-jñāna ke sādhana hetu vibhinna ākhyāmāyikāṃ।
- dehātirikta caitanyavāda kā paricaya।
- dharmādharma kī siddhi kā paricaya।
- prakṛti kī pravṛtti evaṃ puruṣa kī nivṛti kā kāraṇa।

निर्धारित पाठ्य ग्रन्थ - सांख्यदर्शनम्, दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - सांख्यदर्शन- आचार्य उदयवीर शास्त्री जी।

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 3**

***saṃskṛta vyākaraṇa - I* Paper Code - BD-203**

(70+30=100)

### Course Objectives-

- vākyaracanā kā jñāna।
- ac-hala va visarga saṁdhi kā bodha।
- anuvāda kā jñāna।
- kāraka kā sāmānya evaṁ viśeṣa bodha।

प्रथम इकाई- रचनानुवादकौमुदी (अध्याय 1-30 अभ्यास),	- 14 अंक
द्वितीय इकाई- सन्धि प्रकरण,	- 14 अंक
तृतीय इकाई- अनुवाद,	- 14 अंक
चतुर्थ इकाई- शब्दरूप, धातुरूप (1-30 अभ्यास पर्यन्त),	- 14 अंक
पञ्चम इकाई- कारक परिचय,	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक
<b>निर्धारित पाठ्यपुस्तक</b> - रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)	
प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001	

### Course Outcomes-

- vākya racanā kā paricaya।
- ac - hal - visarga saṁdhi kā paricaya।
- anuvāda kā svarūpa।
- kāraka kā sāmānya evaṁ viśeṣa paricaya।

### Paper - 4

#### samśkr̥ta vyākaraṇa – II Paper Code - BD-204

(70+30=100)

### Course Objectives-

- prathamā evaṁ dvitīyā vibhakti kā bodha।
- tṛtīyā, caturthī evaṁ pacamī vibhakti kā jñāna।
- ṣaṣṭhī, saptamī tathā upapada kā bodha।
- samāsa kā sāmānya jñāna।

प्रथम इकाई- विभक्ति प्रकरण (पृष्ठ 1-26 पर्यन्त),	- 14 अंक
द्वितीय इकाई- विभक्ति प्रकरण (पृष्ठ 27-53 पर्यन्त),	- 14 अंक
तृतीय इकाई- विभक्ति प्रकरण (पृष्ठ 54-78 पर्यन्त),	- 14 अंक
चतुर्थ इकाई- समास प्रकरण (अव्ययीभाव समास, तत्पुरुष समास)	- 14 अंक
पञ्चम इकाई- समास प्रकरण (बहुब्रीहि समास, द्वन्द्व समास)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

### Course Outcomes-

- prathamā, dvitīya, vibhakti paricaya।
- tṛtīyā caturthī, pacamī vibhakti paricaya।
- ṣaṣṭhī, saptamī, upapada vibhakti paricaya।
- samāsa kā sāmānya paricaya।

निर्धारित पाठ्यपुस्तक - व्याकरण चन्द्रोदय-प्रथम खण्ड (श्री चारुदेव शास्त्री)

प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

**Paper - 5**

**samskr̥ta s̥ahitya Paper Code - BD-205**

(70+30=100)

**Course Objectives-**

- śreya-preya tathā vidyā-avidyā kā bodha।
- ratha evaṃ rathī ke rūpaka se paramātmā kī prāpti kā jñāna।
- indriyoṃ kī bahirmukhatā kā bodha tathā yogī indriyoṃ ko rokakara ātmajñāna prāpta karānā hai।
- jīvamukti evaṃ videhamukti kā jñāna ।

प्रथम इकाई- उपनिषद् - कठोपनिषद् (2-3 वल्ली)	-14 अंक
द्वितीय इकाई- उपनिषद् - कठोपनिषद् (तृतीय वल्ली)	-14 अंक
तृतीय इकाई- कठोपनिषद् (चतुर्थ वल्ली)	-14 अंक
चतुर्थ इकाई- कठोपनिषद् (पञ्चम, षष्ठ वल्ली)	-14 अंक
पञ्चम इकाई- गीता - चतुर्थ अध्याय (ज्ञानकर्मसंन्यासयोग), पञ्चम अध्याय (कर्मसंन्यासयोग)	-14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	-30 अंक

**Course Outcomes-**

- śreya-preya, vidyā-avidyā kā jñāna।
- ratha evaṃ rathī ke rūpaka se paramātmā prāpti upāya kathana।
- indriyoṃ kī bahirmukhatā kā vivaraṇa।
- jīvanamukti evaṃ videhamukti nirūpaṇa।

**निर्धारित पाठ्य ग्रन्थ - उपनिषद्- एकादशोपनिषद् - डॉ. सत्यव्रत सिद्धान्तालंकार जी,**

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48

गीता- श्रीमद्भगवद्गीता गीतामृत - स्वामी रामदेव जी, दिव्य प्रकाश, पतंजलि योगपीठ, हरिद्वार

**सहायक ग्रन्थ- उपनिषद् रहस्य- पण्डित भीमसेन शर्मा**

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

**1. Reading and Comprehension Skills :**

1.1 Transliteration

1.2 Word Formation by Adding Prefixes & Suffixes with their Correct Pronunciation

1.3 Reading Strategies & Abilities (Intensive, Extensive, Skimming and Scanning etc.)

1.4 Comprehension

**Suggested Reading & Resources for Practice:**

➤ Glossaries—

- The Practical Approach to Divinity—Pujya Chandra Swami Udasin ji (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
- Bhagavad-gita As It Is (The Bhaktivedanta Book Trust, Hare Krishna Land, Juhu, Mumbai 400049, India)

➤ Dictionaries—

- Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
- Oxford English-Hindi Dictionary (Oxford University Press)

➤ Communication Skills —Sanjay Kumar & Pushpa Lata (Oxford University Press, New Delhi)

➤ Effective Strategies for Teaching Reading—Allyn and Bacon

➤ Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, Ist Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)

➤ Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)

**2. Listening Skills:**

2.1 To Listen to the Good Speakers of English Language Having Good Contents

**Resources for Practice:**

➤ Useful You Tube Channels and Other Helpful Mobile Applications—

- Sadhguru
- BK Shivani

**3. Grammar Skills:**

3.1 Non-finites (Infinitives, Gerunds & Participles)

3.2 Modals (will, shall, can, could, may, must, might, would, ought)

to, should, dare, need)—Active Voice

3.3 Tenses—Active Voice

3.4 Passive Voice of Tenses & Modals

3.5 Vocabulary (Synonyms & Antonyms)

3.6 One Word Substitution

3.7 Translation (Hindi to English and Vice-Versa)

**Suggested Reading & Resources for Practice:**

- Aao Saral Angrezi Seekhein Volume-I & II—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125, ISBN: 978-81-89764-25-8)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055, ISBN: 81-219-0009-3)
- How to Write Correct English (Anglo-Hindi) —R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002, ISBN: 978-81-7709-107-6)
- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

**4. Writing Skills:**

4.1 Short Paragraph/Story Writing

4.2 E-mail Writing

4.3 Letter & Application Writing

4.4 Notice Writing

**Suggested Reading & Resources for Practice:**

- Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)
- Useful You Tube Channels and Other Helpful Mobile Applications

**5. Speaking Skills:**

5.1 Conversations in Various Situations (e.g. Conversation between saint and his disciple, Conversation at Railway Station, Bank, Post Office etc.)

5.2 Telephonic Conversation

**Suggested Reading & Resources for Practice:**

- Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)
- Useful You Tube Channels and Other Helpful Mobile Applications

**6. Literature:**

**(Prose)**

6.1 The Last Lesson—*Alphonse Daudet*

6.2 A Truly Beautiful Mind—*Albert Einstein*

**(Rishis, Mystics and Heroes of Ancient Bharat)**

6.3 Maharishi Patanjali

6.4 Aryabhata

**(Poetry)**

6.5 Mercy—*William Shakespeare*

6.6 Where the Mind is Without Fear—*Rabindra Nath Tagore.*

**Suggested Reading & Resources for Practice:**

- Rishis, Mystics and Heroes of India, Volume I—Sadhu Mukundcharandas (*Swaminarayan Asharpith, Shahibaug, Amdavad-4, India*)

- Selected Works of William Shakespeare (*Mundus Media, ISBN 978-1587260179, 1587260174*)
  - Rabindra Nath Tagore Selected Poems (*Penguin India, ISBN 0140183663, 978-0140183665*)
  - Collected Works of Alphonse Daudet (*Scholar's Choice, ISBN 1297056477, 978-1297056475*)
- Albert Einstein—the story of a genius (*Viva Books, ISBN 9789386243973, 978-9386243973*)

#### **Course Outcomes-**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

#### **वैकल्पिक प्रश्न-पत्र**

विषय : मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, द्वितीय वर्ष**  
**Semester 3**

**Paper – 1 *nyāya darśana-1***

**Paper Code - BD-301**

(70+30=100)

**Course Objectives-**

- pramānādi ṣoḍśa padārthoṃ kā jñāna।
- saṃśaya evaṃ śabda śakti kā bodha।
- śabda parimāṇa prakaraṇa kā jñāna।
- jāti evaṃ nigraha sthāna kā bodha।

न्याय सूत्र (प्रथम व द्वितीय अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- pramāṇa - prameyādi ṣoḍśa padārtha vivaraṇa।
- saṃśaya evaṃ śabda śakti parīkṣā।
- śabda pariṇāma prakaraṇa।
- jāti evaṃ nigraha sthāna ke svarūpa evaṃ prabheda।

निर्धारित पाठ्यपुस्तक - न्यायदर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - विद्योदय भाष्य सहित न्यायदर्शन (आचार्य उदयवीर शास्त्री जी)

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 2**

***vaiśeṣika darśana-1* Paper Code - BD-302**

(70+30=100)

**Course Objectives-**

- niḥśreyasa ke sādhanom kā bodha।
- pañcamahābhūtoṃ kā jñāna।
- ātmā evaṃ mana kā bodha।
- nitya evaṃ anitya padārthoṃ kā jñāna।

वैशेषिक सूत्र- (1-5 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- niḥśreyas ke sādhanom kā vivaraṇa।
- pañcamahābhūtoṃ kī parīkṣā।
- ātmā evaṃ mana kā paricaya।
- nitya evaṃ anitya padārtha svarūpa

निर्धारित पाठ्य ग्रन्थ - वैशेषिक दर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - वैशेषिक दर्शन - आचार्य उदयवीर शास्त्री।

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 3**

***saṃskṛta vyākaraṇa-1* Paper Code - BD-303**

(70+30=100)

**Course Objectives-**

- viśeṣa vākya racanā kā bodha।
  - samāsa kā viśiṣṭa kā jñāna।
  - śabdarūpa evaṃ dhāturūpa kā bodha।
  - jaṭila anuvāda kā jñāna।
- |  |          |
|--|----------|
| प्रथम इकाई- रचनानुवादकौमुदी (अध्याय 31-60 अभ्यास),         | - 20 अंक |
| द्वितीय इकाई- समास परिचय,                                  | - 20 अंक |
| तृतीय इकाई- शब्दरूप (31-64 अभ्यास), धातुरूप (36-60 अभ्यास) | - 20 अंक |
| चतुर्थ इकाई- अनुवाद,                                       | - 10 अंक |
| पञ्चम इकाई- शास्त्र स्मरण एवं लेखन                         | - 30 अंक |

#### Course Outcomes-

- viśeṣa vākya racanā paricaya।
- samāsa kā viśiṣṭa vivaraṇa।
- śabdarūpa evaṃ dhātu kā viśeṣa vivaraṇa।
- jaṭila anuvāda kā paricaya।

निर्धारित पाठ्यपुस्तक- रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)  
प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

#### Paper - 4

#### samskr̥ta vyākaraṇa- II Paper Code - BD-304

#### Course Objectives-

- pāṇinīya liṃgānuśāsana meṃ strīliṃga sūtreṃ kā bodha।
- pāṇinīya liṃgānuśāsana meṃ pulligādhikāra kā jñāna।
- pāṇinīya liṃgānuśāsana meṃ napuṃsakaliṃgādhikāra kā bodha।
- strīpuṃsādhikāra evaṃ puṃnapuṃsādhikāra kā jñāna।

प्रथम इकाई- पाणिनीय लिङ्गानुशासनं स्त्रीलिङ्गाधिकारः	- 14 अंक
द्वितीय इकाई- पाणिनीय लिङ्गानुशासनं पुल्लिङ्गाधिकारः	- 14 अंक
तृतीय इकाई- पाणिनीय लिङ्गानुशासनं नपुंसकलिङ्गाधिकारः	- 14 अंक
चतुर्थ इकाई- स्त्रीपुंसाधिकारः एवं पुंनपुंसकाधिकारः	- 14 अंक
पञ्चम इकाई- रामो हरिःकरी भूभृद् भानुःकर्त्ता च चन्द्रमाः।	- 14 अंक
तस्थिवान् भगवानात्मा दशैते पुंसि नायकाः॥ (शब्दरूप)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

निर्धारित पाठ्यपुस्तक- व्याकरण चन्द्रोदय-पञ्चम खण्ड (श्री चारुदेव शास्त्री)  
प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

#### Course Outcomes-

- pāṇinīya liṃgānuśāsana meṃ strīliṃga sūtra paricaya।
- pāṇinīya liṃgānuśāsana meṃ pulliṃgādhikāra sūtra paricaya।
- pāṇinīya liṃgānuśāsana meṃ napuṃsakaliṃgādhikāra sūtra paricaya।
- strīpuṃsādhikāra evaṃ puṃnapuṃsādhikāra vivaraṇa।

Paper - 5

*saṃskṛta sāhitya* Paper Code - BD-305

(70+30=100)

**Course Objectives-**

- kabandhī ādi ṭṭaṣiyom ke chaḥ praśnoṃ kā bodha।
- parā evaṃ aparā vidyā kā jñāna।
- ātmasaṃyamayoga kā bodha।
- bhaktiyoga kā jñāna।

प्रथम इकाई- प्रश्नोपनिषद्	- 20 अंक
द्वितीय इकाई- मुण्डकोपनिषद्	- 20 अंक
तृतीय इकाई- गीता - षष्ठोऽध्याय (आत्मसंयमयोग)	- 20 अंक
चतुर्थ इकाई- द्वादश अध्याय (भक्तियोग)	- 10 अंक
पञ्चम इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

**Course Outcomes-**

- kabandhī ādi ṛṣiyom ke chaḥ praśnoṃ kā vivaraṇa।
- parā-aparā vidyā kā upadeśa।
- ātmasaṃyamayoga kā paricaya।
- bhaktiyoga kā paricaya।

**निर्धारित पाठ्यपुस्तक-** उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
**सहायक ग्रन्थ-** उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

## Paper - 6

### ENGLISH LITERATURE -3 Paper Code - BD-306

(70+30=100)

#### Course Objectives-

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### 1. Reading and Comprehension Skills:

1.1 Words Which Commonly Confuse (Homophones, Homonyms)

1.2 Words that are Pronounced Differently than Spelled (e.g. bouquet, lieutenant, knife, knowledge, doubt, tough etc.)

1.3 Comprehension

#### Suggested Reading & Resources for Practice:

➤ Dictionaries—

- Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
- Oxford English-Hindi Dictionary (Oxford University Press)
- Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)

➤ General English for All Classes—U.R. Mediratta (Jiwan Publishing House Pvt Ltd India, F-227, Mansarover Garden, Main Market, New Delhi-110015)

➤ Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, 1st Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)

➤ Useful You Tube Channels and Other Helpful Mobile Applications

#### 2. Listening Skills:

2.1 To Listen to the Good Speakers of English Language Having Good Contents

#### Resources for Practice:

- Useful You Tube Channels and Other Helpful Mobile Applications—
- Sadhguru

• BK Shivani

### 3. Grammar Skills:

- 3.1 Modals Perfect—Active Voice & Passive Voice
- 3.2 Clauses
- 3.3 Narration
- 3.4 Syntax
- 3.5 Synthesis
- 3.6 Vocabulary (Synonyms & Antonyms)
- 3.7 One Word Substitution
- 3.8 Translation (Hindi to English and Vice-Versa)

#### **Suggested Reading & Resources for Practice:**

- Aao Saral Angrezi Seekhein Volume-II—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
- High School English Grammar and Composition—P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055)
- How to Write Correct English (Anglo-Hindi)—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002)
- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

### 4. Writing Skills:

- 4.1 Advertisements
- 4.2 Reports
- 4.3 Articles
- 4.4 Posters

#### **Suggested Reading & Resources for Practice:**

- Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)
- Useful You Tube Channels and Other Helpful Mobile Applications

### 5. Speaking Skills:

- 5.1 Monologue/Extempore
- 5.2 Group Discussion
- 5.3 Public Speech

#### **Suggested Reading & Resources for Practice:**

- Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)
- Useful You Tube Channels and Other Helpful Mobile Applications

## 6. Literature:

### (Prose)

5.1 The Last Leaf—O. Henry

5.2 The Blue Umbrella—Ruskin Bond

### (Rishis, Mystics and Heroes of Ancient Bharat)

5.3 Panini

5.4 Sushrut

### (Poetry)

5.5 Brahma—*R.W. Emerson*

5.6

### Suggested Reading & Resources for Practice:

- Rishis, Mystics and Heroes of India, Volume I—Sadhu Mukundcharandas ( Swaminarayan Asharpith, Shahibaug, Amdavad-4, India)
- Selected Works of O. Henry
- Selected Works of R.W. Emerson
- Selected Short Stories by Ruskin Bond
- Albert Einstein—the story of a genius (Viva Books, ISBN 9789386243973, 978-9386243973)

### Course Outcomes-

- Course Specific Outcomes
- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

### वैकल्पिक प्रश्न-पत्र

विषय : मनोविज्ञान,

भारतीय ज्ञान परम्परा,

धर्मशास्त्र,

प्राचीन भारतीय इतिहास,

अर्थशास्त्र,

राजनीतिशास्त्र।

### परिणाम-

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, द्वितीय वर्ष**  
**Semester -IV**

**Paper – 1 *nyāya darśana-2***

**Paper Code - BD-401**

(70+30=100)

**Course Objectives-**

- śarīrādi vyatirikta ātmavāda kā bodha।
- śūnyavāda ādi matom kī jānakārī।
- phala, duḥkha evaṃ apavarga kī parīkṣā se unake svarūpa kā bodha।
- tatvajñāna kī prāpti ke sādhanom kā jñāna।

न्याय सूत्र- तृतीय, चतुर्थ एवं पञ्चम अध्याय-

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

निर्धारित पाठ्य ग्रन्थ - न्यायदर्शनम्- दिव्य प्रकाशन, दिव्ययोग मंदिर (ट्रस्ट)

सहायक ग्रन्थ - विद्योदयभाष्य सहित न्यायदर्शन (आचार्य आनन्दप्रकाश जी)

**Course Outcomes-**

- śarīravvyatirikta ātmavāda kā paricaya।
- śūnyavāda ādi matom kā nirākaraṇa।
- phala-duḥkha apavarga kī parīkṣā।
- tattvajñāna prāpti ke sādhanā।

**Paper - 2**

***vaiśeṣika darśana-2* Paper Code - BD-402**

(70+30=100)

**Course Objectives-**

- veda kī pauruṣeyatā kā bodha।
- 24 guṇom kī jānakārī।
- abhāva ke svarūpa evaṃ usake bhedom kā jñāna।
- samavāyikāraṇa, asamvāyī evaṃ nimitta kāraṇa kā bodha।

वैशेषिक सूत्र -(6-10 अध्याय)-

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- veda kī pauruṣeyatā kā paricaya।
- 24 guṇom kī parīkṣā।
- abhāva ke svarūpa evaṃ bheda vivaraṇa।
- samavāyī-asamvāyī nimitta kāraṇa paricaya।

निर्धारित पाठ्य ग्रन्थ - वैशेषिक दर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - वैशेषिक दर्शन- आचार्य उदयवीर शास्त्री।

**Paper - 3**

***saṃskṛta vyākaraṇa-1* Paper Code - BD-403**

(70+30=100)

**Course Objectives-**

- śatādi pratyaayom kā bodha।

- 65 dhātuṃ kā jñāna।
- nibaṃdha ke rūpṃ kā jñāna।
- alaṃkāra ke rūpāṃ kā jñāna।

प्रथम इकाई- प्रत्यय परिचय	- 14 अंक
द्वितीय इकाई- 65 धातुं	- 14 अंक
तृतीय इकाई- पत्रलेखन	- 14 अंक
चतुर्थ इकाई- निबन्धलेखन	- 14 अंक
पञ्चम इकाई- काव्यदीपिका, अष्टमशिखा-I (अलंकार स्वरूपम्-व्यतिरेक अलंकार पर्यन्त)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- sanādi pratyayṃ kā vivaraṇa।
- 65 dhātuṃ kā paricaya।
- nibandha lekhaṇa paricaya।
- alaṃkāra svarūpa paricaya।

निर्धारित पाठ्यपुस्तक - रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)

प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)-

प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,

पो. बाक्स नं.- 1129, वाराणसी-221001

#### Paper - 4

#### samskr̥ta vyākaraṇa- II Paper Code - BD-404

(70+30=100)

#### Course Objectives-

- kāraka saṃbandha kā sāmānya jñāna।
  - kāraka saṃbandha viśeṣa bodha।
  - kāraka saṃbandha kī vākya racanā kā jñāna।
  - kāraka saṃbandha kā sampūrṇa jñāna।
- |   |          |
|---|----------|
| प्रथम इकाई- कारकसम्बन्धोद्घोतःकारिका - (1-3)    | - 14 अंक |
| द्वितीय इकाई- कारकसम्बन्धोद्घोतःकारिका - (4-6)  | - 14 अंक |
| तृतीय इकाई- कारकसम्बन्धोद्घोतःकारिका - (7-9)    | - 14 अंक |
| चतुर्थ इकाई- कारकसम्बन्धोद्घोतःकारिका - (10-12) | - 14 अंक |
| पञ्चम इकाई- कारकसम्बन्धोद्घोतःकारिका - (13-15)  | - 14 अंक |
| षष्ठ इकाई- शास्त्र स्मरण एवं लेखन               | - 30 अंक |

#### Course Outcomes-

- kāraka sambandha sāmānya paricaya।
- kāraka sambandha viśeṣa paricaya।
- kāraka sambandha vākya racanā paricaya।
- kāraka sambandha sūtra paricaya।

निर्धारित पाठ्यपुस्तक- कारकसम्बन्धोद्घोतःकारिका (रभसनन्दि)  
प्रकाशक- राजस्थानी ग्रन्थागार, सोजती गेट, जोधपुर (राजस्थान)।

**Paper - 5**  
**samskr̥ta s̥ahitya Paper Code - BD-405**

(70+30=100)

**Course Objectives-**

- śikṣāvallī kā bodha।
- sṛṣṭi racanā krama kā jñāna।
- guṇatraya vibhāga yoga kā bodha।
- puruṣottama yoga kā jñāna।

प्रथम इकाई	- तैत्तिरीयोपनिषद्,	- 20 अंक
द्वितीय इकाई	- ऐतरेय उपनिषद्	- 20 अंक
तृतीय इकाई	- गीता- चतुर्दशोऽध्याय (गुणत्रयविभागयोगः)	- 20 अंक
चतुर्थ इकाई	- गीता- पञ्चदशोऽध्याय (पुरुषोत्तमयोग)	- 10 अंक
पञ्चम इकाई	- शास्त्र स्मरण एवं लेखन	- 30 अंक

**Course Outcomes-**

- śikṣā vallī kā paricaya।
- sṛṣṭi racanā krama kā vivaraṇa।
- guṇatrayavibhāga yoga kā paricaya।
- puruṣottama yoga kā paricaya।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
सहायक ग्रन्थ- उपनिषद् रहस्य - पण्डित भीमसेन शर्मा

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

**1. Reading and Communication Skills:**

- 1.1 Words Which Commonly Confuse (Homographs, Heteronyms)
- 1.2 Word Formation by Adding Prefixes & Suffixes with their Correct Pronunciation
- 1.3 Newspaper and Magazine Reading
- 1.4 Comprehension

**Suggested Reading & Resources for Practice:**

- Dictionaries—
  - Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
  - Oxford English-Hindi Dictionary (Oxford University Press)
  - Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)
- General English for All Classes—U.R. Mediratta (Jiwan Publishing House Pvt Ltd India, F-227, Mansarover Garden, Main Market, New Delhi-110015)
- Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, Ist Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)
- Useful You Tube Channels and Other Helpful Mobile Applications

**2. Listening Skills:**

- 2.1 To Listen to the Good Speakers of English Language Having Good Contents

**Resources for Practice:**

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru
  - BK Shivani

### 3. Grammar Skills:

- 3.1 Transformation
- 3.2 Idioms & Phrasal Verbs
- 3.3 Figures of Speech
- 3.4 Proverbs/Sayings/Famous Quotes
- 3.5 Vocabulary (Synonyms & Antonyms)
- 3.6 One Word Substitution
- 3.7 Translation (Hindi to English and Vice-Versa)

### 4. Speaking Skills:

- 4.1 Anchoring
- 4.2 Telling Good Jokes
- 4.3 Telling Recipes
- 4.4 Singing English Songs

### Course Outcomes-

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

### वैकल्पिक प्रश्न-पत्र

विषय : मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, तृतीय वर्ष**  
**Semester -V**

**Paper - 1**

**vedānta darśana-1 Paper Code - BD-501**

(70+30=100)

**Course Objectives-**

- brahma ke nimitta kāraṇatva kā jñāna।
- jagat-utpatti meṃ prakṛti kā upādāna kāraṇatva kā bodha।
- smṛti-gran̥thoṃ meṃ ubhayakāraṇavāda kā jñāna।
- prāṇoṃ kī utpatti evaṃ svarūpa kā bodha।

वेदान्त सूत्र (प्रथम व द्वितीय अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- brahma ke nimitta kāraṇatva kā vivaraṇa।
- jagattotpatti ke prakṛti kā upādāna kāraṇatva vivaraṇa।
- smṛti gran̥thoṃ meṃ pratipādita ubhayakāraṇavāda kā samanvaya।
- prāṇoṃ kī utpatti evaṃ svarūpa paricaya।

निर्धारित पाठ्यपुस्तक - ब्रह्मसूत्रम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ- वैदिक मुनिभाष्य

**Paper - 2**

**mīmāṃsā darśana-1 Paper Code - BD-502**

(70+30=100)

**Course Objectives-**

- tarkavāda evaṃ arthavāda prakaraṇa kā bodha।
- dharma ke svarūpa kā jñāna।
- dharma ke sād̥haka pramāṇoṃ kā bodha।
- veda apauruṣeya evaṃ arthavāda prakaraṇa kā jñāna।

मीमांसा सूत्र-

चतुस्सूत्री + 46 सूत्र, (कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- tarkavāda evaṃ arthavāda prakaraṇa paricaya।
- dharma svarūpa kā vivaraṇa।
- dharma ke sād̥haka pramāṇoṃ kā paricaya।
- veda apauruṣeya evaṃ arthavāda prakaraṇa paricaya।

निर्धारित पाठ्यपुस्तक - मीमांसा दर्शन (शाबरभाष्य)

प्रकाशक- युधिष्ठिर मीमांसक, बहालगढ़, जिला- सोनीपत, हरियाणा।

Paper - 3

*saṃskṛta vyākaraṇa - I* Paper Code - BD-503

(70+30=100)

**Course Objectives-**

- akārānta śabdarūparūpa kī siddhi kā bodha।
- ikārānta ukārānta rūpa kī siddhi kā jñāna।
- ṭṭakārānta śabdarūpa kī siddhi kā bodha।
- halanta śabdarūpa kī siddhi kā jñāna।

प्रथम इकाई- नामिक-I (अजन्त शब्दरूप) - 35 अंक

द्वितीय इकाई- काव्यदीपिका, अष्टमशिखा-II, - 35 अंक

(प्रतिवस्तूपमा अलंकार से व्याजस्तुति अलंकार पर्यन्त)

तृतीय इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

**Course Outcomes-**

- akāranta śabdarūpa siddhi vivaraṇa।
- ikāranta-ukāranta ādi vivaraṇa।
- ṛkārānta- ukāranta ādi vivaraṇa।
- halanta- ukāranta ādi vivaraṇa।

निर्धारित पाठ्यपुस्तक - नामिकम् (महर्षि दयानन्द सरस्वतीकृत)

प्रकाशक- वैदिक पुस्तकालय, केसरगंज, अजमेर-305001, राजस्थान।

काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)

प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,

पो. बाक्स नं.- 1129, वाराणसी-221001

Paper - 4

*saṃskṛta vyākaraṇa - II* Paper Code - BD-504

(70+30=100)

**Course Objectives-**

- kṛdanta sāmānya kā bodha।
- kṛdanta siddhi kā jñāna।
- kṛta pratyaṇom kī jānakārī।
- kṛdanta śabdōm kī siddhi kā bodha।

**व्याकरण चन्द्रोदय**

प्रथम इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-1-30) - 14 अंक

द्वितीय इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-31-60) - 14 अंक

तृतीय इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-61-90) - 14 अंक

चतुर्थ इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-91-120) - 14 अंक

पञ्चम इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-215-249) - 14 अंक

षष्ठ इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

### Course Outcomes-

- kṛdanta sāmānya kā paricaya।
- kṛdanta siddhi vivaraṇa।
- kṛta pratyaṇom kā paricaya।
- kṛt pratyaṇom se banane vāle śabdom kī siddhi।

निर्धारित पाठ्यपुस्तक - व्याकरण चन्द्रोदय-द्वितीय खण्ड (श्री चारुदेव शास्त्री)  
प्रकाशक

### Paper - 5

**samskr̥ta sāhitya** Paper Code - BD-505

(70+30=100)

### Course Objectives-

- omkāra upāsana kā bodha।
- raikvaṭṭaṣi evaṃ rājā jānaśruti saṃvāda kā jñāna।
- jābāli ṭṭaṣise śvetaketu ke 5 praśnom kā jñāna।
- nārada-sanatkumāra saṃvāda kā bodha।

प्रथम इकाई- छान्दोग्योपनिषद्- प्रथम प्रपाठक (1-5 खण्ड), तृतीय प्रपाठक (खण्ड-13,16) - 15 अंक  
द्वितीय इकाई- तृतीय प्रपाठक (खण्ड-18,19), चतुर्थ प्रपाठक (खण्ड-1-9, 16,17), - 15 अंक  
तृतीय इकाई- पञ्चम प्रपाठक (खण्ड-1, 11-14), षष्ठ प्रपाठक (1-16 खण्ड) - 15 अंक  
चतुर्थ इकाई- सप्तम प्रपाठक (1-26 खण्ड), अष्टम प्रपाठक (1-2 खण्ड) - 15 अंक  
पञ्चम इकाई- गीता- षोडश अध्याय (दैवासुरसम्पद् विभागयोग)सप्तदश अध्याय (श्रद्धात्रयविभागयोग) - 10 अंक  
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

### Course Outcomes-

- omkāra upāsana vivaraṇa।
- rekva ṛṣi evaṃ rājā jānaśruti saṃvāda।
- śvetaketu ke jābāli se 5 praśnom kā vivaraṇa।
- nārada ko sanatkumāra kā upadeśa।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48

गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ- उपनिषद् रहस्य - पण्डित भीमसेन शर्मा।

**ENGLISH LITERATURE-5**

**Paper Code - BD-506**

(70+30=100)

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

S.NO.	Story Name	English Literature	Page No.
1	My Mother	Prose	1-3
2	PP Acharya Balkrishan ji	Prose	4-20
3	The Doctors Word	Prose	21-24
4	The Spell	Prose	25-32
5	Helen Keller	Prose	33-35
6	Major Dhyan Chand	Prose	36-38
7	Aryabhatt	Prose	39-42
8	The Last Lesson	Prose	43-47

**Course Outcomes-**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**वैकल्पिक प्रश्न-पत्र**

विषय : मनोविज्ञान, भारतीय ज्ञान परम्परा,  
धर्मशास्त्र, प्राचीन भारतीय इतिहास,  
अर्थशास्त्र, राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, तृतीय वर्ष**  
**Semester -VI**

**Paper - 1**

**vedānta darśana-2 Paper Code - BD-601**

(70+30=100)

**Course Objectives-**

- jīvātmā kā sūkṣmaśarīra dvārā gamanāgamana kā jñāna।
- jīvātmā evaṃ paramātmā ke saṃbandha kā bodha।
- pratikopāsanā ke pratiśedha kā jñāna।
- devayāna mārga kī jānakārī।

वेदान्त सूत्र- (तृतीय व चतुर्थ अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- jīvātmā kā sūkṣma śarīra dvārā gamana-āgamana paricaya।
- jīvātmā evaṃ paramātmā ke madhya saṃbandha vivaraṇa।
- pratikopāsanā kā pratiśedha।
- devayāna mārga paricaya।

निर्धारित पाठ्यपुस्तक- ब्रह्मसूत्रम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - वैदिक मुनि भाष्य

**Paper - 2**

**nighaṇṭu Paper Code - BD-602**

(70+30=100)

**Course Objectives-**

- ācārya vāvyayiṇī ke ṣaḍbhāva vikāroṃ kā bodha।
- audumbarāmaṇa ke śabda anityatva ke mata ko bodha।
- kutsa ācārya mantra anarthakatva khaṇḍana kā jñāna।
- ācārya gārgya ke upasargoṃ kī sārthakatā kā bodha।

प्रथम इकाई - निघण्टु- प्रथम व द्वितीय अध्याय (कण्ठस्थीकरण)

- 70 अंक

द्वितीय इकाई - निरुक्त-यास्क-भूमिका

- 30 अंक

**Course Outcomes-**

- ācārya vārṣyāyaṇī ke ṣaḍ bhāva vikāra kā paricaya।
- audumbarāyaṇa kā śabda anityatva mata khaṇḍana।
- kutsa ācārya kā mantra anarthakatva khaṇḍana।
- ācārya gārgya kā upasargoṃ kā sārthaka batānā।

निर्धारित पाठ्य ग्रन्थ- निरुक्त (चन्द्रमणि-व्याख्यायुक्त संस्करण)

प्रकाशक-हरयाणा साहित्य संस्थान, गुरुकुल झज्जर (हरयाणा)

**Paper - 3**  
**saṃskṛta vyākaraṇa- I Paper Code - BD-603**

(70+30=100)

**Course Objectives-**

- halanta śabda rūpa kā bodha।
- halanta śabdarūpa siddhi kā jñāna।
- arthāpatti ādi alaṃkārom kā bodha।
- vācana evaṃ lekhaṇa kā jñāna।

प्रथम इकाई- नामिक-II (हलन्त शब्दरूप)	- 35 अंक
द्वितीय इकाई- काव्यदीपिका, अष्टमशिखा-III, (प्रतिपमलंकार अलंकार से अर्थापत्ति अलंकार पर्यन्त)	- 35 अंक
तृतीय इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

**Course Outcomes-**

- halanta śabdarūpa paricaya।
- halanta śabdarūpa gūḍ siddhi।
- pratipamalaṃkāra se arthāpatti alaṃkāra paryanta paricaya।
- vācana evaṃ lekhaṇa paricaya।

**निर्धारित पाठ्यपुस्तक-** नामिकम् (महर्षि दयानन्द सरस्वतीकृत)

प्रकाशक- वैदिक पुस्तकालय, केसरगंज, अजमेर-305001, राजस्थान।  
काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)  
प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,  
पो. बाक्स नं.- 1129, वाराणसी-221001

## Paper - 4

### samṣkṛta vyākaraṇa- II Paper Code - BD-604

(70+30=100)

#### Course Objectives-

- apatyā prakaraṇa kā bodha।
- cāturārthika pratyayom kā jñāna।
- samāsānta pratyayom kā bodha।
- matvarthāya prakaraṇa kā jñāna।

#### व्याकरण चन्द्रोदय- तद्धित प्रकरण

प्रथम इकाई- (पृष्ठ संख्या-251 से 273)	- 14 अंक
द्वितीय इकाई- (पृष्ठ संख्या-274 से 295)	- 14 अंक
तृतीय इकाई- (पृष्ठ संख्या-296 से 317)	- 14 अंक
चतुर्थ इकाई- (पृष्ठ संख्या-318 से 339)	- 14 अंक
पञ्चम इकाई- (पृष्ठ संख्या-340 से 364)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- apatyā prakaraṇa bodha kā vivaraṇa।
- cāturārthika pratyaya paricaya।
- sāmāsānta paricaya।
- matvarthīya prakaraṇa।

निर्धारित पाठ्यपुस्तक- व्याकरण चन्द्रोदय-द्वितीय खण्ड (श्री चारुदेव शास्त्री)

प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

## Paper - 5

### samskrta sāhitya Paper Code - BD-605

(70+30=100)

#### Course Objectives-

- prāṇa saṃbandhī devāsura kathā kā bodha।
- ahaṃ brahmāsmi' mahā vākya kā bodha।
- yājñayavalkya- maitreyī saṃvāda kā bodha।
- jagata karaṇatva evaṃ traitavāda tathā śarīra rūpī nagarī kā bodha।

- उद्देश्य- 1. प्राण संबंधी देवासुर कथा का बोध।  
2. 'अहं ब्रह्मास्मि' महा वाक्य का बोध।  
3. याज्ञवल्क्य- मैत्रेयी संवाद का बोध।  
4. जगत करणत्व एवं त्रैतवाद तथा शरीर रूपी नगरी का बोध।

#### बृहदारण्यकोपनिषद्

प्रथम इकाई-	प्रथम अध्याय- प्राण सम्बन्धी देवासुर कथा, अहं ब्रह्मास्मि	- 14 अंक
द्वितीय इकाई-	द्वितीय अध्याय- याज्ञवल्क्य-मैत्रेयी संवाद	- 14 अंक
तृतीय इकाई-	पञ्चम अध्याय- सम्पूर्ण	- 14 अंक
चतुर्थ इकाई-	श्वेताश्वतर- 1-4 अध्याय	- 14 अंक
पञ्चम इकाई-	गीता- अष्टदशोऽध्याय (मोक्षसंन्यासयोग)	- 14 अंक
षष्ठ इकाई-	शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- prāṇa saṃvadhi devāsura kathā vivaraṇa।
- ahaṃ brahmāsmi, vākya svarūpa jñāna।
- yājñavalkya maitreyī saṃvāda।
- nau dvāra rūpī śarīra kā varṇana।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
सहायक ग्रन्थ- उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

## Paper - 6

### ENGLISH LITERATURE-6 Paper Code - BD-606

(70+30=100)

#### Course Objectives-

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

S.NO.	Story Name	English Literature	Page No.
1	The Solitary Reaper	Poetry	1-3
2	Mercy (Poem)	Poetry	4-20
3	Sardar Ballabh-Bhai Patel	Prose	21-24
4	The Last Leaf	Poetry	25-32
5	P.P.Swami RamDev Ji	Prose	33-35
6	The Exemplary Characters of Mahabharat	Need to Added	36-38
7	The Exemplary Characters of Ramayan	Need to Added	39-42

#### Course Outcomes-

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**प्रश्नपत्र- ( 7 ) पर्यावरण विज्ञान**

**Paper Code - BD-607**

(100)

**वैकल्पिक प्रश्न-पत्र**

**विषय :** मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

# B.Sc. (Honours) Biological Science CBCS Structure under the Faculty of APPLIED & ALLIED SCIENCE

	CORE COURSES (14)	ABILITY ENHANCEMENT (2)	SKILL ENHANCEMENT (4)	DISCIPLINE SPECIFIC (4)	GENERIC ELECTIVE (4)
SEMESTER -I	BSHB-CC-101 (Chemistry)  BSHB-CC-102 (Cell Biology)	BSHB-AE-101 English	BSHB-SE-101 (Biostatistics)		BSHB-GE-101 Fundamentals of Yoga & Ayurveda <hr/> Or BSHB-GE-102 Foundation of Physical Education
SEMESTER -II	BSHB-CC-201 (Biodiversity)  BSHB-CC-202 (Biophysics)	BSHB-AE-201 Environmental Science	BSHB-SE-201 (Recombinant DNA Technology)		BSHB-GE-201 Indian Culture or <hr/> BSHB-GE-202 Introduction to Srimad Bhagawad Gita
SEMESTER -III	BSHB-CC-301 (Biochemistry)  BSHB-CC-302 (Ecology)  BSHB-CC-303 (Microbiology)		BSHB-SE-301 (Computer Programming)	BSHB-DS-301 (Drug Discovery & Development)	
SEMESTER -IV	BSHB-CC-401 (Metabolism)  BSHB-CC-402 (Mol Biology)  BSHB-CC-403 (Physiology)		BSHB-SE-401 (Analytical Chemistry)	BSHB-DS-401 (Biomaterials)	
SEMESTER -V	BSHB-CC-501 (Genetics)  BSHB-CC-502 (Neurobiology)			BSHB-DS-501 (Economic Botany)	BSHB-GE-501 Research Methodology or BSHB-GE-502 Fundamentals of Organic Chemistry
SEMESTER -VI	BSHB-CC-601 (Evolution)  BSHB-CC-602 (Endocrinology)			BSHB-DS-601 (Dissertation)	BSHB-GE-601 Biochemical Instrumentation or BSHB-GE-602 Structural Bioinformatics
TOTAL	14 PAPERS  THEORY 14X4CREDITS=56  PRACTICAL 14X2CREDITS=28	2 PAPERS  2X4 CREDITS=8	4 PAPERS  4X4 CREDITS=16	4 PAPERS  4X6 CREDITS=24	4 PAPERS  4X4 CREDITS=16
OVERALL CREDITS	148				

University of Patanjali, Haridwar

Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: CHEMISTRY (THEORY)

SUBJECT CODE: - BSHB-CC101

SEMESTER – I

Course Objectives:

The chemistry course objectives are

- 1) Helping learners to describe chemical bonding and structural aspect of molecules.
- 2) Basic idea of inorganic, Physical and organic aspectt of the molecules.
- 3) Help to understand the atomic structure, Kinetics, bonding & bio-molecules.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Chemical Bonding and Molecular Structure Ionic Bonding [15 hrs]**

Ionic Bonding, Lattice energy and solvation energy. Born-Haber cycle and its applications, Covalent Bonding: VB Approach, Lewis theory, VSEPR theory to explain the shapes of molecules, concept of hybridization, MO Approach: limitations of the VB approach, salient features of the MO theory. Rules for the LCAO method, bonding and anti-bonding MOs and their characteristics for s-s-, s-p and p-p combinations of atomic orbitals, MO treatment of homonuclear diatomic molecules and heteronuclear diatomic molecules such as CO, HF.

**Unit 2 Chemical Thermodynamics [15 hrs]**

First Law of Thermodynamics: Calculation of work (w), heat (q), changes in internal energy ( $\Delta E$ ) and enthalpy ( $\Delta H$ ) for expansion or compression of ideal gases under isothermal and adiabatic conditions for both reversible and irreversible processes. Calculation of w,q,  $\Delta E$ , and  $\Delta H$  for processes involving changes in physical states. Important principles and definitions of thermochemistry. Concept of standard state and standard enthalpies of formation, Variation of enthalpy of a reaction with temperature Kirchoff's equation. Second law of thermodynamics,

concept of entropy, Gibbs free energy and Helmholtz free energy. Calculations of entropy change and free energy change for reversible and irreversible processes under isothermal and adiabatic conditions. Criteria of spontaneity, Gibbs Helmholtz equation.

### **Unit 3 Chemical Kinetics [10 hrs]**

The concept of reaction rates, effect of temperature, pressure, catalyst and other factors on reaction rates. Order and molecularity of a reaction, derivation of integrated rate equations for zero, first and second order reactions, half-life of a reaction, general methods for determination of order of a reaction, Concept of activation energy and its calculation from Arrhenius equation.

### **Unit 4 Atomic Structure [15 hrs]**

Review of: Bohr's theory and its limitations, Heisenberg uncertainty principle, Dual behaviour of matter and radiation, De-Broglie's relation, Hydrogen atom spectra, need of a new approach to atomic structure. What is Quantum mechanics? Time independent Schrodinger equation and meaning of various terms in it. Significance of  $\psi$  and  $\psi^2$ , Schrödinger equation for hydrogen atom, radial and angular parts of the hydrogenic wave functions (atomic orbitals) and their variations for 1s, 2s, 2p, 3s, 3p and 3d orbitals (Only graphical representation), radial and angular nodes and their significance, radial distribution functions and the concept of the most probable distance with special reference to 1s and 2s atomic orbitals. Significance of quantum numbers, orbital angular momentum and quantum numbers. Shapes of s, p and d atomic orbitals

### **Unit 5 Bio-molecules & Medicinal chemistry [5 hrs]**

Bio-molecules: Carbohydrates, proteins, medicines and vitamins.

### **Course Outcomes**

Upon completion of the course the student should be able to:

1. Get a knowledge of the theoretical principles of chemistry of molecular structure, bonding and properties of chemical substances and structure and function of bio-inorganic molecules
2. Get an acquaintance with chemical concepts and apply the concepts of thermodynamics like heat, temperature, calorie, degree Celsius, application in photosynthesis and digestion, food industry, role of entropy on global warming, enthalpy of a reaction
3. Apply the concepts related to rate of chemical reaction, role of enzyme catalyst etc

### **SUGGESTED READINGS**

1. J. D. Lee: A New Concise Inorganic Chemistry, E.L.B.S.
2. P.W. Atkins: Physical Chemistry, Oxford University Press
3. R.T. Morrison & R. N. Boyd: Organic Chemistry, Prentice Hall
4. James E. Huheey *et al.*: Inorganic Chemistry: Principles of Structure and reactivity,

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC101-P CHEMISTRY (PRACTICALS) SEMESTER - I**

**TOTAL HOURS: 30 CREDIT: 2**

1. Simple Acid Base titrations for determining strengths.
2. Estimation of oxalic acid by titrating it with  $\text{KMnO}_4$ .
3. Surface tension measurement (use of organic solvents excluded) Determination of the surface tension of a liquid or a dilute solution using a stalagmometer.
4. Determination of the relative and absolute viscosity of a liquid or dilute solution using an Ostwald's viscometer
5. Determination of melting and boiling points of organic compounds
6. Separation of mixtures by Chromatography; Measure the  $R_f$  value in each case (combination of two compounds to be given) Identify and separate the components of a given mixture of 2 amino acids (glycine, aspartic acid, glutamic acid, tyrosine or any other amino acid) by paper chromatography.
7. Determination of Functional groups present in an organic compound.
8. Identification of anions and cations in an inorganic compound

**Suggested Reading Materials:**

1. A.I. Vogel, Vogel's Qualitative Inorganic Analysis, Prentice Hall, 7th Edition
2. A.I. Vogel, Vogel's Quantitative Chemical Analysis, Prentice Hall, 6th Edition
3. B.D. Khosla, Senior Practical Physical Chemistry, R.Chand & Co.

University of Patanjali, Haridwar

Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: CELL BIOLOGY (THEORY)

SUBJECT CODE: - BSHB-CC102

SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

The cell biology course objectives are

1. Helping learners to describe cytological, biochemical, physiological aspect of cell.
2. Relate normal cellular structures to their functions.
3. Apply modern cellular techniques to solve aspects of scientific problems.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit I: The Cell [10 hrs]**

Historical background, significant landmarks, cell theory, structure of prokaryotic and eukaryotic cells, Types of prokaryotic Cells- Domain archaea & domain bacteria, Prokaryotic diversity, mycoplasma, viruses, viroids, prions. Cell Organelles: Structure and functions of various organelles.

The nature of biological molecules, Carbohydrates, Lipids, Proteins, Nucleic acids

**Unit III: Cell Fractionation [10 hrs]**

Centrifugation: types of centrifuges, principle and different types of centrifugation- differential, density gradient and equilibrium.

**Unit IV: Cell Membrane and Transport [15 hrs]**

Functions, different models of membrane structure, types of membrane lipids, membrane proteins and carbohydrate. Transport of small molecules: Passive transport (simple diffusion and facilitated diffusion) and active transport and their types (P, V, F and ABC transporter) with

example of Na<sup>+</sup> /K<sup>+</sup> pump. Transport of macromolecules: Endocytosis (pinocytosis, phagocytosis), exocytosis.

### **Unit V: Cell Junctions [05 hrs]**

Basics concepts of anchoring junctions, tight junctions, communication junctions (gap junction and plasmodesmata).

### **Unit VI: Cytoskeletal Elements [05 hrs]**

Structure assembly and functions of microtubules, Microfilaments and Intermediate filaments.

### **Unit VII: Cell Cycle [05 hrs]**

Different phases of cell cycle and their significance. Checkpoints and regulation of cell cycle.

### **Unit VIII Principles of Microcopy [10 hrs]**

Principles and Applications of Microscopy including Light Microscopy, Phase Contrast Microscopy, Confocal microscopy and Electron Microscopy.

### **Course outcomes**

1. At the end of the course, the student has a strong foundation on the functions of the cell. Understand the genetic changes that give rise to cancer and the mechanisms by which those changes occur, as well as how genes are abnormally regulated.
2. The student grasps how cellular processes—such as cancer cell metabolism, stress responses, and cell cycle regulation—contribute to cancer development and progression. He/ She knows the biological processes underlying cancer initiation, progression, and metastasis and identify how tumors evolve and respond to/ or resist treatment
3. He masters the basic principles of signal transduction mechanisms, in particular the concepts of response specificity, signal amplitude and duration, signal integration and intracellular location give examples of different types of extracellular signals and receptors, and explain their functional significance describe the mechanisms by which different receptors may be activated by their respective ligands, describe and give examples of the structure and properties of the major components of signal transduction pathways.

### **SUGGESTED READINGS**

1. Karp, G. 2010. Cell and Molecular Biology: Concepts and Experiments. 6th Edition, John Wiley & Sons. Inc.
2. De Robertis, E. D. P. and De Robertis R. E. 2009. Cell and Molecular Biology, 8th edition. Lippincott Williams and Wilkins, Philadelphia.
3. Cooper G. M. Hausman R. E. 2009. The Cell: A Molecular Approach. 5th edition. ASM Press and Sunderland, Washington D. C.; Sinauer Academic Press.
4. Becker W. M., Kleinsmith L.J. and Bertni G. P. 2009. The World of the Cell. 7th edition. Pearson Benjamin Cummings Publishing, San francisco.

## University of Patanjali, Haridwar

### Structure of B.Sc. (Hons) Biological Science under CBCS

#### BSHB-CC-102-P Cell Biology (PRACTICALS) SEMESTER - I

**TOTAL HOURS: 30 CREDIT: 2**

(Wherever wet lab experiments are not possible the principles and concepts can be demonstrated through any other material or medium including videos/virtual labs etc.)

1. Microscopy- Theoretical knowledge of Light and Electron microscope.
2. To study the following techniques through photomicrographs: fluorescence microscopy, autoradiography, positive staining, negative staining, endocytosis and phagocytosis.
3. To explain mitosis and meiosis using permanent slides.
4. To cytochemically demonstrate the structure of cell using onion peel.
5. To cytochemically demonstrate presence of carbohydrates in cheek cells or onion peel using periodic acid Schiff's reagent.
6. To cytochemically demonstrate presence of DNA in cheek cells or onion peel using Feulgen reagent.
7. To study the effect of isotonic, hypotonic and hypertonic solutions on cells.
8. To study and comment upon different organelles of a typical cell using specimens/photographs.
9. To study the process of osmosis using potato osmometer.

#### **SUGGESTED READINGS**

1. Cell Biology-Practical Manual- Dr. Renu Gupta, Dr. Seema Makhija and Dr. Ravi Toteja, Prestige Publishers.
2. Cell and Molecular Biology- A Lab Manual-K.V. Chaitanya, PHI Learning Pvt. Limited, New Delhi
3. A Manual of Practical Zoology-Biodiversity, Cell Biology, Genetics & Developmental Biology Part 1- M.M Trigunayat and Kritika Trigunayat, Scientific Publishers, India

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: BIOPHYSICS (THEORY)**

**SUBJECT CODE: - BSHB-CC-202**

**SEMESTER – II, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

**The biophysics course objectives are**

- 1. It Helps learner to understand the laws of physics to biological problems.**
- 2. Biophysics helps to understand the various laws & principles used for biological system.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit1: General Physics: [15 Hrs]**

Conservation of momentum and energy, work energy theorem. Conservation of angular momentum, torque, Physiological effects of acceleration and angular motion. Simple harmonic motion, damped and driven harmonic oscillator, Wave equation, superposition principle, pulses, Doppler effect, effects of vibrations in humans,

**Unit 2: Protein Structure & Stability [15 Hrs]**

Predicting properties of proteins from amino acid composition, Primary structure sequencing of polypeptide, hemoglobin, homologies in proteins, Secondary structure alpha and beta conformation, collagen structure, stability of alpha helix, Ramchandran plot, Tertiary structure, structure of myoglobin and hemoglobin, Quaternary structure, Analysis of subunits and chain arrangement of subunits, stability of globular quaternary structure. Protein folding rules

### **Unit 3: Biophysics of Various Organs [30 Hrs]**

(i) Structure of the eye, Optics of Vision, retinal pigments, rods and cones, Photochemistry of vision, structure of ear, physics of audition (amplitude, frequency, pitch), unit of measurement of sound, intensity, Audiometry, deafness, hearing aids. Taste & Smells: taste receptors & their role,

(ii) Electrocardiogram (ECG) and its characteristics, structure of lungs, diffusion, exchange and transport of gases, Effect of altitude changes on body, high altitude- mountain sickness. Biophysics of nerves, generation and propagation of nerve impulse, synapse, synaptic transmission, Brain Waves (EEG): origin of alpha, beta, delta & theta

#### **Course Outcome**

1. Examine biophysical scenarios using a conceptual understanding of the core concepts of biology, chemistry, and physics
2. Effectively communicate biophysics content through both written reports and oral presentation
3. Apply their physics and biophysics experience and knowledge to analyze new biophysical situations and to develop and refine experimental methods

#### **SUGGESTED READINGS**

1. Physical Biochemistry, David Freifelder, Applications to Biochemistry and Molecular Biology, 2nd Edition, W.H. freeman and Company, 2005.
2. Hoppe et. al., Biophysics, Translation of 2nd German Edition, Springer Verlag, 1983.
3. Keith Wilson and John Walker, Principles and Techniques of Biochemistry and Molecular Biology, 6th Edition, Cambridge University Press, 2005

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course BSHB-CC-202-P BIOPHYSICS (PRACTICALS)**

**SEMESTER - II TOTAL HOURS: 30 CREDIT: 2**

1. Determination of the acceleration due to gravity using bar pendulum
2. Determination of the coefficient of Viscosity of water by capillary flow method (Poiseuille's method)
3. Verification of Beer Law
4. Effect of different solvents on UV-Vis absorption spectra of proteins.

**University of patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course (C-3)**

**COURSE DETAILS**

**SUBJECT TITLE: BIODIVERSITY (THEORY)**

**SUBJECT CODE: - BSHB-CC201**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. Identify and describe the structural features of plants.**
- 2. Describe major evolutionary lineages of plants and their defining characteristics.**
- 3. Describe the cultural uses of plants for food, fiber, medicine, biotechnology etc.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Defining Biodiversity [15 hrs]**

Components of Biodiversity. Biodiversity crisis and biodiversity loss. Importance of biodiversity in daily life. Biodiversity and climate change. Threats to biodiversity, threatened criteria, Types of Ecosystems: India as mega biodiversity Nation. Hot spots and biodiversity in India. Biodiversity and Ecosystem functioning. Plant and Animal systematic. Species concept in biodiversity studies. Indian Wildlife protection act, 1972

**Unit 2 Modern Tools in the study of Biodiversity [15 hrs]**

Endemism, endemic plants and animals; Assessment of mapping of biodiversity; GIS/Remote sensing; Biotechnology and Conservation, IUCN; Protected areas networks, reserve forests, biosphere reserve forest, wetlands, Biodiversity park, Germplasm banks, National Parks, Botanical and Zoological Gardens; Wildlife Sanctuaries, Bioresources, rescue centers, captive breeding centres, zoo. Biological diversity act, 2002.

### **Unit 3 Crop Diversity [15 hrs]**

Wild relatives of cultivated plant; BM Crops, Domesticated diversity; Spice diversity; Forest diversity and wild life. Men biosphere program 1988

### **Unit 4 Bio-prospecting [10 hrs]**

Bio-prospecting - Micro organisms as a source of novel enzymes, antibiotics, antiviral agents; Immunosuppressive agents and other therapeutic agents.

### **Unit5: Different Projects for conserving wild animals [5 hrs]**

Project Tiger, Project Asiatic lion and elephant, Project Crocodile, Project Vultures

#### **Learning Outcomes:**

1. Students will realize that people are dependent on intact habitats that sustain the various organisms we need to produce food, medicines, clothing, and other materials. Students will learn about certain species' roles in an ecosystem.
2. Students will discover that life can be found almost everywhere on earth.
3. Students will identify floral and faunal species in its surrounding with their status.
4. Inputs of conservation steps according to the status of degradation in surrounding.
5. Actively participate in planned, sustained, and collaborative ecological Projects.

#### **SUGGESTED READINGS**

1. Aber, J.D.and Melillo J.M., Terrestrial Ecosystems: 1991, W.B.Saunders
2. Ingrowille, M Diversity and Evolution of land plants 1992 chapman and Hall

**University of patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-201-P BIODIVERSITY (PRACTICALS)**

**SEMESTER - II TOTAL HOURS: 30 CREDIT: 2**

1. Study of a few endangered species of amphibians, reptiles, birds and mammals of India
2. Report on visit to National Park/Wild life sanctuary/Botanical garden.
3. Study through specimens/photographs/slides of a. Key stones species (b) Ecads, Ecotypes, Ecophenes (c) Sacred flora (havan materials etc.)
4. Study of the characteristic features of any flower for each family a. Malvaceae/Fabaceae/Cruciferae/Ranunculaceae (any one family), (b) Compositae b. Euphorbiaceae, (d) Poaceae/Liliaceae (any one family)

**SUGGESTED READING**

1. A Manual of Practical Zoology-Biodiversity, Cell Biology, Genetics & Developmental Biology Part 1- M.M Trigunayat and Kritika Trigunayat, Scientific Publishers, India
2. Dinesh Biodiversity (Microbes, Algae, Fungi & Archegoniatas)-Dr. Anil K. Thakur , Dr. Susheel K. Bassi, Dr. S.K. Sood- Dinesh & Co.

## University of Patanjali, Haridwar

### Structure of B.Sc. (Hons) Biological Science under CBCS

#### Core Course

#### COURSE DETAILS

**SUBJECT TITLE: MICROBIOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC303**

**SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4**

#### Course Objectives:

2. Describe disease causing microorganisms and microbial agents at organismal, cellular or molecular levels.
3. Relate normal cellular and molecular structures their functions.
4. Apply modern biological techniques to identify potential pathogens and solve aspects of scientific problems.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

#### Unit 1 [15Hrs]

Early history of Microbiology and Microbial Diversity constituting structure of bacteria: cocci/bacilli and its organelles, Discovery of microorganisms, contributions of scientists, spontaneous generation v/s Biogenesis, discovery of antibiotics. Physiological diversity, microbial classification ( prokaryotes: Bacteria and Archaea, eukaryotes: Fungi, Algae, Protozoa, Helminthes) Binomial nomenclature, General characteristics of viruses, Lytic and lysogenic cycle of T4 and Lambda bacteriophages.

#### Unit 2 [15Hrs]

Microbial Nutrition, Growth and Control Nutritional requirements (macro and micronutrients), Temperature, pH, osmotic pressure, Types of culture media, uptake of nutrients, Maintenance of pure cultures. Bacterial division, growth curve, generation time, measurement of growth. Asepsis, sterilization with physical and chemical agents.

### **Unit 3 [15Hrs]**

Harmful and beneficial microbes Normal microflora of human body, host-pathogen interaction, bacterial, viral, protozoan and fungal diseases of plants and animals. Phytotoxins, antimicrobial agents, drug resistance, interferons. Microorganisms and fermentation; Bioremediation; Bio-indicators.

### **Unit 4 [15Hrs]**

Microbial Biotechnology Types of restriction enzymes, cloning vectors (plasmids, phage-based etc), selection of recombinants. Application of recombinant DNA technology – Therapeutic proteins (human disease) transgenics-herbicide, resistance, metabolic engineering, production of vaccines

#### **Course Outcomes:**

1. Students will gain knowledge about the different cell organelles of microorganisms and their detailed functions
2. Students will also study the growth and control of microbes as well as different bacteriological techniques involved in microbiology.

#### **SUGGESTED READINGS**

1. Willey, J.M., Sherwood, L.M. and Woolverton, C.J.(2008). Prescott, Harley and Klein's Microbiology.7th edition. McGraw Hill Higher Education.
2. Tortora, G.J., Funke, B.R. and Case, C.L.(2008) Microbiology: An Introduction. 9th edition. Pearson Education.
3. Primrose and Twymann, Principles of Gene Manipulation and Genomics. 7th edition(2008), Blackwell Publishing.
4. Microbiology, Prescott, Harley and Kleins, McGraw Hill International.
5. Microbiology, Pelczar, Chan and Krieg. McGraw Hill International .
6. Biology of Microorganisms, T. D. Brock and M.T. Madigan, Pearsons, Benjamin Cumming

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-303-P MICROBIOLOGY (PRACTICALS)**

**SEMESTER – III, TOTAL HOURS: 30 CREDITS : 2**

1. To study disinfectants and sterilization techniques.
2. To study types of Media and perform media preparation.
3. To perform subculturing- streaking techniques (T streaking). .
4. To study Growth Curve of bacteria.
5. To study the effect of pH/temperature/UV light on bacterial growth.
6. To perform Gram's staining
7. Milk quality testing by Methylene Blue dye reductase test.

**SUGGESTED READINGS**

1. **Practical Microbiology Paperback –D.K. Maheshwari & R.C. Dubey, S. Chand & Company Limited.**
2. **Introductory Practical Microbiology- J. Mudili, Narosa Publishing House**
3. **Practical Manual for Undergraduates Microbiology- Mukesh Kumar 3<sup>rd</sup> Edition, Jain Brothers**



University of patanjali, Haridwar

Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: BIOCHEMISTRY (THEORY)

SUBJECT CODE: - BSHB-CC301

SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. To give students a solid foundation in biology and chemistry.
2. To develop analytical and critical-thinking skills that allows independent exploration of biological phenomena through the scientific method.
3. To introduce students to modern methods of biochemical experimentation within the disciplines of biology and chemistry.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit - 1: [15 hrs]**

Introduction to Bio-chemistry; chief intracellular components; Introduction to chemical receptors/co-receptors, cell to cell communication, channels & transportation; Definition and classification of Vitamins and their Clinical importance; Basics of Molecular mechanism of O<sub>2</sub> transport and storage; Fundamentals of Bio-Energetics: Biological Oxidation, General Concept of oxidation, features of cellular Oxidation-respiratory chain oxidative phosphorylations, Structure and analysis of water.

**Unit – 2: [15 hrs]**

Carbohydrates: Definition, classification with examples and general functions; Concept of isomerism, types & mode of action; Introduction to metabolism, Integration of metabolism and catabolism.

**Unit-3: [15 hrs]**

lipids and proteins Lipids: definition, classifications and general functions; Introduction to essential fatty acids, cholesterol, Blood lipids, brief review of lipoproteins and fatty liver; Proteins: definition, classification and Biomedical Importance, Plasma Proteins and functions;

Definition, classification and nomenclature of Enzymes, basic introduction to Enzymology and regulation of Enzymatic activity. Structure of DNA, RNA, nucleic acid metabolism and diseases associated with it.

#### **Unit- 4: [15 hrs]**

Functional Bio-chemistry Introduction to hormones, molecular basis of hormonal action; Introduction to common metabolic disorders; Basic techniques for estimation of different Bio-chemical markers i.e., diffusion, Osmosis, Electrophoresis

#### **Learning Outcomes:**

1. Disciplinary grasp and understanding of biochemistry, structure and function of biological molecules.
2. Explain biological mechanisms, such as the processes and control of bioenergetics and metabolism.
3. Explain the biochemical processes that underlie the relationship between genotype and phenotype.
4. Demonstrate an experiential learning and critical thinking of the structure and function of both prokaryotic and eukaryotic cells (including the molecular basis and role of sub-cellular compartmentalization).
5. Fundamental properties of elements, their role in formation of biomolecules and in chemical reactions within living organisms.
6. Understanding of the concepts of mole, mole fraction, molarity, etc. and to apply them in preparations of solutions of desired strengths.
7. Demonstrate an understanding of the principles, and have practical experience of, a wide range of biochemical techniques (e.g. basic molecular biology, cell biology and microbiology methods, spectro-photometry, the use of standards for quantification, enzyme kinetics; macromolecular purification, chromatography, electrophoresis, etc.).
8. Analyse biochemical data (e.g. in enzyme kinetics, molecular structure analysis and biological databases).

#### **SUGGESTED READING**

1. Campbell, MK (2012) Biochemistry, 7th ed., Published by Cengage Learning
2. Campbell, PN and Smith AD (2011) Biochemistry Illustrated, 4th ed., Published by Churchill Livingstone
3. Tymoczko JL, Berg JM and Stryer L (2012) Biochemistry: A short course, 2nd ed., W.H. Freeman
4. Berg JM, Tymoczko JL and Stryer L (2011) Biochemistry, W.H. Freeman and Company
5. Nelson DL and Cox MM (2008) Lehninger Principles of Biochemistry, 5th Edition., W.H. Freeman and Company,
6. Willey MJ, Sherwood, LM & Woolverton C J (2013) Prescott, Harley and Klein's Microbiology by. 9th Ed., McGrawHill
7. Voet, D. and Voet J.G (2004) Biochemistry 3rd edition, John Wiley and Sons,

**University of patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-302-P Biochemistry (Practicals)**

1. Properties of water, Concept of pH and buffers, preparation of buffers and Numerical problems to explain the concepts
2. Qualitative/Quantitative tests for carbohydrates, reducing sugars, non reducing sugars
3. Qualitative/Quantitative tests for lipids and proteins
4. Study of protein secondary and tertiary structures with the help of models

**SUGGESTED READING**

1. **Introductory Practical Biochemistry, S.K. Sawhney, Narosa Publishing House**

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: ECOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC 302**

**SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. Describe plant and animal distribution patterns in relation to abiotic and biotic factors.**
- 2. Define the essential characteristics underlying natural ecosystems.**
- 3. Identify global environmental problems**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Ecology [15 Hrs]**

History, definition, ecological factors (abiotic and biotic factor), ecological range (Eury , Steno) Stress and adaptation (Morphological, physiological, anatomical and biochemical), Biotic interaction, phenotypic and genotypic plasticity, canalization, Ecological Succession, Ecological Services.

**Unit 2: Ecosystem [15 Hrs]**

Concept, components, (e.g., aquatic, marine, forest, grassland, desert, energy flow, food web, niche , different trophic levels, ecological pyramids, Autecology

**Unit 3 Pollution [15 Hrs]**

Pollution: Pollution of Soil, water, air (types of pollutants and sources), noise pollution, radiation pollution, eutrophication, remedial measures, biomagnifications, Disaster management : Types of disasters & Management strategy, Environmental Impact Assessment analysis

## **Unit 4 Behavioral ecology [15 Hrs]**

Social, reproductive & territorial behavior, evolution of optimal life history, reproductive structure and mating system, microbial ecology.

### **Learning Outcomes:**

1. Master the concepts and principles of Ecology
2. Master the structural and functional aspects of biodiversity and the need for its conservation
3. Be aware of the suitable use of field techniques, data collection, mapping, analysis and interpretation.
4. Be able to take up interdisciplinary research and teaching in Ecology
5. The student should have understanding of the ecology and the role of human beings in shaping the ecosystem.
6. Knowing various components of the ecology and interfaces.
7. Ability to understand the ecosystem and its various component and functions.
8. Knowledge on ecology, and ecological dynamics.
9. Ability to understand the various ecosystem services and their role in sustaining the environment.
10. Be familiar with modern tools and techniques and their appropriate use to conduct research.

### **SUGGESTED READINGS**

1. Wilkenson DM - 2007 - Fundamental Processes in Ecology
2. Aber J.D. & Melillo J M 1991- Terrestrial Ecosystems
3. Smith R.L. Elements of ecology
4. Ricklefs Economy of nature
5. Odum, E.P., (2008). Fundamentals of Ecology. Indian Edition. Brooks/Cole

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-302-P Ecology Practicals**

**SEMESTER – III, TOTAL HOURS: 30 CREDITS: 2**

1. Study through specimens/photographs/slides Parasitic angiosperms, Saprophytic angiosperms, VAM fungi, Root nodules, Coralloid roots, Mycorrhizal roots, Velamen roots, Lichen as pollution indicators,
2. Principle and function of Sechi disc, Atmometer, Anemometer, Hygrometer, Hair hygrometer, Luxmeter, Rain guage, Soil thermometer, Min-Max thermometer
3. Minimal quadrat method
4. To determine density/frequency/abundance of the vegetation by quadrat method.
5. To determine soil texture
6. To determine soil density, bulk density, particle density and pore space.
7. To determine water holding capacity and percolation rate of soil.
8. To determine pH, Cl, SO<sub>4</sub>, NO<sub>3</sub> in the soil.

**SUGGESTED READINGS**

1. Wilkenson DM - 2007 - Fundamental Processes in Ecology
2. Aber J.D. & Melillo J M 1991- Terrestrial Ecosystems
3. Smith R.L. Elements of ecology
4. Ricklefs Economy of nature
5. Odum, E.P., (2008). Fundamentals of Ecology. Indian Edition. Brooks/Cole

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: MICROBIOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC303**

**SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. Describe disease causing microorganisms and microbial agents at organismal, cellular or molecular levels.**
- 2. Relate normal cellular and molecular structures their functions.**
- 3. Apply modern biological techniques to identify potential pathogens and solve aspects of scientific problems.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 [15Hrs]**

Early history of Microbiology and Microbial Diversity constituting structure of bacteria: cocci/bacilli and its organelles, Discovery of microorganisms, contributions of scientists, spontaneous generation v/s Biogenesis, discovery of antibiotics. Physiological diversity, microbial classification ( prokaryotes: Bacteria and Archaea, eukaryotes: Fungi, Algae, Protozoa, Helminthes) Binomial nomenclature, General characteristics of viruses, Lytic and lysogenic cycle of T4 and Lambda bacteriophages.

**Unit 2 [15Hrs]**

Microbial Nutrition, Growth and Control Nutritional requirements (macro and micronutrients), Temperature, pH, osmotic pressure, Types of culture media, uptake of nutrients, Maintenance of pure cultures. Bacterial division, growth curve, generation time, measurement of growth. Asepsis, sterilization with physical and chemical agents.

### **Unit 3 [15Hrs]**

Harmful and beneficial microbes Normal microflora of human body, host-pathogen interaction, bacterial, viral, protozoan and fungal diseases of plants and animals. Phytotoxins, antimicrobial agents, drug resistance, interferons. Microorganisms and fermentation; Bioremediation; Bio-indicators.

### **Unit 4 [15Hrs]**

Microbial Biotechnology Types of restriction enzymes, cloning vectors (plasmids, phage-based etc), selection of recombinants. Application of recombinant DNA technology – Therapeutic proteins (human disease) transgenics-herbicide, resistance, metabolic engineering, production of vaccines

#### **Learning Outcomes:**

1. Apply the knowledge to understand the microbial physiology and to identify the microorganisms.
2. Define basic concepts and definitions of microbiology
3. Familiarize basic concepts in microscopy and sterilization procedures
4. Explain general characters of different groups of microbes and culturing media.
5. Discuss the ultrastructure of bacterial cell. Differentiate prokaryotic and eukaryotic microbes
6. Explain classification of microbes and Examine different methods for bacterial identification
7. Master the regulation of biochemical pathway and possible processmodifications for improved control over microorganisms for microbialproduct synthesis.

#### **SUGGESTED READINGS**

1. Willey, J.M., Sherwood, L.M. and Woolverton, C.J.(2008). Prescott, Harley and Klein's Microbiology.7th edition. McGraw Hill Higher Education.
2. Tortora, G.J., Funke, B.R. and Case, C.L.(2008) Microbiology: An Introduction. 9th edition. Pearson Education.
3. Primrose and Twymann, Principles of Gene Manipulation and Genomics. 7th edition(2008), Blackwell Publishing.
4. Microbiology, Prescott, Harley and Kleins, McGraw Hill International.
5. Microbiology, Pelczar, Chan and Krieg. McGraw Hill International .
6. Biology of Microorganisms, T. D. Brock and M.T. Madigan, Pearsons, Benjamin Cumming

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-303-P MICROBIOLOGY (PRACTICALS)**

**SEMESTER – III, TOTAL HOURS: 30 CREDITS : 2**

1. To study disinfectants and sterilization techniques.
2. To study types of Media and perform media preparation.
3. To perform subculturing- streaking techniques (T streaking). .
4. To study Growth Curve of bacteria.
5. To study the effect of pH/temperature/UV light on bacterial growth.
6. To perform Gram's staining
7. Milk quality testing by Methylene Blue dye reductase test.

**SUGGESTED READINGS**

4. **Practical Microbiology Paperback –D.K. Maheshwari & R.C. Dubey, S. Chand & Company Limited.**
5. **Introductory Practical Microbiology-** J. Mudili, Narosa Publishing House
6. **Practical Manual for Undergraduates Microbiology-** Mukesh Kumar 3<sup>rd</sup> Edition, Jain Brothers

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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: METABOLISM (THEORY)

SUBJECT CODE: - BSHB-CC401

SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Knowledge of the historical background for metabolism.
2. Explain the basic elements of the integration of metabolism
3. Compare and contrast the basic differences between carbohydrate, lipid and protein metabolism.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Concept of Metabolism [10HRS]**

Experimental approaches to study metabolism; Primary and secondary metabolism

**Unit 2 Major metabolic pathways [20HRS]**

Basics of Carbohydrate Metabolism (I) - Glycolysis; Aerobic and Anerobic, metabolism of glycogens; glycogenesis, glycogenolysis, glyconeogenesis, Regulation of glycogen metabolism; Basics of Carbohydrate Metabolism (II) - Kreb's Cycle (T.C.A), Regulation of Blood glucose, Hexose Mono Phosphate (HMP Shunt); Basics of Lipid Metabolism - Oxidation of fatty acids, cholesterol synthesis. Correlation between carbohydrate, amino acids and fatty acid degradation.

**Unit 3 Special aspects of metabolic regulation, Tissue specialization [15HRS]**

Function. Intracellular communications and signal transduction mechanisms; developmental adaptations – eg: rat, C3, C4 plants; Metabolic basis of health and disorders – Jaundice – diabetes mellitus, exercise, alcohol abuse

#### **Unit 4 Use of microbes for specific metabolic tasks [15HRS]**

Alternate metabolic cycles, Carbon metabolism of intracellular bacterial pathogens; Environmental cleaning, Metabolic handling of xenobiotics and drug resistance; Photo and lithotrophic metabolic capabilities; myporia

#### **Course Outcome:**

1. It helps the students in appreciating the integrated approach of interrelated pathways of catabolism and anabolism.
2. It also emphasizes on metabolic disorders at molecular level.
3. It features the regulatory aspects of metabolism for better understanding of physiology and therapeutic applications.

**BSHB CC401-P METABOLISM : INTEGRATION AND ADAPTATION –  
LABORATORY**

**Credit:2**

1. Estimation of blood glucose – Glucose Oxidase method
2. Estimation of Cholesterol – Hyper Cholesteremia samples
3. Estimation of SGPT and SGOT 4.

Identification of organelles by marker enzymes – SDH, LDH and acid phosphatase

**SUGGESTED READINGS**

1. H.G. Sehlegal, General Microbiology 2003, Cambridge University Press Cambridge
2. Sterier, R.Y.et AL, General Microbiology 1986, Macmillan London
3. Thomas M.Devlin, Text Book of Biochemistry with Clinical Correlations, 6th edition, 2006, Wiley-Liss 4. Peter W. Hochachka, George. N. Somero, Biochemical adaptation, Amazon Publishers BISP 302 :

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: MOLECULAR BIOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC402**

**SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives**

- 1. Outline the structure of the biomolecules found in all living organisms.**
- 2. To describe how RNA, DNA and Proteins are synthesized.**
- 3. To explain the process of cell division in both somatic and germ cells.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Molecular Biology [15 Hrs]**

General principles - bidirectional replication, Semi-conservative, discontinuous. RNA priming, Various models of DNA replication. Enzyme involved in DNA replication – DNA polymerases, DNA ligase, primase, telomerase and other accessory proteins. Denaturation and renaturation of DNA, Cot curves.

**Unit 2 The mutability and Repair of DNA [10 Hrs]**

Replication Errors (Transitions, transversion and thymine dimer), DNA Damage (deamination, depurination and dimerization) and their repair: mismatch repair, SOS response (recombination), Excision Repair, Photoreactivation.

**Unit 3 Information Transfer –I: Mechanism of Transcription [10Hrs]**

Basic transcription apparatus, Initiation, elongation and termination of transcription, Eukaryotic transcription of mRNA, tRNA and rRNA, types of RNA polymerases, transcription factors, Inhibitors of transcription- rifampicin and  $\alpha$ -amanitin. Reverse Transcription in virus.

#### **Unit 4 Post-Transcriptional Modifications [10 Hrs]**

Split Genes, Concept of introns and exons, RNA splicing, Spliceosomes and Self splicing introns, alternative splicing and exon shuffling, mRNA transport.

**Unit 5 Information Transfer-II: Mechanism of Translation [15 Hrs]** Features of genetic code and exceptions in some systems, Ribosome structure- rRNA and proteins, Charging of tRNA, aminoacyl tRNA synthetases, Proteins involved in initiation (in prokaryotes and eukaryotes), elongation and termination of polypeptides, Fidelity of translation, Inhibitors of protein synthesis – tetracyclins, aminoglycosides, chloramphenicol and aminoglycosides.

#### **Learning Outcomes:**

1. Graduates will gain fundamental knowledge in Molecular Biology.
2. Graduates will be familiarizing with the contemporary research in the field of Molecular Biology.
3. Exhibit an advanced knowledge base in genetics, cell and molecular biology, and anatomy and physiology.
4. Graduates gain the applied knowledge of molecular biology for research and development.
5. Graduates will gain knowledge in molecular biology for academic and Biotech industry placement
6. Graduates will gain basic and applied knowledge to enable them for start-ups/bio entrepreneurship.

#### **SUGGESTED READINGS**

1. Molecular Biology of the Gene, 6th edition (2007), Watson, J. D., Baker T. A., Bell, S. P., Gann, A., Levine, M., and Losick, R; Benjamin Cummings Publishers, ISBN-13: 978-0805395921.
2. Cell and Molecular Biology: Concepts and Experiments, 7th edition (2013), Gerald Karp. ; Wiley Publishers ISBN-13: 978-1118206737.
3. Molecular Cloning: A Laboratory Manual, 4th edition (2012), Michael R. Green and Joseph Sambrook; Cold Spring Harbor Laboratory Press, ISBN-13: 978-1936113422.
4. The World of the Cell, 7th edition (2008), Becker, Kleinsmith, Hardin and Bertoni. Benjamin Cummings, ISBN-13: 978-0805393934.
5. The Cell: A Molecular Approach, 6th edition (2013), Cooper and Hausman; Sinauer Associates, Inc. ISBN-13: 978-1605351551.
6. DNA Replication, 2nd edition (2005), Arthur Kornberg; University Science Books ISBN-13: 978-1891389443.

## University ofatanjali, Haridwar

### Structure of B.Sc. (Hons) Biological Science under CBCS

#### **BSHB-CP-402-P Molecular Biology**

**TOTAL HOURS: 30 CREDITS: 2**

(Wherever wet lab experiments are not possible the principles and concepts can be demonstrated through any other material or medium including videos/virtual labs etc.)

1. Preparation of various stock solutions required for Molecular Biology Laboratory.
2. Preparation of culture medium (LB) for E. coli (both solid and liquid) and raise culture of E. coli.
3. Isolation of chromosomal DNA from bacterial cultures and visualization on Agarose Gel Electrophoresis.
4. Quantitative estimation of salmon sperm/ calf thymus DNA using colorimeter (Diphenylamine reagent) and Spectrophotometer (A260 measurement).
5. Isolation of genomic DNA from blood/ tissue.
6. Demonstration of Polymerase Chain Reaction (PCR) technique
7. Demonstration of AMES test or reverse mutation for carcinogenicity

#### **SUGGESTED READINGS**

1. Molecular Biology of the Gene, 6th edition (2007), Watson, J. D., Baker T. A., Bell, S. P., Gann, A., Levine, M., and Losick, R; Benjamin Cummings Publishers, ISBN-13: 978-0805395921.
2. Cell and Molecular Biology: Concepts and Experiments, 7th edition (2013), Gerald Karp. ; Wiley Publishers ISBN-13: 978-1118206737.
3. Molecular Cloning: A Laboratory Manual, 4th edition (2012), Michael R. Green and Joseph Sambrook; Cold Spring Harbor Laboratory Press, ISBN-13: 978-1936113422.
4. The World of the Cell, 7th edition (2008), Becker, Kleinsmith, Hardin and Bertoni. Benjamin Cummings, ISBN-13: 978-0805393934.
5. The Cell: A Molecular Approach, 6th edition (2013), Cooper and Hausman; Sinauer Associates, Inc. ISBN-13: 978-1605351551.
6. DNA Replication, 2nd edition (2005), Arthur Kornberg; University Science Books ISBN-13: 978-1891389443.

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: SYSTEMS PHYSIOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC403**

**SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. Describe metabolic reactions which occur in cells.**
- 2. Compare the structure and function of organ systems in a variety of animal phyla.**
- 3. Outline the steps involved in transmission of nerve impulses.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Movements and Bulk Transport [12HRS]**

Cellular movements, ciliary and flagellar structure and function; Introduction to musculo skeletal system; Terrestrial, aquatic and aerial locomotion; Locomotory cost; Long distance transport of water and nutrients in plants (xylem and phloem transport) ; General plan and physiology of circulatory system in vertebrates and invertebrates

**Unit 2 Gas exchange in organism; Generation and utilization of energy[15HRS]**

Exchange in unicellular organisms and plants; Respiratory organs in aquatic and terrestrial systems ; Physiology of aquatic breathing and aerial breathing; Feeding patterns, digestive tract systems; Digestion of food

**Unit 3 Regulatory Physiology[15HRS]**

Mechanism of opening and closing of stomata. Regulation of water and solutes in aquatic and terrestrial animals; Osmoregulatory organs. Transpiration in plants; Excretion of nitrogenous wastes in animals; Patterns of Thermoregulation : Ectotherms and Endotherms; Structural and functional adaptation to stress

## **Unit 4 Integrative Physiology[18HRS]**

An overview of neuronal structure and function; Sensory physiology -mechano, chemo, thermo, photo and electro receptors; Endocrine systems in animals and their physiological effects; Plant hormones and their physiological effects; Regulation of metabolism and response to environmental cues.

### **Learning Outcomes:**

1. Have an enhanced knowledge and appreciation of human physiology;
2. Grasp the functions of important physiological systems including the cardio-respiratory, renal, reproductive, metabolic systems, endocrine system, skeletal system, nervous system and sense organs etc.
3. Grasp how these separate systems interact to yield integrated physiological responses to challenges such as exercise, fasting and ascent to high altitude, and how they can sometimes fail;
4. Be able to perform, analyse and report on experiments and observations in physiology;
5. Be able to recognise and identify principal tissue structures.
6. Describe the structure of major human organs and explain their role in the maintenance of healthy individuals.
7. Explain the interplay between different organ systems and how organs and cells interact to maintain biological equilibria in the face of a variable and changing environment.

## **SYSTEMS PHYSIOLOGY BSHB CC-403-P (PRACTICALS)**

**TOTAL HOURS: 30 CREDITS: 2**

1. Effect of isotonic, hypotonic and hypertonic salines on erythrocytes
2. Enumeration of RBC using haemocytometer
3. Estimation of total count of WBC using haemocytometer
4. Study of the effect of various environmental factors on transpiration in an excised twig/leaf
5. Calculation of the stomatal index, stomatal frequency and percentage of leaf area open through stomata in a mesophyte and a xerophytes
6. Study of the mechanism of stomatal opening and closing

### **SUGGESTED READINGS**

1. Knut Schmidt-Nielsen , Animal Physiology , Cambridge University Press
2. David Randall, Eckert's Animal Physiology, W.H.Freeman and Co.
3. Philips Withers; Comparative Animal Physiology. Books Cole Publishers

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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: METABOLISM (THEORY)

SUBJECT CODE: - BSHB-CC401

SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Knowledge of the historical background for metabolism.
2. Explain the basic elements of the integration of metabolism
3. Compare and contrast the basic differences between carbohydrate, lipid and protein metabolism.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Concept of Metabolism [10HRS]**

Experimental approaches to study metabolism; Primary and secondary metabolism

**Unit 2 Major metabolic pathways [20HRS]**

Basics of Carbohydrate Metabolism (I) - Glycolysis; Aerobic and Anerobic, metabolism of glycogens; glycogenesis, glycogenolysis, glyconeogenesis, Regulation of glycogen metabolism; Basics of Carbohydrate Metabolism (II) - Kreb's Cycle (T.C.A), Regulation of Blood glucose, Hexose Mono Phosphate (HMP Shunt); Basics of Lipid Metabolism - Oxidation of fatty acids, cholesterol synthesis. Correlation between carbohydrate, amino acids and fatty acid degradation.

**Unit 3 Special aspects of metabolic regulation, Tissue specialization [15HRS]**

Function. Intracellular communications and signal transduction mechanisms; developmental adaptations – eg: rat, C3, C4 plants; Metabolic basis of health and disorders – Jaundice – diabetes mellitus, exercise, alcohol abuse

## **Unit 4 Use of microbes for specific metabolic tasks [15HRS]**

Alternate metabolic cycles, Carbon metabolism of intracellular bacterial pathogens; Environmental cleaning, Metabolic handling of xenobiotics and drug resistance; Photo and lithotrophic metabolic capabilities; myporia

### **Course Outcome:**

1. Master the concepts of metabolism and Illustrate the metabolism of carbohydrates through various anabolic and catabolic pathways like glycolysis, Kreb's cycle, Glycogen metabolism, glucuronic acid cycle etc.
2. Grasp the regulation of glycolysis and TCA cycle.

### **SUGGESTED READINGS**

1. H.G. Sehlegal, General Microbiology 2003, Cambridge University Press Cambridge
2. Sterier, R.Y.et AL, General Microbiology 1986, Macmillan London
3. Thomas M.Devlin, Text Book of Biochemistry with Clinical Correlations, 6th edition, 2006, Wiley-Liss
4. Peter W. Hochachka, George. N. Somero, Biochemical adaptation, Amazon Publishers BISP 302 :

**BSHB CC401-P METABOLISM : INTEGRATION AND ADAPTATION –  
LABORATORY**

1. Estimation of blood glucose – Glucose Oxidase method
2. Estimation of Cholesterol – Hyper Cholesteremia samples
3. Estimation of SGPT and SGOT 4.

Identification of organelles by marker enzymes – SDH, LDH and acid phosphatase

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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: GENETICS (THEORY)

SUBJECT CODE: - BSHB-CC501

SEMESTER – V, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Apply Quantitative problem solving Skills to genetics problems and issues.
2. Demonstrate their ability to reason both inductively and deductively with experimental information and data.
3. Select and apply experimental procedures to solve genetic problems.
4. To make the students to understand the gene expression and regulation

Total Number of Hrs. : 60	Theory	Practical	Tutorial
Credits	4	2	-
Hrs/Week	4	2	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 : Mendelian Genetics and Extensions [10HRS]**

Mendel's work on transmission of traits, Genetic Variation, Molecular basis of Genetic Information. Principles of Inheritance, Chromosome theory of inheritance, Laws of probability, Pedigree analysis, Incomplete dominance and co-dominance, Multiple alleles, Lethal alleles, Epistasis, Pleiotropy

**Unit 2: Linkage, Crossing over and Chromosomal Mapping [05 HRS]**

Linkage and Crossing over, cytological basis of crossing over, Molecular mechanism of crossing over. Recombination frequency as a measure of linkage intensity, two factor and three factor crosses, Interference and Coincidence

**Unit 3: Mutations[10 HRS]**

Chromosomal mutations, Deletion, Duplication, Inversion, Translocation, Aneuploidy and Polyploidy; Gene mutations: Induced v/s Spontaneous, Back v/s Suppressor mutations.

Molecular basis of mutations in relation to UV light and chemical mutagens, Detection of mutations: ClB method, Attached X-method, DNA repair mechanisms

#### **Unit 4: Extra chromosomal Inheritance [05 HRS]**

Chloroplast mutation/Variation in four 'o clock plant and Chlamydomonas, Mitochondrial mutations in Neurospora and yeast, Maternal effects, Infective heredity-Kappa particles in Paramecium

#### **Unit 5: Genome Dynamics-Transposable Genetic Elements[10 HRS]**

Prokaryotic transposable elements-IS elements, Composite transposons, Tn-3 elements; Eukaryotic transposable elements- Ac-Ds system in maize and P-elements in drosophila; Uses of transposons

#### **Unit: 6 Genomics, Bioinformatics and Proteomics[10HRS]**

Genomes of bacteria, Drosophila and Humans; Human genome project; Introduction to Bioinformatics, Gene and Protein databases, sequence similarity and alignment, Gene feature identification. Gene Annotation and analysis of transcription and translation; Posttranslational analysis-Protein interaction

#### **Unit: 7 Population and Evolutionary Genetics [10HRS]**

Allele frequencies, Genotype frequencies, Hardy-Weinberg Law, role of natural selection, Genetic drift. Speciation

#### **Course Outcome:**

1. Revising the Mendelian Genetics and molecular basis of heredity
2. Applying the gene transformation in recombination
3. Analyzing the types gene mutation and causes on genetic disorders
4. Revising the Mendelian Genetics and molecular basis of heredity

#### **SUGGESTED READINGS**

1. Genetics (2012) 6th ed., Snustad, D.P. and Simmons, M.J., John Wiley & Sons. (Singapore), ISBN: 978-1-118-09242-2.
2. 2. Genetics - A Conceptual Approach (2012), 4th ed., Pierce, B.A., W.H. Freeman & Co. (New York), ISBN:13:978-1-4292-7606-1 / ISBN:10:1-4292-7606-1.
3. 3. An Introduction to Genetic Analysis (2010), 10th ed., Griffiths, A.J.F, Wessler, S. R, Carroll, S. B. and Doebley, J., W.H. Freeman & Company (New York), ISBN:10: 1-4292-2943-8.

**BSHB-CC501-P GENETICS (PRACTICALS)****Credit:2**

1. Study of Linkage, recombination, gene mapping using marker based data from *Drosophila*.
2. Study of Phlox/ *Allium* Karyotype (normal and abnormal).
3. PTC testing in a population and calculation of allele and genotype frequencies.
4. Study of abnormal human karyotype and pedigrees (dry lab)
5. Isolation of plasmid DNA from *E.coli*. and restriction
6. Restriction enzyme digestion plasmid DNA.
7. Estimation of size of a DNA fragment after electrophoresis using DNA markers.
8. Construction of Restriction digestion maps from data provided.
9. Demonstration of DNA fingerprinting.

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**COURSE DETAILS**

**SUBJECT TITLE: FUNDAMENTALS OF NEUROBIOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC502**

**SEMESTER – V, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

1. Describe the structure and function of cells that comprise the nervous system.
2. Outline sensory and motor systems.
3. Generate a hypothesis from a set of observations and then suggest experiments to test the hypothesis.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit-1 [12HRS]**

**Introduction** to neurons, glia and muscle, **Membrane Potentials:** Basic concept of resting membrane potential: equilibrium potentials, Nernst equation, Action potential: generation and propagation.

**Unit-2 [12HRS]**

**Ion Channels and Ion Pumps:** Ion channels, ion pumps, Ohm's law, sodium channels, potassium channels, calcium channels, acetylcholine receptor channels, NMDA receptor channels, diversity of potassium channels.

**Unit -3 [12HRS]**

**Drugs and toxins as tools in neuroscience research, Muscle Contraction:** Mechanism of muscle contraction, **Synapse:** Electrical synapses, chemical synapses, molecular and cellular mechanisms of synaptic transmission, neuropharmacology of synaptic transmission, calcium regulation of synaptic transmission.

**Unit-4 [12HRS]**

**Neural System and Behavior:** Functional neuroanatomy of human central nervous system. Neurotransmitter systems, G protein-coupled receptors and effectors. Biology of sleep-wakefulness cycle. **Chemical senses:** Vision. Auditory. Sensation of touch. Thermoreception. Pain and the placebo effects.

**Unit -5 [12HRS]**

**Homeostasis in the Nervous System:**

**Diseases of Nervous System:** Neurobiology of affective disorders or mood disorders; dopamine and addiction; current research on Alzheimer's disease, Parkinson's disease, Huntington's disease, autism spectrum disorders (ASD) and Japanese encephalitis,

**SUGGESTED READINGS**

1. M.Bear, B.Connors, M. Paradiso, Neuroscience :exploring the brain, Lippincott Williams & Wilkins, 3<sup>rd</sup> edition, 2006.

**BSHB-CC 502-P NEUROBIOLOGY (PRACTICALS)**

1. The vertebrate nervous system and its organization chart.
2. Demonstration of tissue sectioning techniques.
3. Introduction to behavioral measurements and statistical analysis

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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: BIOLOGY OF EVOLUTION (THEORY)

SUBJECT CODE: - BSHB-CC601

SEMESTER –VI, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Describe the theory of natural selection.
2. Explain how new species arise.
3. Construct a phylogenetic tree.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Historical Review of Evolutionary Concept [10HRS]**

Pre-Darwinian ideas – List of contributors influencing Darwin indicated as a timeline. Lamarckism – Merits and demerits. Darwinism – Merits and demerits, Post-Darwinian era – Modern synthetic theory; biomathematics and the theory of population genetics leading to Neo-Darwinism

**Unit 2: Life's Beginnings[15HRS]**

Chemogeny – An overview of pre-biotic conditions and events; experimental proofs to abiotic origin of micro- and macro-molecules. Current concept of chemogeny – RNA first hypothesis. Biogeny – Cellular evolution based on proto-cell models (coacervates and proteinoid microspheres). Origin of photosynthesis – Evolution of oxygen and ozone buildup. Endosymbiotic theory – Evolution of Eukaryotes from Prokaryotes

### **Unit 3: Evidences of Evolution [20HRS]**

Paleobiological – Concept of Stratigraphy and geological timescale; fossil study (types, formation and dating methods). Anatomical – Vestigial organs; Homologous and Analogous organs (concept of parallelism and convergence in evolution). Taxonomic – Transitional forms/evolutionary intermediates; living fossils. Phylogenetic – a) Fossil based – Phylogeny of horse as a model. b) Molecule based – Protein model (Cytochrome C); gene model (Globin gene family)

### **Unit 4: Sources of Evolution – Variations as Raw Materials of Change [15HRS]**

**Types of variations**– Continuous and discontinuous; heritable and non-heritable. Causes, classification and contribution to evolution – Gene mutation; chromosomal aberrations; recombination and random assortment (basis of sexual reproduction); gene regulation . Concept of micro- and macro-evolution – A brief comparison

#### **Course Outcome:**

1. Gain conceptual understanding of evidences, theories and mechanisms of evolution
2. Explain the evolutionary history of man
3. Obtain comprehensive knowledge of comparative anatomy of chordates and to recognize their evolutionary trends

#### **SUGGESTED READINGS**

1. Ridley, M. (2004) Evolution. III Edn. Blackwell
2. Hall, B. K. and Hallgrimson, B. (2008) Strickberger's Evolution. IV Edn. Jones and Barlett
3. Zimmer, C. and Emlen, D. J. (2013) Evolution: Making Sense of Life. Roberts & Co.
4. Futuyma, D. (1998) Evolutionary Biology. III Edn. Sinauer Assoc. Inc.
5. Barton, Briggs, Eisen, Goldstein and Patel. (2007) Evolution. Cold Spring Harbor Laboratory Press

**BSHB-CP 601-P BIOLOGY OF EVOLUTION (PRACTICALS)      Credit 2**

(A) Evidences of fossils (using pictures/slides)

1. Study of types of fossils ( e.g. trails, casts and moulds and others) and Index fossils of Palaeozoic era
2. Connecting links/transitional forms - Eg. Euglena, Neopilina, Balanoglossus, Chimaera, Tiktaalik, Archaeopteryx, Ornithorhynchus
3. Living fossils - Eg. Limulus, Peripatus ,Latimeria, Sphaenodon
4. Vestigial, Analogous and Homologous organs using photographs, models or specimen

(B) Variations

1. Sampling of human height, weight and BMI for continuous variation

(C) Selection Exemplifying Adaptive strategies (Colouration, Mimetic form, Co-adaptation and co-evolution; Adaptations to aquatic, fossorial and arboreal modes of life) using Specimens

(D) Phylogeny

1. Digit reduction in horse phylogeny (study from chart),

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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: ENDOCRINOLOGY (THEORY)

SUBJECT CODE: - BSHB-CC-602

SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4

Course objectives

1. To explain the roles of the endocrine system in maintaining homeostasis, integrating growth and development.
2. To differentiate among endocrine, paracrine and autocrine systems.

Total Number of Hrs. : 60	Theory	Practical	Tutorial
Credits	4	2	-
Hrs/Week	4	2	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Introduction [3HRS]**

History of endocrinology, characteristic of Hormones, Classification –Local and circulating hormones, chemical classification, Neurosecretions and Neurohormones

**Unit 2: Hypothalamic-Pituitary system [12HRS]**

Hypothalamus; structure of hypothalamus, names and functions of important hypothalamic nuclei, neuroendocrine regulation of endocrine glands and feedback mechanisms. Pituitary Gland, structure of pituitary, its hormones, their secretion, transportation, storage, functions and hypothalamic regulation; disorders of pituitary gland. Pineal gland, secretions and their functions in biological rhythms and reproduction.

**Unit 3: Thyroid-Parathyroid system [8HRS]**

Thyroid gland; structure of thyroid gland, synthesis and functions of thyroid hormones, regulation of thyroid hormone secretion; thyrocalcitonin. Disorders of thyroid gland. Parathyroid Glands: Secretion Action of parathyroid Hormones, role of parathyroid hormone and calcitonin in calcium metabolism, disorders of parathyroid gland

#### **Unit 4: Adrenal gland and its hormones [12HRS]**

Structural of Adrenal Gland – Synthesis and structure of hormones of the adrenal cortex and medulla; Biological Action of glucocorticoids, mineralocorticoids, adrenaline and noradrenaline on carbohydrate and protein metabolism; and cardiovascular system, osmoregulation, Stress and diseases related to adrenal cortex and medulla.

#### **Unit 5: Pancreas and its hormones [10HRS]**

Structure of Pancreatic Islets of Langerhans and hormones secreted by it; insulin secretion (proinsulin) its activation, Glucagon secretion, mechanism of action of both hormones in controlling the blood glucose level. Diabetes mellitus.

#### **Unit 6: Reproductive endocrinology [10HRS]**

Male Reproductive system; hormonal control of testes; chemistry and biosynthesis of testosterone, functions of testosterone. Female Reproductive system, role of hormones in Female Sexual cycle, placental hormones; parturition and lactation, Reproductive Health

Unit 7: **Gastrointestinal hormones** No. of Hours: 5

#### **Course Outcome:**

After the course the student should be able to comprehend:-

1. Biosynthesis & Receptor mechanism of Hormones and its Disorders
2. Reproductive cycle of Vertebrate, Menstruation cycle, Lactation, Pregnancy, and mechanism of Parturition.
3. Hormonal regulation of gametogenesis
4. Hormone & Behavior

#### **SUGGESTED READINGS**

1. J. Larry Jameson, editor. (2010). Harrison's Endocrinology. 2nd Edition. McGraw-Hill Press: New York.
2. Turner, D.C. and Bagnara, J.T. (Editor) (1976). General Endocrinology. W. B. Saunders Company, Philadelphia, Pennsylvania.
3. Hall, J.E. (2011). Guyton and Hall Textbook of Medical Physiology (Guyton Physiology).

**BSHB-CC606-P ENDOCRINOLOGY (PRACTICALS)      Credit:2**

**TOTAL HOURS: 30 CREDITS: 2**

1. Study of the permanent slides of all the endocrine glands
2. Estrous cycle of rat.- Vaginal smear
3. Compensatory ovarian hypertrophy or adrenal hypertrophy
4. Castration/ ovariectomy

## Ability Enhancement compulsory Course

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### COURSE DETAILS

**SUBJECT TITLE:** Communicative English

**CREDITS:** 4

**SUBJECT CODE:** - BSHB-AE101

### Course Objectives

1. To improve the fluency and confidence of the student when speaking English
2. To use English effectively for study purpose across the curriculum.

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	-	-
<b>Hrs/Week</b>	<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	-	-

### SEMESTER – I, TOTAL HOURS: 30 CREDITS: 2

Unit 1: Reading and communication Skills

An introduction to the International Phonetic Alphabet for English (Phonetic Symbols, Phonemes, Monophthongs, Diphthongs, Accent, Intonation, Stress etc)

Use of punctuations in Reading

Theory of communication

Type and modes of communication

### Suggested reading & Resources for practice:

1. Oxford Advanced learner's Dictionary of Current English (Oxford University Press)
2. Oxford English-Hindi Dictionary (Oxford University Press)
3. Some Useful Mobile Dictionaries Application (Can be downloaded from Google Play Store)
4. Communication Skills – Sanjay Kumar & Pushpa Lata (Oxford University Press, new Delhi)

5. High School English Grammar and Composition – P. C. Wren & H. Martin (S. Chand & Company Ltd. Ran Nagar, New Delhi- 110055, ISBN: 81-219-0009-3)
6. Useful You Tube Channels and Other Helpful Mobile Applications

## Unit 2

### **Listening Skills:**

To listen to the Good Speakers of English language Having Good Contents.

### **Resources for practices:**

Useful You Tube Channels and Other Helpful Mobile Applications-

Sadhguru

BK Shivani

## Unit 3

### **Grammar Skills**

Parts of Speech

Article

Vocabulary (Synonyms & Antonyms)

The Sentence – parts, Types, Forms, Question Tag and Sentence part (Based on Structures)

5. Simple Present, past and Future Tenses (Without main Verbs-SHO i.e is, am, are, was, were, will/shall be: has/have /had/will/shall have Type. Sentences imperative Sentences, Simple Translation (Hindi to English and Vice-Versa)

Suggested Reading

Aao Saral Angrezi Seekhein Volume-1- Swami Prem Vivekanand ji. (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand – 248125)

High School English Grammar and composition – P.C.Wren & H. Martin (S. Chand & Company Ltd. Ram Nagar, new Delhi -110055)

How to write correct English (Anglo-Hindi) – R. P. Sinha (Bharti Bhawan Publication. Ansari Road, Daryaganj, new Delhi 110002)

How to Translate into English –R. P. Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002 – ISBN: 9788177091083, 8177091085)

## Unit 4

### **Writing Skills**

Short and Simple Messages

Suggested Reading

Advance writing Skills – D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)

Useful You Tube Channels and other Helpful Mobile Applications

Unit 5

Speaking Skills

General Conversation & Expressions used in Day-to-Day Life

Suggested reading

Conversation Skills – S.C. Gupta Arihant Publications pvt Ltd, Meerut, ISBN:978-81-8348-135-9)

Useful You Tube Channels and Other helpful Mobile Applications.

### **Course Outcome**

It seeks to develop the students' abilities in grammar, oral skills, reading, writing and study skills

- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles

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### Structure of B.Sc. (Hons) Biological Science under CBCS

#### COURSE DETAILS

**SUBJECT TITLE:** Environmental Science

**SUBJECT CODE:** - BSHB-AE201

**SEMESTER – II, TOTAL HOURS: 30 CREDITS: 4**

#### Course Objectives

1. To understand how science and the scientific method work to address environmental problems.
2. The student will become familiar with environmental pollution such as Air, Water, Noise and soil and understand about global warming etc.
3. Students will learn about the environmental assessment, management and legislation.

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

#### Unit 1 Introduction to Environmental Science (7hrs)

Definitions, Principles and Scope of Environmental Science, Structure and composition of Atmosphere, Hydrosphere, lithosphere, Biosphere. Energy and environment: Fossil fuels, wind power, geothermal energy, and solar energy(solar collectors, photovoltaic modules, solar ponds). Nuclear energy, bio-energy, environmental implications of energy use: energy use pattern in india and world

#### Unit 2 Environmental pollution (8hrs)

Air, Water, Noise and soil Pollutants: Causes, Effects and prevention Global Warming: Impact, adaptation, vulnerability and mitigation. Kyoto protocol, World Metereological organizations (UNEP, IPCC and UNFCCC). Solid and Hazardous Waste management: Solid Waste-type and sources, Solid waste characteristics, generation rates, solid waste components, hazardous waste-Types, characteristics and health impacts, hazardous waste management.

### **Unit 3 Environmental Assessment, management and legislation (8hrs)**

Aims and objectives of Environmental impact assessment (EIA), Environment policy (1986), Overview of Environmental laws in India, Environmental protection act (1986), national Forest Policy (1988), The plastic Waste management rule (2016), Biodiversity and climate change, national missions on climate change.

### **Unit 4 Current Environmental Issues in India (7hrs)**

Environmental issues related to water resource project – narmada dam, Tehri dam, Almatti dam, Cauvery and Mahanadi, Carbon sequestration and carbon credits. Waste management-Swachh Bharat Abhiyan, Environmental Disasters: Minamata Disaster, Bhopal Gas Disaster (1984), Chernobyl Disaster (1986), Fukushima Daiichi nuclear disaster (2011).

#### **Learning Outcomes:**

**After completing the major in Environmental Studies, students will be able to:**

- Articulate the interconnected and interdisciplinary nature of environmental studies;
- Demonstrate an integrative approach to environmental issues with a focus on sustainability;
- Use critical thinking, problem-solving, and the methodological approaches of the social sciences, natural sciences, and humanities in environmental problem solving;
- Communicate complex environmental information to both technical and non-technical audiences;
- Understand and evaluate the global scale of environmental issues & problems; and
- Reflect critically on their roles, responsibilities, and identities as citizens, consumers and environmental actors in a complex, interconnected world.

#### **Suggested Reading**

1. Textbook of Environmental Studies (Universities Press India Pvt. Ltd.) Erach Bharucha.
2. Environmental Science: A global concern (McGraw-Hill Education) William P Cunningham, Mary Ann Cunningham.

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**SKILL ENHANCEMENT COURSE**

**COURSE DETAILS**

**SUBJECT TITLE: Biostatistics**

**SUBJECT CODE: - BSHB-SE-101**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

The Biostatistics course objectives are

1. It helps learners to analyzing data from various biological experimental problems.
2. It helps to determine the appropriate sampling techniques and coordinate data collection procedures.
3. It helps to conduct statistical analyses to answer scientific questions.

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**Unit-1 Biostatistics (8hrs)**

Definition –statistical methods – basic principles, Variables-measurements, functions, limitations and uses of statistics.

**Unit-2 Collection of data primary and secondary (7hrs)**

Types and methods of data collection procedures-merits and demerits. Classification-tabulation and presentation of data-sampling methods.

**Unit-3 Measures of central tendency (8hrs)**

Mean, median, mode, geometric mean – merits & demerits. Measures of dispersion-range, standards deviation, mean deviation, quartile deviation-merits and demerits; Co-efficient of variations.

#### **Unit 4 Correlation (12 hrs)**

Correlation: Types and methods of correlation, regression, simple regression equation, fitting prediction, similarities and dissimilarities of correlation and regression. Statistical inference: Hypothesis- simple hypothesis – student ‘t’ test –chi square test.

#### **Unit 5 Population and Sample (15 hrs)**

Population and sample, Sampling, Type of sampling, Simple Random Sampling and Stratified Random sampling (description without mathematical details). Analysis of Variance, one way and two way classified data, Design of experiment (DOE), principle of DOE, CRD, RBD, LSD (Description without mathematic details)

#### **Unit 6 Vital events (10 hrs)**

Vital events, Vital statistics, Rates and Ratios, Measures of fertility and mortality, Gross and Net reproduction rates, Life tables, complete and abridged life tables, description of life table, uses of life tables, population projection, population projection models.

#### **Course Outcome:**

1. This course imparts the knowledge of basic statistical methods to solve problems and students are taught to operate various statistical software packages
2. By the end of the course, the students are able to appreciate the importance of statistics in research and prepares them for a career in research

#### **SUGGESTED READINGS**

1. Danniell, W.W. (1987), Biostatistics, New York, John Wiley Sons.
2. Banerjee, P. (2001), Introduction to Biostatistics, S. Chand Publication, Delhi.
3. Goon, Gupta & das Gupta: Fundamentals of Statistics Vol II, Calcutta: The world press.

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**SKILL ENHANCEMENT COURSE**

**COURSE DETAILS**

**SUBJECT TITLE: RECOMBINANT DNA TECHNOLOGY**

**SUBJECT CODE: - BSHB-SE-201**

**SEMESTER – II, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. To understand the basic concept of recombinant DNA technology.**
- 2. To understand various aspects of Cloning vectors for prokaryotes and eukaryotes.**
- 3. To understand the applications of recombinant DNA technology in medicine, production of recombinant pharmaceuticals and in agriculture.**

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**Unit 1 Introduction to recombinant DNA technology (10 hrs)**

Overview of recombinant DNA technology. Restriction and modification systems, restriction endonucleases and other enzymes used in manipulating DNA molecules, separation of DNA by gel electrophoresis. Extraction and purification of plasmid DNA.

**Unit 2 Cloning vectors for prokaryotes and eukaryotes (10 hrs)**

Plasmids and bacteriophages as vectors for gene cloning. Cloning vectors based on E. coli plasmids, pBR322, pUC8, pGEM3Z. Joining of DNA fragments: ligation of DNA molecules. DNA ligases, sticky ends, blunt ends, linkers and adapters.

### **Unit 3 Introduction of DNA into cells (20 hrs)**

Uptake of DNA by cells, preparation of competent cells. Selection for transformed cells. Identification for recombinants - insertional inactivation, blue-white selection. Introduction of phage DNA into bacterial cells. Identification of recombinant phages. Methods for clone identification: The problem of selection, direct selection, marker rescue. Gene libraries, identification of a clone from gene library, colony and plaque hybridization probing, methods based on detection of the translation product of the cloned gene.

### **Unit 4 Applications of RDT (20 hrs)**

Applications in medicine, production of recombinant pharmaceuticals such as insulin, human growth hormone, factor VIII. Recombinant vaccines. Gene therapy. Applications in agriculture - plant genetic engineering, herbicide resistant crops, problems with genetically modified plants, safety concerns. Introduction to DNA sequencing, polymerase chain reaction, expression vectors.

#### **Course Outcome:**

- 1.This course teaches RDNA techniques and their application in the field of genetic engineering
- 2.They learn about plasmids,vectors and gain knowledge on the construction of cDNA libraries
- 3.Student of this course have knowledge on gene manipulation, gene expression, etc which prepares them for further studies in the area of genetic engineering

#### **SUGGESTED READINGS**

- 1.Gene Cloning and DNA Analysis (2010) 6th ed., Brown, T.A., Wiley-Blackwell publishing (Oxford, UK).
- 2.Principles of Gene Manipulation and Genomics (2006) 7th ed., Primrose, S.B., and Twyman, R. M., Blackwell publishing (Oxford, UK).
- 3.Molecular Biotechnology: Principles and Applications of Recombinant DNA (2010) 4th ed., Glick B.R., Pasternak, J.J. and Patten, C.L., ASM Press (Washington DC).

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**SKILL ENHANCEMENT COURSE**

**SUBJECT TITLE: COMPUTER PROGRAMMING**

**SUBJECT CODE: - BSHB-SE301**

**SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. To understand the basic concept of Computer Programming.**
- 2. To understand various aspects of Biology and Computer Programming techniques.**

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**COMPUTER PROGRAMMING FOR BIOLOGISTS**

Fundamentals of computers, algorithms, computer basics, Constants, variables, bits, bytes, binary and ASCII formats, arithmetic expressions, hierarchy of operations, inbuilt functions. Elements of the BASIC language. BASIC keywords and commands. Logical and relative operators. Strings and graphics. Compiled versus interpreted languages. Debugging. Simple programs using these concepts.

**Simple programming in Python : Getting started with Python program**

Variables, keywords and Operators, Control flow statements, Numbers and Functions, Strings, Lists, Tuples, Dictionary and Sets, More of Python functions, Object oriented programming with Python, Exception Handling in Python, File handing, Regular expression, Multithreading, Database, Python Debugging and Automation, Usage of standard module and web-scraping.

**Course Outcome:**

1. This is a skill based paper that introduces the students to the basics of computer operations
2. The student is imparted with knowledge on both hardware and software.
3. The student has a better understanding on the use of computers for various applications

**Books Recommended:**

1. Venit, S.M. Programming in BASIC: Problem solving with structure and style. Jaico Publishing House: Delhi (1996).
2. Let us Python by Kanetkar, BPB Publication, Noida.

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**SKILL ENHANCEMENT COURSE**

**SUBJECT TITLE: ANALYTICAL CHEMISTRY**

**SUBJECT CODE: - BSHB-SE401**

**SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. To understand the basic concept of Chemical Analysis.**
- 2. To understand titrations and salt analysis**

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**ANALYTICAL CHEMISTRY**

Acid-base titrations, Simple & Double

Qualitative analysis of cations & anions, Dry and Wet tests, Confirmatory tests

Organic Compounds analysis (C, N, S and halides), Functional group analysis

Electrochemistry: Faraday's Law of electrolysis and its applications

**Course Outcome:**

1. Get knowledge about various topics of analytical chemistry such as Volumetric analysis, Gravimetric analysis and Separation techniques of various cations and anions in a mixture
2. Grasp about the Farady's laws of electrolysis and its application

Books recommended:

1. Christian, Gary D; Analytical Chemistry, 6<sup>th</sup> Ed. John Wiley & Sons, New York, 2004.
2. Harris, Daniel C: Exploring Chemical Analysis, Ed. New York, W.H. Freeman, 2001.
3. Khopkar, S.M. Basic Concepts of Analytical Chemistry. New Age, International Publisher, 2009.

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DISCIPLINE SPECIFIC SUBJECT

COURSE DETAILS

SUBJECT TITLE: BIOMATERIALS (THEORY)

SUBJECT CODE: - BSHB-DS 401

SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4

Course objectives:

1. To understand the basics of nanoscience and technology.
2. To understand the various process techniques available for bio- materials.
3. The application of nanotechnology in various fields such as biomedicine, Tissue Replacement Implants and Acute Wound Healing etc.

Total Number of Hrs. : 60	Theory	Practical	Tutorial
Credits	4	2	-
Hrs/Week	4	2	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Introduction to biomaterials [20HRS]**

Classification, Chemistry and characterization of biomaterials. The state of the art of biomaterials and the challenges. Disciplines involved in biomaterials science and the path from a need to a manufactured medical device. Material selection requirements for biomaterials – metals, composites, ceramics and polymers. Tissue environment of the implanted biomaterial: unit cell processes. Tissue responses to implants. Nanomaterials: fullerenes, carbon nanotubes, nanomembranes. Synthesis of bio-materials, Characterization of chemical, physical, mechanical properties, visco elasticity, end group analysis, determination of molecular weight of a polymer.

**Unit 2: Biocompatibility [10HRS]**

Biocompatibility of Bio-materials, wound-healing process, body response to implants, blood compatibility. Tests to assess biocompatibility of a polymer, modifications to improve biocompatibility. Reactions of biomaterials with cellular and extra cellular components

### **Unit 3: Modified biomaterials [10HRS]**

Biodegradable biomaterials, Bioactive polymers and biosynthetic polymers, inert biomaterials, genetically engineered biomaterials

### **Unit 4: Applications of Biomaterials [20HRS]**

Tissue Replacement Implants, Acute Wound Healing, Blood Clotting, Chronic Wound Healing and Foreign Body Response. Soft-tissue replacements, sutures, surgical tapes, adhesive, percutaneous and skin implants, maxillofacial augmentation, blood interfacing implants, hard tissue replacement implants, internal Fractures fixation devices, joint replacements. Artificial Organs Artificial Heart, Prosthetic cardiac Valves, Limb prosthesis, Externally Powered limb, prosthesis, Dental Implants, Other applications. Liposomes, hydrogels and Nanomaterials in drug delivery. Biomaterials in diagnostics and bioanalytical techniques.

### **SUGGESTED READINGS**

1. Sujata V. Bhat, Biomaterials , 2nd edition, Narosa Publishing House, New Delhi, 2006.
2. Buddy D. Ratner, B. D. Ratner, Allan S. Hoffman, Biomaterials Science: An Introduction To Materials In Medicine, 2nd Edition(2004) Publisher: Academic Press.
3. Fred W. Billmeyer, Text book of Polymer Science. 3 rd edition John Wiley and sons publications.
4. Basic & Clinical Pharmacology, 10th ed B.G. Kat sung, McGraw-Hill 2007

## **BSHB-DS-401-P BIOMATERIALS (PRACTICALS)**

**TOTAL HOURS: 30 CREDITS: 2**

1. Understand and follow guidelines regarding biological safety and maintain a laboratory notebook that follows the guidelines given in class. Prepare a laboratory report
2. Demonstrate aseptic cell culture techniques
3. Perform transformation into a bacterial cell
4. Describe and demonstrate basic concepts and examples of biomedical signal and image processing, biomaterials, biomechanics, and cellular and molecular biotechnology
5. Perform literature search
6. Prepare a scientific poster
7. Collect, analyze, and interpret physiological measurements
8. Visit to a R&D section of a leading Pharmaceutical company/ surgical theatre of Hospital. Prepare a laboratory report

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DISCIPLINE SPECIFIC SUBJECT

COURSE DETAILS

SUBJECT TITLE: DRUG DISCOVERY & DEVELOPMENT (THEORY)

SUBJECT CODE: - BSHB-DS-301

SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. To make the students understand about the basic concept of drug and its targets.
2. To understand the **Fundamentals of Physicochemical principles of drug action.**
3. To understand the **role of pharma-informatics in drug discovery.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit-1 General Introduction [20HRS]**

Definition and scope of drug design; **Drug target classification:** Proteins as drug targets: Receptors - receptor role, ion channels, membrane bound enzyme activation, agonist and antagonists, concept of inverse agonist, desensitization and sensitization of receptors, affinity, efficacy and potency. Enzymes - Enzyme inhibitors (competitive, noncompetitive, suicide inhibitors), medicinal use of enzyme inhibitors. Nucleic acids as drug targets: Classes of drugs that interact with DNA: DNA intercalators and DNA alkylators.

**Unit-2 Physicochemical principles of drug action [05HRS]**

Partition coefficient, drug dissolution, acid-base properties, surface activity, bioavailability, stereochemical aspects of drug action.

**Unit-3 Drug receptor interactions [05HRS]**

Kinetic analysis of ligand receptor interactions using scatchard plot, double reciprocal plot, Hill plot, forces involved, relationship between dose and effect (graded and quantal response).

#### **Unit-4 Principles of drug design [10HRS]**

Introduction to SAR, strategies in the search for new lead compounds, analogue synthesis versus rational drug design, concept of prodrugs.

#### **Unit-5 Drug discovery and pharmainformatics [20HRS]**

Drug discovery pipeline, drug target identification and validation for microbial pathogen, selection of gene unique to the pathogen, screening for its presence in other microbes and human host, Drug Databases, PubChem, Calculating drug-like properties, introduction to rational drug design methods, optimization of lead compounds.

#### **Course Outcome:**

1. Critically evaluate the drug discovery process.
2. Master the role of bioinformatics and genomics in the drug discovery process.
3. Discuss and place into context the use of high-throughput-screening in the drug discovery process.
4. Appreciate the importance of pharmacology in the drug discovery process.

## **BSHB-DS-301-P PRACTICALS**

**TOTAL HOURS: 30 CREDITS: 2**

(Wherever wet lab experiments are not possible the principles and concepts can be demonstrated through any other material or medium including videos/virtual labs etc.)

1. Preparation of Benzocaine,
2. Preparation of Aspirin and determination of partition coefficient in octanol-water system,
3. Preparation of Paracetamol, Preparation of Phenacetin,

### **SUGGESTED READINGS**

1. Introduction to Medicinal Chemistry, 4th edition (2009), Graham I. Patrick, Oxford University Press. ISBN-13: 978-0199234479.
2. The Organic Chemistry of Drug Design and Drug Action, 2nd edition (2004), Richard B. Silvermann, Elsevier, Academic Press. ISBN-13: 978-0126437324.
3. Medicinal Chemistry: A Molecular and Biochemical Approach, 3rd edition (2005), Thomas Nogrady and Donal F. Weaver, Oxford University Press. ISBN-13: 978-0195104561.

Structure of B.Sc. (Hons) Biological Science under CBCS

DISCIPLINE SPECIFIC SUBJECT

COURSE DETAILS

**SUBJECT TITLE: Economic Botany**

**SUBJECT CODE: - BSHB-DS-501**

**SEMESTER – V, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- To learn the diverse human uses of plants and plant products.
- To learn the taxonomic diversity of useful plants.
- To learn the biological reasons why certain plant resources are important.
- To acquire an increased awareness and appreciation of plants and plant products encountered in everyday life.
- To recognize geographic, historical, & cultural differences in the uses and importance of plants.
- To relate diverse aspects of human cultural endeavors to plant resources, and to gain a better understanding and perspective of the origins, histories, and roles of important plants and plant products to the development of human culture.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Economic Botany (Credits: Theory-4, Practical-2) THEORY**

**Unit 1:** Origin of Cultivated Plants (6 lectures) Concept of Centres of Origin, their importance with reference to Vavilov’s work.examples of major plant introductions; Crop domestication and loss of genetic diversity; evolution of new crops/varieties, importance of germplasm diversity.

**Unit 2:** Cereals (6 lectures) Wheat and Rice (origin, morphology, processing & uses), brief account of millets.

**Unit 3:** Legumes (4 lectures) General account, importance to man and ecosystem.

**Unit 4: Sugars & Starches** (4 lectures) Morphology and processing of sugarcane, products and by-products of sugarcane industry. Potato – morphology, propagation & uses.

**Unit 5: Spices** (6 lectures) Listing of important spices, their family and part used, economic importance with special reference to fennel, saffron, clove and black pepper

**Unit 6: Beverages** (4 lectures) Tea, Coffee (morphology, processing & uses)

**Unit 7: Oils & Fats** (8 lectures) General description, classification, extraction, their uses and health implications groundnut, coconut, linseed and Brassica and Coconut (Botanical name, family & uses)

**Unit 8: Essential Oils** (4 lectures) General account, extraction methods, comparison with fatty oils & their uses.

**Unit 09: Drug-yielding plants** (4 lectures) Therapeutic and habit-forming drugs with special reference to Cinchona, Digitalis, Papaver and Cannabis.

**Unit 10: Fibres** (4 lectures) Classification based on the origin of fibres, Cotton and Jute (morphology, extraction and uses).

### **Course Outcomes**

1. After learning the subject the student will develop an understanding of plants as a source of food with emphasis on major food crops and requirements for human nutrition, the origin of agriculture, legumes, and starchy staples
2. They will get a knowledge commercial products derived from plants that provide us with consumable products such as beverages, herbs and spices, and materials such as cloth, paper, and wood.
3. They will make an understanding of plants and the environment with emphasis on the principles of ecology: the major biomes of the world, economic value of certain plants, and the strategy of extractive reserves in the rain forest.

**Suggested Readings** 1. Kochhar, S.L. (2012). Economic Botany in Tropics, MacMillan & Co. New Delhi, India. 2. Wickens, G.E. (2001). Economic Botany: Principles & Practices. Kluwer Academic Publishers, The Netherlands. 3. Chrispeels, M.J. and Sadava, D.E. (2003). Plants, Genes and Agriculture. Jones & Bartlett Publishers

## **SUBJECT CODE: - BSHB-DS-501-P**

### Economic Botany (Practical)

1. Cereals: Wheat (habit sketch, L. S/T.S. grain, starch grains, micro-chemical tests) Rice (habit sketch, study of paddy and grain, starch grains, micro-chemical tests). 2. Legumes: Soya bean, Groundnut, (habit, fruit, seed structure, micro-chemical tests). 3. Sugars & Starches: Sugarcane (habit sketch; cane juice- micro-chemical tests), Potato (habit sketch, tuber morphology, T.S. tuber to show localization of starch grains, w.m. starch grains, micro-chemical tests). 4. Spices: Black pepper, Fennel and Clove (habit and sections). 5. Beverages: Tea (plant specimen, tea leaves), Coffee (plant specimen, beans). 6. Oils & Fats: Coconut- T.S. nut, Mustard-plant specimen, seeds; tests for fats in crushed seeds. 7. Essential oil-yielding plants: Habit sketch of Rosa, Vetiveria, Santalum and Eucalyptus (specimens/photographs) 8. Drug-yielding plants: Specimens of Digitalis, Papaver and Cannabis. 10. Fibre-yielding plants: Cotton (specimen, whole mount of seed to show lint and fuzz; whole mount of fibre and test for cellulose), Jute (specimen, transverse section of stem, test for lignin on transverse section of stem and fibre).

**University of patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**DISCIPLINE SPECIFIC SUBJECT**

**COURSE DETAILS**

**SUBJECT TITLE: Dissertation**

**SUBJECT CODE: - BSHB-DS-601**

**SEMESTER – VI, CREDITS: 6**

**Course Objective:**

This course is focused to facilitate student to carry out basic research and development project through problem and gap identification, development of methodology for problem solving, interpretation of findings, presentation of results and discussion of findings. The overall goal of the dissertation is for the student to display the knowledge and capability required for independent work.

<b>Credits</b>	<b>6</b>		
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			

Dissertation

**Course Outcome:**

The student will be able to

- gain in-depth knowledge and use adequate methods in the major subject/field of study.
- create, analyze and critically evaluate different research solutions
- clearly present and discuss the conclusions as well as the knowledge and arguments that form the basis for these findings
- identify the issues that must be addressed within the framework of the specific dissertation in order to take into consideration

University of Patanjali, Haridwar

Structure of B.Sc. (Hons) Biological Science under CBCS

GENERIC ELECTIVE COURSE

COURSE DETAILS

**SUBJECT TITLE: Fundamentals of Yoga and Ayurveda**

**SUBJECT CODE: - BSHB-GE-101**

**SEMESTER – V, TOTAL HOURS: 30 CREDITS: 4**

Course Objectives

Objectives

1. Give an introduction of Yoga and its important streams.
2. Give a brief history and the basis different types of Yoga.
3. Understand the concept and principle underlying the Ayurveda medicinal system
4. Have knowledge & skills of therapeutics related to Tridosha system of disease and its treatment.
5. Dietary recommendation of Ayurveda with respect to seasons, behavior and others.
6. Acqu

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**Unit 1 General Introduction to Yoga [7Hrs.]**

Brief introduction to origin of Yoga Psychological aspects leading to origin of Yoga, History and Development of Yoga; Etymology and Definitions of Yoga, Aim and Objectives of Yoga, Misconceptions about Yoga, True Nature of Yoga; General Introduction to Schools (Streams) of Yoga, Principles of Yoga and Yogic practices for healthy living, Patanjali Yoga.

**Unit 2 Foundations of Yoga and Yoga Traditions [8Hrs.]**

General introduction to Vedas and Upanishads, Yoga in Pre-vedic period, Yoga in Vedic period, Yoga in Ayurveda, Yoga in Principle Upanishads, Yoga in Yogopanishad; General introduction to Bhagavadgita, Yoga in Bhagavadgita; Introduction to Smritis and Yoga in Smritis, Introduction to Puranas, Nature of Yoga in BhagavatPurana ; Yoga in Yoga Vasishtha, Yoga in

Narada Bhakti Sutra, Yoga in Medieval Literature, Bhakti Yoga of Medieval Saints, Yoga by Ramdev Ji and Parmahansa Yogananda Ji.

### **Unit 3 Fundamentals of Ayurveda [8 Hrs.]**

Introduction of Ayurveda: Ayurveda and its Diversified Areas, Aṣṭāṅgāyurveda: The Eight Branches of Āyurveda, Basic principal: Pañcamahābhūta (The Five Basic Elements), The Principle of Triḍoṣa: The Three Biological Humors, Traiyopastambha: Three Supporting Pillars of the Body, Saptadhātu: The Seven Fundamental Tissues, Ojas: The Vital Essence, Upadhātus: Sub-Tissues, Tridaṇḍa: The Three Dimensions of Life - Body, Mind (Psyche) and Soul, PañcaPañcaka: The Five Pentads, Mala: Digestion and Metabolism, Prakṛti, Srotas: Body Channels, Acharya Balkrishna and Ayurveda.

### **Unit 4 Anatomy & physiology and DravyagunaVigyan [7 hours]**

Basic introduction to Anatomy (Sareer Rachana) and Physiology (Sareer Kriya), *Rasa*: Taste: *Rasa* (taste) and the five elements, *Rasa* and *Doṣa*, *Rasa* and *Dhātu*, *Rasa* and *Mala*, Identifying *rasa* and their *guṇa-karma* (qualities and actions), *Guṇa*: Attributes, *Vīrya*: Potency, *Vipāka*: Post-Digestive Effect, *Prabhāva*: Specific Action

#### **Course Outcome:**

1. Students of the UG course will have an understanding about origin, history and development of Yoga.
2. They will have an idea about the insights of Indian philosophy
3. Introduction about Yoga according to various yogic texts.
4. Explain prevention of diseases through preventive health practices like daily and seasonal regimen.
5. Apply the principles of Swasthavritta and Yoga for improving quality of life.

#### **Suggested Reading**

1. Acharya, B. (2004). AusadhDarshan. Haridwar, India: DivyaPrakashan.
2. Acharya, B. (2005). Ayurveda Jadi-butiRahasya. Haridwar, India: DivyaPrakashan.
3. Dasgupta S. N: History of Indian Philosophy, MotilalBanarsidas, Delhi, 2012.
4. Sharma, Chandradhar: A Critical Survey of Indian Philosophy. MotilalBanarasidas, Delhi, 2013.
5. Swami SatyanandaSaraswati: Gheranda Samhita, Pub: BSY Mungher.
6. Swami Kulvyananda: Hath Pradipika, Pub: Kaivalyadhama, Lonawala.
7. Yoga Darshan: Swami Ramdeva, Pub: DivyaPrakashan, Haridwar.
8. Patanjali Yoga Darshan: Geeta Press.
9. Swami Ramdev: Shrimad Bhagavadgita: Geetamrit, Pub: DivyaPrakashan.
10. Shrimad Bhagvadgita: Geeta Press.

# Foundation of Physical Education

**SUBJECT CODE: - BSHB-GE-102**

**Credit 4**

## **Course Objective:**

- 1. The main aim of physical education is to spread awareness about the physical body. It enhances the knowledge of a student regarding physical safety.**
- 2. It also aims to develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.**
- 3. It gives a brief idea of history of physical education**
- 4. It teaches group solidarity and leadership qualities**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

## **Unit-I** Introduction to Physical Education

- 1.1 Meaning, Definition and Scope of Physical Education
- 1.2 Aims and Objective of Physical Education
- 1.3 Importance of Physical Education in present era.
- 1.4 Misconceptions about Physical Education.
- 1.5 Relationship of Physical Education with General Education.
- 1.6 Physical Education as an Art and Science.

## **Unit-II** Historical Development of Physical Education in India

- 2.1 Vedic Period (2500 BC – 600 BC), Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD), Medieval period
- 2.2 Post Mughal British Period (Before 1947)
- 2.3 Physical Education in India (After 1947)
- 2.4 The early history and significant stages in the revival and development of the modern Olympic movement

2.5 Educational and cultural values of Olympic movement

### **Unit-III Training Components**

3.1 Strength: its type and means methods employed for developing them

3.2 Speed: its type and means methods employed for developing them

3.3 Endurance: its type and means methods employed for developing them

3.4 Flexibility: its type and means methods employed for developing them

3.5 Coordinative abilities: means methods employed for developing those

3.6 Principles of load and its components, Determination of Optimum load,

3.7 overload its causes and identification, Tackling over Load, Training programming and planning

3.8 Periodization and its types of Periodization.

3.9 Aim and Content of Periods–Preparatory, Competition, Transitional period, Planning: Meaning and types, Principles of Planning.

### **Unit-IV Foundation of Physical Education**

4.1 Biological

4.1.1 Growth and development

4.1.2 Age and gender characteristics

4.1.3 Body Types

4.2 Psychological

4.2.1 Attitude, interest.

4.2.2 Cognition, emotions and sentiments.

4.2.3 Practical suggestion from psychology.

4.3 Sociological

4.3.1 Society and culture

4.3.2 Social acceptance and recognition

4.3.3 Leadership in physical education

Assignments, And Presentations

### **Learning Outcomes**

1. After studying the subject the student would be able to compare the relationship between general education and physical education.

2. He/ She should be able to identify and relate with the History of physical education

3. He would be able to comprehend the relationship between philosophy, education and physical education.

4. He/ She would know recent development and academic foundation of physical education.

References:

1. Bucher, C. A. (n.d.) - Foundation of physical education. St. Louis: The C.V. Mosby Co.
2. Deshpande, S. H. (2014) - Physical Education in Ancient India. Amravati: Degree college of Physical education.
3. Dash, B.N. (2003.) –Principles of Education, Neelkamal publication, Hyderabad, 32
4. Kamlesh, M.L. (2002) –Sociological Foundation of Physical Education, Metropolitan Book co. Pvt. Ltd., Delhi,
5. Pandey, R.S.( 1991) Philosophical & Sociological Foundation of Education, Vinod PustakMandir, Agra,.

# INDIAN CULTURE

4 CREDITS

## COURSE DETAILS

**SUBJECT TITLE: Indian Culture**

**SUBJECT CODE: - BSHB-GE-201**

**SEMESTER – II, TOTAL HOURS: 60 CREDITS: 4**

### Course Objectives:

This course introduces to the students the basic ideas and features of ancient Indian religions as manifested through Vedas, Buddhism and Jainism and Puranas. Beginning with the primitive religious beliefs, the Vedic pantheon and sacrifices are focussed in first unit. Next introduces to the students the basic features of the Sraman a traditions which include within its fold Buddhism and Jainism. Life and teaching of Mahāvīra, basic philosophical ideas of Jainism and its spread are discussed. Teachings of Bhagavadgītā are pronounced in detail whereas the core of Purānic religions is sought to be established through Avatāravāda and Pañacadevopāsanā. Various cults like Vaisnavism, Śaivism and Śāktism have played a prominent role in popularizing the basic tenets of Purānic religion.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

### Unit I :

**12 Hours**

Indus period, Early Vedic period, Later Vedic period Science & Technology, Culture & Civilization, Literature and texts, Society and position of women

### Unit II :

**12 Hours**

Tirthankar: Rishabhdev, Parshwanath and Mahaveer. Jainism: Life and teachings of Mahavira, Svetambara and Digambara, Anekantavada and Syadvad Buddhism: Life and teachings of Gautama Buddha, Buddhist Councils, Hinayana and Mahayana. Bhagavatism

### Unit III :

**14 Hours**

Teachings of Bhagavadgita, Gyanayoga, Bhaktiyoga and Karmayoga Puranic Religions: Shaivism, Vaishnavism and Shaktism.

### Unit IV:

**11 Hours**

Adi Shankaracharya, Bhakti movement, Ramanujacharya, Kabirdas, Tulsidas, Surdas, Nanak Dev, Chaitanya, etc

Indian culture in medieval and modern times. Cultural diversity, Uniqueness of Indian Culture, Science & Technology in modern India and cultural change.

**Course outcome:**

Students will able to:

1. Identify Approaches towards the sources and the study of ancient Indian history.
2. Evolution of social and cultural institutions in the Vedic society, Religious dissent and the rise of Jainism and Buddhism
3. Understand Asoka's Dhamma and his inscriptions.
4. To Know Science and Technology in Ancient Text.
5. To Know Science and Technology in Modern Text.
6. To Know our great Yoga Guru.

**Recommended Readings :**

Agrawala, V.S., Prachina Bharatiya Lokadharma (Hindi and English), Varanasi, 1964.

Banerjee, J.N., Development of Hindu Iconography, New Delhi, 1985.

Barth, A., The Religions of India, Varanasi, 1985. 19

Bevarkara, S.K. and R.D. Ranade, History of Indian Philosophy, Vol. II, Poona, 1927.

Bhandarkar, R.G., Vaishnavism, Saivism and Minor Religious Systems (Also in Hindi), Varanasi, 1965.

Bhattacharya, N.N., History of Sakta Religion, New Delhi, 1974

Chaturvedi, P., Vaishnava Dharma, Varanasi, 1977.

Hiriyanna, M.H., Outlines of Indian Philosophy, London, 1932.

Jaiswal, Suvira, Origin and Development of Vaishnavism (also in Hindi), Delhi, 1996 (2nd ed.).

Keith, A.B., The Religion and Philosophy of Veda and Upanishads (also in Hindi), Cambridge, 1925

Upadhyaya, B. Bharatiya Darshana, Varanasi, 1971.

Bapat, P.V. (ed.), 2500 Years of Buddhism ( Also in Hindi ), New Delhi, 1987.

Jain, Hiralal, Bharatiya Samskriti me Jaina Dharma ka Yogadana (Hindi). Bhopal, 1962.

Jaini, J.L., An outline of Jainism, Cambridge, 1916.

Jain, Jyoti Prasad, Religion and Culture of the Jains, Delhi, 1995.

Majumdar, R.C. and A. D. Pusalker (eds.), The History and Culture of the Indian People, Vols. I –V (relevant chapters), Bombay, 1951-1957.

# Introduction to Srimad Bhagavad Gita

**SUBJECT CODE: - BSHB-GE-202**

4 CREDITS

## Course Objectives:

1. Introducing learners towards various aspects of the Bhagavadgeeta.
2. Familiarize the learners with the contributions of the Bhagavadgeeta in the areas of religion, Yoga, science & Technology, education, languages and literature.
3. Enable learners to appreciate the composite nature of Bhagavadgeeta.
4. Develop among learners a feeling of love and a sense of belonging towards the nation by Bhagavadgeeta.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

Unit 1: Shrimad Bhagwadgita Introduction

(12 Hours)

General Introduction Of The Bhagavad Gita, The Great Significance Of The Bhagavad Gita And Various Scholars' Views In Relation To It, Synthesis Of Yoga In The Bhagavad Gita, The Major Definitions Of Yoga, The Nature Of Yoga, Yoga Sadhana In The Bhagavad Gita, Relevance Of The Bhagavad Gita In The Current Era.

Unit-2: Gyan Yoga –Atman, Prakriti & Parmatman

(12 Hours)

Sankhya Yoga Or Jnana Yoga (Chapter-2, 3, 4, 5, 6, 13),

The Form Of The Soul (Chapter-2),

The Form Of The Supreme Soul (Purushottama), (Chapter4, 8,10,11,13,15),

Form Of Prakriti (Chapter-9, 13, 14).

Unit-3: Karma Yoga and Meditation Yoga

(12 Hours)

Concepts Of Karmayoga (Chapter-2-6), Form Of Yajna , Yajnartha Karma, Nishkam Karma (Chapter-3,4), Lok Sangrah (Chapter-3), Jnana-Karma Coordination (Chapter-5), Forms Of Dhyana Yoga (Chapter-6).

Unit 4: Bhakti Yoga

(12 Hours)

Concepts Of Bhakti And Mahatmya (Chapters-7, 8, 9,11, 12), The Necessity Of Devotion In Divine Realization (Chapters-11, Verse-52-55), Types Of Bhakti (Chapters-7,12) Characteristics Of The Devotee (Chapter-12, Verse-13-20)

Unit 5: Personality, Diet And Trigun Concept

(12 Hours)

Role Of Diet In Yoga Practice (Chapter-6), Introduction To Trigunas (Chapter-14), Concept Of Trigun-Based Personality (Chapter-17), Elements Of Personality Development, Ideal Personality- Daivee Sampda (Chapter-16).

### **Course Outcome:**

Students will able to:

1. get knowledge about Karma, Gyan and Bhakti Yoga.
2. understand how Humans can achieve a better goal in their life.
3. know the true meaning of life.

Prescribed Text Book - 1. श्रीमद्भगवद्गीता- गीतामृत- योग ऋषि स्वामी रामदेव जी, पतञ्जलि योगपीठ

Supporting text book 1. गीता रहस्य लोक मान्द्य नतलक (चयनित पाठ यांश)

2. Shrimadbhagvadgeeta- Tattvavivechini-Jaidayal Goyandaka, Geeta Press Gorakhpur.

**RESEARCH METHODOLOGY** (Credits: Theory-04, Tutorials-02)**Course Objective:**

1. Understand some basic concepts of research and its methodologies
2. Identify appropriate research topics
3. Select and define appropriate research problem and parameters
4. Prepare a project proposal (to undertake a project)

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	-	-
<b>Hrs/Week</b>		<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>		<b>Internal Assessment (CT+TA)</b>		<b>Final Exam (SEE)</b>
<b>70</b>		<b>30</b>		<b>Internal Assessment (CT+TA/PR)</b>
				<b>-</b>
				<b>-</b>

Literature Survey: Print: Sources of information: Primary, secondary, tertiary sources; Journals: Journal abbreviations, abstracts, current titles, reviews, monographs, dictionaries, text-books, current contents, Introduction to Chemical Abstracts and Beilstein, Subject Index, Substance Index, Author Index, Formula Index, and other Indices with examples.

Digital: Web resources, E-journals, Journal access, Hot articles, Citation index, Impact factor, H-index, E-consortium, UGC infonet, E-books, Internet discussion groups and communities, Blogs, Preprint servers, Search engines, Scirus, Google Scholar, ChemIndustry, Wiki- Databases, ChemSpider, Science Direct, SciFinder, Scopus.

Information Technology and Library Resources: The Internet and World Wide Web. Finding and citing published information.

Methods of Scientific Research and Writing Scientific Papers: Reporting practical and project work. Writing literature surveys and reviews. Organizing a poster display. Giving an oral presentation. Writing scientific papers – justification for scientific contributions, bibliography, description of methods, conclusions, the need for illustration, style, publications of scientific work. Writing ethics. Avoiding plagiarism.

Data Analysis The Investigative Approach: Making and Recording Measurements. SI Units and their use. Scientific method and design of experiments. Analysis and Presentation of Data: Descriptive statistics. Choosing and using statistical tests. Chemometrics. Analysis of variance (ANOVA), Correlation and regression, Curve fitting, fitting of linear equations, simple linear cases, weighted linear case, analysis of residuals, General polynomial fitting, linearizing transformations, exponential function fit, r and its abuse. Basic aspects of multiple linear regression analysis.

**Course Outcome:**

At the end of the course students will be able to...

**CO1:** Develop the ability to apply the methods while working on a research project work

**CO2:** Describe the appropriate statistical methods required for a particular research design

**CO3:** Choose the appropriate research design and develop appropriate research hypothesis for a research project

**CO4:** Develop a appropriate framework for research studies

**Reference Books:**

1. Dean, J. R., Jones, A. M., Holmes, D., Reed, R., Weyers, J. & Jones, A. (2011) Practical skills in chemistry. 2nd Ed. Prentice-Hall, Harlow.
2. Hibbert, D. B. & Gooding, J. J. (2006) Data analysis for chemistry. Oxford University Press.
3. Topping, J. (1984) Errors of observation and their treatment. Fourth Ed., Chapman Hall, London.

# Fundamentals of Organic Chemistry

SUBJECT CODE: - BSHB-GE-502

Credit 4

## Course Objective:

1. To understand the core concepts of organic chemistry i.e. resonance, hyperconjugation, inductive effect etc. and their application.
2. To study about the Biodegradable and non-biodegradable polymers.
3. To understand chemistry in everyday life.
4. To acquire basic knowledge of reactive intermediates and mechanism of organic reactions

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	-	-
<b>Hrs/Week</b>	<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	-	-

1. Electronic Displacements: Inductive Effect, Electromeric Effect, Resonance and Hyperconjugation. Cleavage of Bonds: Homolysis and Heterolysis. Reaction intermediates: Carbocations, Carbanions and free radicals. Electrophiles and nucleophiles Aromaticity: Hückel's rule, Stereochemistry
2. Aliphatic Hydrocarbons, Aromatic hydrocarbons, Alkyl Halides, Alcohols, Phenols, Esters, Aldehydes and ketones, Carboxylic acids, Amines (preparations, physical properties & chemical reactions)
3. Polymers: Natural and synthetic, methods of polymerization (addition and condensation), copolymerization. Some important polymers: natural and synthetic like polythene, nylon, polyesters, bakelite, rubber. Biodegradable and non-biodegradable polymers.
4. Chemistry in everyday life: Chemicals in Medicine, Cleansing agents

## Course Outcome:

- 1.. Know the fundamental principles of organic chemistry and predict outcomes and derive mechanism of various types of organic reactions.
2. Understand various types of reactive intermediates and factors affecting their stability.
3. Understand the synthesis, isomerism and physical properties of alkanes, cycloalkanes, alcohols, esters, amines, aldehydes, ketones etc

### Books recommended:

1. Morrison, R. T. & Boyd, R. N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
2. Finar, I. L. Organic Chemistry (Volume 1), Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
3. Finar, I. L. Organic Chemistry (Volume 2), Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
4. Nelson, D. L. & Cox, M. M. Lehninger's Principles of Biochemistry 7th Ed., W. H. Freeman.
5. Berg, J. M., Tymoczko, J. L. & Stryer, L. Biochemistry 7th Ed., W. H. Freeman

**BIOCHEMICAL INSTRUMENTATION****Course Objective:**

1. The course will help students to acquaint with basic instrumentation, principle and procedure of various sophisticated instruments
2. This will enable the students to implement the use of these techniques in biological research and in discovering new products/compounds.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>	

1. Separation of mixtures by Chromatography: Measure the R<sub>f</sub> value in each case (combination of two compounds to be given) (a)Identify and separate the components of a given mixture of 2 amino acids (glycine, aspartic acid, glutamic acid, tyrosine or any other amino acid) by paper chromatography (b)Identify and separate the sugars present in the given mixture by paper chromatography.
2. Optical methods of analysis: Origin of spectra, interaction of radiation with matter, fundamental laws of spectroscopy and selection rules, validity of Beer-Lambert's law. UV-Visible Spectrometry: Basic principles of instrumentation (choice of source, monochromator and detector) for single and double beam instrument; Basic principles of quantitative analysis: estimation of metal ions from aqueous solution, geometrical isomers, keto-enol tautomers.
3. Infrared spectroscopy: Interactions with molecules: absorption and scattering. Means of excitation (light sources), separation of spectrum (wavelength dispersion, time resolution), detection of the signal (heat, differential detection), interpretation of spectrum (qualitative, mixtures, resolution), advantages of Fourier Transform (FTIR).
4. NMR spectroscopy: Principle, Instrumentation, Factors affecting chemical shift, Spincoupling, Applications.
5. Mass spectroscopy: Making the gaseous molecule into an ion (electron impact, chemical ionization), Making liquids and solids into ions (electrospray, electrical discharge, laser desorption, fast atom bombardment), Separation of ions on basis of mass to charge ratio
6. Electrophoresis: Basic Principle of electrophoresis, Paper electrophoresis, Gel electrophoresis, discontinuous gel electrophoresis, PAGE, SDS-PAGE, Native and denaturing gels. Agarose gel electrophoresis, buffer systems in electrophoresis. Electrophoresis of proteins and nucleic acids, protein and nucleic acid blotting, detection and identification. Molecular weight determination
7. Centrifugation  
Principle of centrifugation, basic rules of sedimentation, sedimentation coefficient,

various types of centrifuges, different types of rotors, differential centrifugation, density gradient centrifugation

**Course Outcome:**

1. This paper is crucial for implementation of research ideas at molecular level.
2. It trains the students in adopting various techniques in biological research.
3. This significantly enhances the employability of the candidates in Biotechnological, Pharmaceutical Industries and Analytical Laboratories and research institutes
4. The course will help students to acquaint with basic instrumentation, principle and procedure of various sophisticated instruments
5. The students will be able to implement the use of instruments like chromatography, UV-VIS spectroscopy, NMR, electrophoresis, etc in biological research

**Books recommended:**

1. Principles of Instrumental Analysis - 6th Edition by Douglas A. Skoog, F. James Holler, and Stanley Crouch (ISBN 0-495-01201-7).
2. Instrumental Methods of Analysis, 7th ed, Willard, Merritt, Dean, Settle.
3. P.W. Atkins: Physical Chemistry.
4. G.W. Castellan: Physical Chemistry.
5. C.N. Banwell: Fundamentals of Molecular Spectroscopy.

**STRUCTURAL BIOINFORMATICS**

## Course Objective:

The objective of the course is learning and understanding the detailed developments and applications of the field of Bioinformatics in varied area of biological research. The course generally focuses on genomics, proteomics and computational biology studies and their relevance on research platform.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	-	-
<b>Hrs/Week</b>	<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	-	-

Unit I What is Bioinformatics and its relation with molecular biology Examples of related tools (FASTA, BLAST, BLAT, RASMOL), databases (GENBANK, Pubmed, PDB ) and software (RASMOL,Ligand Explorer), Data generation; Generation of large scale molecular biology data. (Through Genome sequencing, Protein sequencing, Gel electrophoresis, NMR Spectroscopy, X-Ray Diffraction, and microarray).

Unit II Sequence Alignments and Visualization, Introduction to Sequences, alignments and Dynamic Programming,Local alignment and Global alignment (algorithm and example), Pairwise alignment (BLAST and FASTA Algorithm) and multiple sequence alignment (Clustal W algorithm).Methods for presenting large quantities of biological data: sequence viewers (Artemis, SeqVISTA), 3D structure viewers (Rasmol, SPDBV, Chime, Cn3D, PyMol), Anatomical visualization.

Unit III Fundamentals of X-ray diffraction, NMR spectroscopy of macromolecules, Protein Structure: Primary, Secondary, Super Secondary, Domains, Tertiary, Quaternary, Ramachandran plot.

Unit IV Protein secondary structure classification databases: HSSP, FSSP, CATH, SCOP, Protein secondary structure prediction methods: GOR, Chou-Fasman, PHD, PSI- PRED, J-Pred.

Unit V Protein Tertiary structure prediction methods: Homology Modeling, Fold Recognition, Ab-intio Method, Protein folding, Molecular Dynamics of Protein, Molecular Docking of Protein, Small molecule and Nucleotide, Concepts of Force Field

Unit VI Motif and Domain: Motif databases and analysis tools, Domain databases (CDD, SMART, ProDom) and Analysis tools. HMM (Hidden Markov Model): Introduction to HMM, its application in Sequence alignment and Structure prediction, HMM based Softwares (HMMER and HMMSTR)

**Course Outcome:**

1. The student will be able to apply basic principles of biology, computer science and mathematics to address complex biological problems.
2. The student will learn about the Computer basics like Operating systems, Programming in Visual Basic, Data Access, Internet and Nucleic acid Sequence and protein Data Banks
3. The course will help to understand the Database Similarity Searches like BLAST, FASTA etc., multiple sequence alignments, Primer Designing, Homology Modeling, phylogenetic analysis & Drug Designing, and Determination of Secondary & Tertiary of proteins.

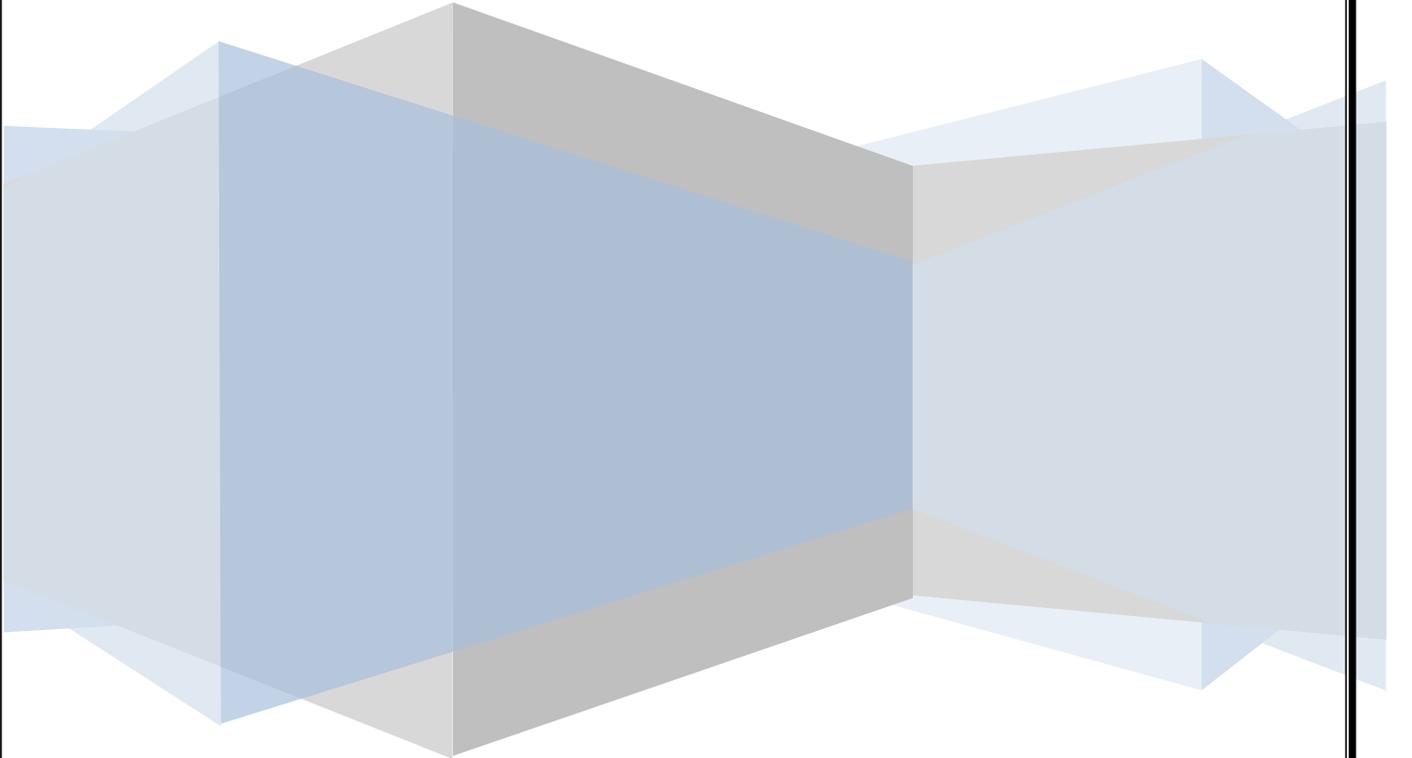
**Books recommended:**

1. Baxevanis & Ouellette 2001. Bioinformatics: A Practical Guide to the Analysis of Genes and Proteins 2nd Edition. John Wiley Publishing.
2. Gibas & Jambeck 2001. Developing Bioinformatics Computer Skills. O'Reilly.
3. Bioinformatics: Genome Sequence Analysis Mount 2001
4. Bioinformatics For Dummies – Claverie & Notredame 2003
5. Introduction to Bioinformatics – Lesk 2002
7. Fundamental Concepts of Bioinformatics Krane & Raymer 2003

University of Patanjali,  
Haridwar, Uttarakhand.

**Bachelor of Naturopathy and Yogic Sciences (B.N.Y.S.)**

**Syllabus of BNYS**



## INTRODUCTION

Patanjali Yogpeeth has been established on dated 4/2/2004, to promote the traditional knowledge of Vedic system of health and healing. The common masses have accepted and realized the efficacy of Indian traditional systems of Yoga, Naturopathy and Ayurveda. Especially, the integrated approach to overcome the Corona Pandemic Crisis. The Mother Nature has all resources to maintain health and harmony of all the living organisms in this world. But we, human beings in the name of civilization, modernization and technical advancement, adopted and habituated to unnatural lifestyle and going against Natural Laws of Health. In this Era of Modernization, the prevalence of psychosomatic disorders, Infections and Auto immune diseases are in rage and losing the Innate Immunity.

The demand for traditional and integrated methods towards health and healing has been increased. Therefore, Param Pujya Swami Ramdevji and Param Shraddey Acharya Balkrishna ji have given the clarion call “**BACK TO NATURE**” and propounded to promote traditional and integrated therapeutic academic program. University of Patanjali established Faculty of Naturopathy and Yoga Science, under which 6 years BNYS medical UG program started. The main objective to start BNYS medical degree course is to blend Indian culture, heritage, traditional knowledge of Naturopathy, Yoga Philosophy & Practices with an integrated approach in medical science.

First BNYS is divided into 2 parts BNYS 1<sup>st</sup>A of 6 months consists of Physics, Chemistry, Biology and Sanskrit & BNYS 1<sup>st</sup>B 1 ½ year duration, and consists of pre-clinical subjects that describe about Yoga and Naturopathy principles, Human Anatomy, Physiology, Biochemistry, Philosophy of Nature cure, Fundamental principles of integrated system of medicine, Philosophy and Practice of Yoga and Sanskrit. Second BNYS is one year duration consisting Para-clinical subjects like – Pathology, Microbiology, Community Medicine, Basic Pharmacology, Yoga and Physical Culture-I, Diagnostic Method in Yoga & Naturopathy and Modern Diagnostic Methods. Third BNYS is of one year duration and consists of Para-clinical and Yoga – Naturopathy clinical subjects include Forensic Medicine and Toxicology, Manipulative Therapy, Community Medicine, Yoga & Physical Culture II, Nutrition & Herbology, Psychology & Basic Psychiatry and Obstetrics & Gynecology. Final or 4<sup>th</sup> BNYS is of one year duration, and consists of intense clinical subjects like Yoga Therapy, Hydrotherapy & Claytherapy, Fasting & Diet therapy, Chromotherapy & Magnetotherapy, Physiotherapy, Acupuncture, Acupressure, Reflexology Pranic healing & Reiki, Minor Surgery, First aid and Emergency Medicine and Hospital Management.

To procreate competent Naturopathy physicians, Board of studies of Naturopathy and Yoga science & Academic council of Patanjali University, with the approval of Revered Yog Rishi Pujya Swami Ramdevji and Ayurveda Shiromani Pujya Acharya Balkrishnaji restructured the BNYS course syllabus and admission criteria. Yoga being one of the core subjects in BNYS, all Yoga Sutras explained in the Sanskrit language. To retain the real meaning and convey the complete essence of each sutra, The August management of University of Patanjali initiated the reforms in BNYS admission criteria by allowing few percentages of seats to the students with Sanskrit and other streams of +2. For such students the **University of Patanjali** is conducting 6 months bridge course. **This is in similarity to pre-tib course in Unani Medicine.** In this bridge course, students study all subjects of Science and Sanskrit language. The bridge course is pre-requisite and designed to fill the gap between science and arts students to get admission into BNYS under University of Patanjali.

In view of new regulations from UGC, University of Patanjali also revised the BNYS course on CBCS exam pattern and also brought uniformity in duration and course contents from 1<sup>st</sup>BNYS to 4<sup>th</sup> BNYS course curriculum.

#### **GOALS OF BNYS COURSE**

1. Recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the National Health Policy
2. Develop the skills in most of the competencies and training that are required to deliver the Naturopathy and Yoga health care system
3. Become aware of the contemporary advances and developments in the discipline concerned;
4. Acquire a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology,
5. Become proficient in their profession by developing scientific temper and improve educational experience;
6. Identify social, economic, environmental, biological and emotional determinants of health in a given case and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies;
7. Plan and devise measures in Naturopathy and yoga for the prevention and rehabilitation of patients suffering from disease and disability;
8. Demonstrate skills in documentation of individual case details as well as morbidity data relevant to the assigned situation;

9. Play the assigned role in the implementation of national health programs, effectively and responsibly;
10. Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field Situation;
11. Develop skills as a self-directed learner; recognize continuing educational needs, select and use appropriate learning resources;
12. Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyze relevant published research literature;
13. To implement all National health policies;
14. Work towards realization of Health for all, as a national goal through naturopathy and yoga;
15. To follow the medical ethics and to fulfill the social and professional responsibilities as a Naturopathy and Yoga Physician through drugless therapies;
16. Be competent in the practice of holistic medicine with expert knowledge and experience in promotive, preventive, curative and rehabilitative aspects of diseases;
17. Become proficient in their profession by developing scientific temper and improve educational experience;

### **INSTITUTIONAL GOALS**

After the medical undergraduate program, the students must:

1. Be able to expertly diagnose and manage common diseases and health problems of individuals as well as community, work with the health team as a fully qualified doctor at primary, secondary or tertiary levels, with his/her clinical experience and skills in history, physical examination and relevant investigations;
2. Be proficient in promotive, preventive, curative and rehabilitative medicine and therapy for common health issues;
3. Be adept in different therapeutic modalities and their administration;
4. Develop a humane attitude towards one's clients and understand economic, environmental, social, psychological and cultural factors that influence health;
5. Enjoy an urge for self-improvement, directed towards advanced expertise or research in any chosen area of health care;
6. Have enough knowledge about implementation of National Health Programs and the basic factors required for the same, which are as follows;
  - a. Family Welfare and Maternal and Child Health (MCH);
  - b. Sanitation and Water Supply;

- c. Prevention and Control of communicable and non-communicable diseases;
  - d. Immunization;
  - e. Health education;
7. Possess management skills in human resources, materials and resource management in health care delivery;
  8. Be competent in recognizing community health issues and design, institute curative and preventive measures and evaluate the outcome of these measures, thus working towards resolving these issues;
  9. Be able to work successfully in a variety of health care settings;
  10. Develop integrity, responsibility, reliability, dependability and compassion, which are characteristics required for successful professional life; 11. Develop leadership and communication skills to work as leading investigator or clinician in health care team.

### **OBJECTIVES OF MEDICAL GRADUATE TRAINING PROGRAMME**

1. To effectively integrate the conventional basic sciences (e.g., human physiology) with the traditional medical systems and to enhance the understanding of their effects and therapeutic potential;
2. To provide state of the art learning facilities (e.g., audio visual aids, interactive learning systems) to conceptualize the ancient medical system;
3. To run advanced laboratories under each department (basic and clinical sciences) for effective experimental training and research;
4. To explore the possibilities of promoting effective integrated medical practice at conventional medical facilities attached to the institute;
5. To provide the best possible clinical setting for clinical training and research;
5. To prepare every Yoga and Naturopathic physician with an in depth understanding of Basic sciences, superior clinical training and with an outlook for research and development;

### **NORMS RELATED BNYS COURSE**

#### **Course of Study**

The duration of the course shall be 6 years (six years). The course shall include a period of regular study of five (5 years, followed by a compulsory rotatory internship of one year. The period of regular study shall be divided into five phases - first year of two years which is divided into BNYS 1<sup>st</sup> A of 6 months and BNYS 1<sup>st</sup> B of 1 ½ year , and the Second, Third and Final years of one year each of the B.N.Y.S. Medical Degree Course respectively.

**Attendance**

A candidate shall be considered to have satisfied the requirement of attendance for each Part/Phase if he/she attends not less than 80 per cent of the theory and practical classes actually conducted up to the end of the Phase in that subject. Such a candidate having shortage of attendance shall be required to attend 80 per cent of the theory and practical classes actually held up to the end of the term by repeating that subject of that Part/Phase during a subsequent term.

**SCHEME OF EXAMINATION**

The examination/s shall be held as per the date of Examination notified by s University: There should be one Internal & One External Examiner for all practical and Viva exams for each subject. A candidate shall register for term/year, when he/she appears for the first time to the examination of that Part.

**Internal Assessment**

There shall be an internal assessment which follows broadly the principles enunciated by the University in each subject for which 20 per cent of the marks are set apart these will be added in the final grade in the University examinations. There shall be minimum of two assignments and two periodical tests in all subjects of each year assess the progress of the candidate. If a candidate fails in an Examination, his/her internal assessment shall be assessed again as if he/she is a regular student for the second attempt only.

**Theory**

Minimum of 3 examinations is recommended. The examination preceding the university examination may be similar to the University Examination. Average marks of the better of the two notified internal examinations should be reduced to the marks allotted for internal assessment for each subject and should be sent to the university.

**Practical**

A minimum of one clinical test may be conducted at the end of each ward postings in all the clinical subjects, Assistant professor and above or lecturer with five years of teaching experience can conduct internal assessment examination. Average of best two examination marks should be taken into consideration while calculating the marks of internal assessment. The internal assessment marks of both theory and practical obtained by the candidates should be sent to university at least 15 days prior to the commencement of the theory exams.

**Eligibility for examination:**

A candidate who has passed in all the subjects of First B.N.Y.S. Medical Degree examination shall be eligible to be promoted to Second B.N.Y.S. Medical Degree course. A candidate is eligible for carry over facility only if he/she has appeared for all the subjects of that particular examination.

First year to Second Year - 3 subjects carry Over, second year to Third year - 3 subjects carry over, Third Year to Final year-3 subject Carry over.

Completion of the degree should not go beyond 11 years from the date of admission.

**Criteria for Pass**

To be eligible for promotion to BNYS 1<sup>st</sup> B, the candidate has to complete and pass in all the subjects. The candidate is declared to have been successful provided he/she secures minimum 50% and above in subjects. To be eligible for promotion to the II, III & IV years, the candidate has to complete and pass in all the subjects of I, II & III years with an exemption of one subject in each year. The candidate is declared to have been successful passed, if he/she secures minimum 50% and above in theory, 50% and above in oral/practical/clinical separately each subject, but should get 50% in aggregate in all.

**Declaration of Class**

A candidate who passes all the subjects of one examination in the first attempt only be eligible for a class. No class or rank shall be declared for candidate who does not pass any examination in the first attempt, and such a candidate shall be eligible only for a pass class.

**Grading system**

The students will be assigned a grade in each course based on his or her combined performance in the sessional work and the final examination. Grade distinction and grade point of each grade is as follows:

<b>Grade Distinction</b>			
<b>Marks Obtained</b>	<b>Grade</b>	<b>Grade Point</b>	<b>Class</b>
<b>Less than 50%</b>	<b>F</b>	<b>0</b>	<b>Fail</b>
<b>50 % to 54 %</b>	<b>C</b>	<b>1</b>	<b>Pass</b>
<b>55% to 64 %</b>	<b>B</b>	<b>2</b>	<b>Second class</b>
<b>65% to 74%</b>	<b>A</b>	<b>3</b>	<b>First class</b>
<b>75% to 100%</b>	<b>O</b>	<b>4</b>	<b>Distinction</b>

**Cumulative Grade Point Average:**

Based on the grades obtained in all the subjects registered for by a student, his or her Cumulative Grade Point Average (CGPA) is calculated as follows:

CGPA is rounded off to the second decimal place.

$$CGPA = \frac{\sum (No.ofCredits \times GradePoint)}{\sum No.ofCredits}$$

CGPA is rounded off to the second decimal place.

**Note: A candidate who passes in all the subjects of any Examination only in first attempt shall be eligible for First class with Distinction /First/Second Class**

# Bachelor of Naturopathy and Yogic Sciences (B.N.Y.S.) (A Six years Degree Course)

**MEDIUM OF INSTRUCTION :- English & Sanskrit**

## CURRICULUM

**BNYS 1<sup>st</sup> A**  
**Duration : 6 months**

S.No.	Subject	Duration of Study
1.	Physics	6 months
2.	Chemistry	6 months
3.	Biology	6 months
4.	Sanskrit	6 months

S.No.	Subject	Paper Code Theory	Paper Code Practical
1.	Physics	PBNYS – T 101	-
2.	Chemistry	PBNYS – T 102	-
3.	Biology	PBNYS – T 103	-
4.	Sanskrit	PBNYS – T 104	-

### B.N.Y.S. 1<sup>st</sup> A (6 MONTHS)

S. No	Subject	Theo ry	IA	Viva voce	Total	Practical	IA	Total	Grand Total Marks	Credits	Hrs./ Week
1.	Physics	70	20	10	100	-	-	-	100	6	6
2.	Chemistry	70	20	10	100	-	-	-	100	6	6
3.	Biology	70	20	10	100	-	-	-	100	6	6
4.	Sanskrit	70	20	10	100	-	-	-	100	6	6

\*IA - Internal Assessment

**B.N.Y.S. 1<sup>st</sup> B**  
**Duration: 18 months**

Part -1		
S.No.	Subject	Duration of Study
1.	Biochemistry	12 months
2.	Philosophy and Practice of Yoga	12 months
3.	Sanskrit	12 months
Part -2		
1.	Human Anatomy – I	18 months
	Human Anatomy – II	
2.	Human Physiology –I	18 months
	Human Physiology – II	
3.	Philosophy of Nature cure – I	18 months
	Philosophy of Nature cure – II	
4.	Fundamental principles of integrated system of medicine -I	18 months
	Fundamental principles of integrated system of medicine -II	

**Practical's** : Biochemistry, Philosophy and Practice of Yoga, Anatomy, Physiology & Philosophy of Nature Cure.

Part -1			
S.No.	Subject	Paper Code Theory	Paper Code Practical
1.	Biochemistry	BNYS – T 101	BNYS – P 101
2.	Philosophy and Practice of Yoga	BNYS – T 102	BNYS – P 102
3.	Sanskrit	BNYS – T 103	-
Part -2			
1.	Human Anatomy – I	BNYS – T 104A	BNYS – P 104
	Human Anatomy – II	BNYS – T 104B	
2.	Human Physiology –I	BNYS – T 105A	BNYS – P 105
	Human Physiology – II	BNYS – T 105B	
3.	Philosophy of Nature cure – I	BNYS – T 106A	BNYS – P 106
	Philosophy of Nature cure – II	BNYS – T 106B	
4.	Fundamental principles of integrated system of medicine -I	BNYS – T 107A	-
	Fundamental principles of integrated system of medicine -II	BNYS – T 107B	

Part -1 (12 MONTHS)											
S. No	Subject	Theory	IA	Viva voce	Total	Practical	IA	Total	Grand Total Marks	Credits	Hrs./Week
1	Biochemistry	80	20	30	130	60	10	70	200	6	6
2	Philosophy and Practice of Yoga	80	20	30	130	60	10	70	200	6	6
3	Sanskrit	80	20	50	150	-	-	-	150	6	6
<b>Total</b>									<b>550</b>	<b>18</b>	<b>18</b>

Part - 2 (18 MONTHS)											
S. No	Subject	Theory	IA	Viva voce	Total	Practical	IA	Total	Grand Total Marks	Credits	Hrs./Week
1	Anatomy – I	80	20	30	230	60	10	70	300	6	6
	Anatomy – II	80	20								
2	Physiology-I	80	20	30	230	60	10	70	300	6	6
	Physiology –II	80	20								
3	Philosophy of Nature cure-I	80	20	30	230	60	10	70	300	6	6
	Philosophy of Nature cure –II	80	20								
4	Fundamental principles of integrated system of medicine -I	80	20	50	250	-	-	-	250	6	6
	Fundamental principles of integrated system of medicine –II	80	20								
<b>Total</b>									<b>1150</b>	<b>24</b>	<b>24</b>

\*IA - Internal Assessment

**B.N.Y.S. 2<sup>nd</sup>**  
**Duration : 12 months**

S.No.	Subject	Duration of Study
1.	Pathology-I	12 months
	Pathology-II	
2.	Microbiology	12 months
3.	Yoga and Physical Culture-I	12 months
4.	Diagnostic Method in Yoga & Naturopathy	12 months
5.	Modern Diagnostic Methods	12 months
6.	Basic Pharmacology	12 months

**Practical's :** Pathology, Microbiology, Yoga & phy. culture, Diagonostic Methods in N&Y, Modern Diagnostics.

S.No.	Subject	Paper Code Theory	Paper Code Practical
1.	Pathology-I	BNYS – T 201 A	BNYS- P 201
	Pathology-II	BNYS – T 201 B	
2.	Microbiology	BNYS – T 202	BNYS- P 202
3.	Yoga and Physical Culture-I	BNYS – T 203	BNYS- P 203
4.	Diagnostic Method in Yoga & Naturopathy	BNYS – T 204	BNYS- P 204
5.	Modern Diagnostic Methods	BNYS – T 205	BNYS- P 205
6.	Basic Pharmacology	BNYS – T 206	-

<b>B.N.Y.S. 2<sup>nd</sup> (12 MONTHS)</b>											
S. No	Subject	Theo ry	IA	Viva voce	Total	Practical	IA	Total	Grand Total Marks	Credits	Hrs./ Week
1.	Pathology-I	80	20	30	230	60	10	70	300	6	6
	Pathology-II	80	20								
2.	Microbiology	80	20	30	130	60	10	70	200	6	6
3.	Yoga and Physical Culture-I	80	20	30	130	60	10	70	200	6	6
4.	Diagnostic Method in Yoga & Naturopathy	80	20	30	130	60	10	70	200	6	6
5.	Modern Diagnostic Methods	80	20	30	130	60	10	70	200	6	6
6.	Basic Pharmacology	80	20	50	150	-	-	-	150	6	6
<b>Total</b>									<b>1250</b>	<b>36</b>	<b>36</b>

\*IA - Internal Assessment

**B.N.Y.S. 3<sup>rd</sup>**  
Duration: 12 months

S.No.	Subject	Duration of Study
1.	Forensic Medicine & Toxicology	12 months
2.	Community Medicine	12 months
3.	Psychology & Basic Psychiatry	12 months
4.	Obstetrics & Gynecology	12 months
5.	Yoga & Physical Culture II	12 months
6.	Nutrition & Herbology	12 months
7.	Manipulative Therapy	12 months

**Practical's** : Forensic Medicine & Toxicology, Community Medicine, Obstetrics & Gynecology, Yoga & Physical Culture II, Nutrition & Herbology, Massage, Chiropractice, Osteopathy & Aromatherapy.

S.No.	Subject	Paper Code Theory	Paper Code Practical
1.	Forensic Medicine & Toxicology	BNYS – T 301	BNYS- P 301
2.	Community Medicine	BNYS – T 302	BNYS- P 302
3.	Psychology & Basic Psychiatry	BNYS – T 303	-
4.	Obstetrics & Gynecology	BNYS – T 304	BNYS- P 304
5.	Yoga & Physical Culture II	BNYS – T 305	BNYS- P 305
6.	Nutrition & Herbology	BNYS – T 306	BNYS- P 306
7.	Manipulative Therapy	BNYS – T 307	BNYS- P 307

**B.N.Y.S. 3<sup>rd</sup> (12 MONTHS)**

S. No	Subject	Theo ry	IA	Viva voce	Total	Practical	IA	Total	Grand Total Marks	Credits	Hrs./ Week
1.	Forensic Medicine & Toxicology	80	20	30	130	60	10	70	200	6	6
2.	Community Medicine	80	20	30	130	60	10	70	200	6	6
3.	Psychology & Basic Psychiatry	80	20	50	150	-	-	-	150	6	6
4.	Obstetrics & Gynecology	80	20	30	130	60	10	70	200	6	6
5.	Yoga & Physical Culture II	80	20	30	130	60	10	70	200	6	6
6.	Nutrition & Herbology	80	20	30	130	60	10	70	200	6	6
7.	Manipulative Therapy	80	20	30	130	60	10	70	200	6	6
<b>Total</b>									<b>1350</b>	<b>42</b>	<b>42</b>

\*IA - Internal Assessment

## B.N.Y.S. 4<sup>th</sup>

Duration: 12 months

S.No.	Subject	Duration of Study
1.	Yoga Therapy	12 months
2.	Hydrotherapy & Claytherapy	12 months
3.	Fasting & Diet therapy	12 months
4.	Chromotherapy & Magnetotherapy	12 months
5.	Physiotherapy	12 months
6.	Acupuncture, Acupressure, Reflexology Pranic healing & Reiki	12 months
7.	Minor Surgery, First aid and Emergency Medicine	12 months
8.	Hospital Management	12 months

**Practical's** : Except Hospital Management & Administration all other subjects have practical.

S.No.	Subject	Paper Code Theory	Paper Code Practical
1.	Yoga Therapy	BNYS – T 401	BNYS- P 401
2.	Hydrotherapy & Claytherapy	BNYS – T 402	BNYS- P 402
3.	Fasting & Diet therapy	BNYS – T 403	BNYS- P 403
4.	Chromotherapy & Magnetotherapy	BNYS – T 404	BNYS- P 404
5.	Physiotherapy	BNYS – T 405	BNYS- P 405
6.	Acupuncture, Acupressure, Reflexology Pranic healing & Reiki	BNYS – T 406	BNYS- P 406
7.	Minor Surgery, First aid and Emergency Medicine	BNYS – T 407	BNYS- P 407
8.	Hospital Management & Research Methodology	BNYS – T 408	-

### B.N.Y.S. 4<sup>th</sup> (12 MONTHS)

S. No	Subject	Theory	IA	Viva voce	Total	Practical	IA	Total	Grand Total Marks	Credits	Hrs./ Week
1.	Yoga Therapy	80	20	30	130	60	10	70	200	6	6
2.	Hydrotherapy & Claytherapy	80	20	30	130	60	10	70	200	6	6
3.	Fasting & Diet therapy	80	20	30	130	60	10	70	200	6	6
4.	Chromotherapy & Magnetotherapy	80	20	30	130	60	10	70	200	6	6
5.	Physiotherapy	80	20	30	130	60	10	70	200	6	6
6.	Acupuncture, Acupressure, Reflexology Pranic healing & Reiki	80	20	30	130	60	10	70	200	6	6
7.	Minor Surgery, First aid and Emergency Medicine	80	20	30	130	60	10	70	200	6	6
8.	Hospital Management & Research Methodology	80	20	50	150	-	-	-	150	6	6
<b>Total</b>									<b>1550</b>	<b>48</b>	<b>48</b>

\*IA - Internal Assessment

**Sub division of marks :**

Subject Carry Marks	150	200	250	300
<b>Theory :</b>	<b>80</b>	<b>80</b>	<b>80*2 = 160</b>	<b>80*2 = 160</b>
Long Questions	10*4=40	10*4=40	10*4=40	10*4=40
Short Questions	5*6=30	5*6=30	5*6=30	5*6=30
Very Short Questions	2*5=10	2*5=10	2*5=10	2*5=10
<b>Theory Internal Assessment (Every 6 months then aggregated to 20 marks )</b>	<b>20</b> 20 + 20 = 40/2 =20	<b>20</b> 20 + 20 = 40/2 =20	<b>20</b> 20+20+20 =60/3 =20	<b>20</b> 20+20+20 =60/3 =20
Long Questions	10*1 =10	10*1 =10	10*1 =10	10*1 =10
Short Questions	5*2 =10	5*2 =10	5*2 =10	5*2 =10
<b>Viva voce</b>	<b>50</b>	<b>30</b>	<b>50</b>	<b>30</b>
Internal	25	15	25	15
External	25	15	25	15
<b>Total</b>	<b>150</b>	<b>150</b>	<b>250</b>	<b>230</b>
<b>Passing Marks</b>	<b>75</b>	<b>75</b>	<b>125</b>	<b>115</b>
<b>Practical</b>	-	<b>60</b>	-	<b>60</b>
Records		10*1=10		10*1=10
Major Practical/Yoga		20*1=20		20*1=20
Minor	-	10*1=10	-	10*1=10
Practical/Shatkriya Spotting		5*4=20		5*4=20
<b>Practical Internal Assessment</b>	-	<b>10</b>	-	<b>10</b>
<b>Total</b>	-	<b>70</b>	-	<b>70</b>
<b>Passing Marks</b>	-	<b>35</b>	-	<b>35</b>
<b>Grand Total Marks</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>
<b>Passing Marks</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>

**UNIVERSITY OF PATANJALI**

**HARIDWAR**



**DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS**

**UNDER GRADUATE PROGRAM**

**Bachelor in Physical Education and Sports**

**(B.P.E.S.)**

**REVISED SYLLABUS 2021-22**



**Preamble:**

Physical Education is a form of one of the most effective means of education imparted through physical exercises, recreational activities and sports. It is an integral part of education. Which by mere participation in it gives the outcomes? These outcomes are both instant as well as have strong carry over values in the life. The children as well as the adults and the old enjoy physical activities & sports and gets benefit in the form of stronger muscles and bones, increased energy, coordination level and most importantly the decreased risk of developing chronic diseases. The UNESCO in its General Conference in 1978 was convinced that, everyone should be free to develop and preserve his or her physical, intellectual and moral powers. Physical Education and Sport should consequently be assured and guaranteed for all human beings. Physical Education is now a regular feature in the primary and secondary schools as well as it is gaining popularity in the higher education. The course opted for this is elective as well as the core at the college and the university level in India. The graduate level course in Physical Education and Sports contains subjects varying from foundation of Physical Education to Anatomy, Physiology, Kinesiology, Officiating & coaching, Test & Measurement, Nutrition, Rehabilitation, Psychology, Sports Training, Sports Biomechanics, Methods of Teachings etc. which are aimed to give thorough knowledge and skills to the students. Students perusing physical education courses are fit to join the jobs as physical trainers, coaches, game officials, referees, umpires, curators, gym trainers, lifeguards, personal trainers etc. During their course of education the students also develops the expertise to establish their own business as entrepreneurs in the field of sports, fitness, recreation, adventure sports, Camping, event management etc.

### **Aims of the Bachelor's degree program in Physical Education**

Physical education is not only concerned with the physical outcome that accrue from participation in physical activities but also the development of knowledge and attitude conducive to lifelong learning and participation in motor activities. The overall aim of bachelor's degree program in

Physical Education is;

1. The acquisition and refinement of motor skills,
2. To equip the students with the scientific knowledge of body response to various types of exercise.
3. Maintenance of fitness for optimal health and well being,
4. Attainment of knowledge and the growth of positive attitude towards physical activity and sports.

### **Nature and extent of the B.P.E.S degree program**

Physical Education is normally referred to as the science that aims to develop all-inclusive aspects of human personality through physical and sports activities. Physical education practical, is a Multidisciplinary subject that cannot be studied in seclusion under the scope of one or two subjects. The scope of Physical Education as a subject is very broad. It caters to the need for developing capability of the students on physical, mental and social aspects. Physical education also aims to develop activity as an alternate and prophylactic medicine. The key areas of study within the Physical Education are 'Exercise Physiology, Sports Psychology, Sports Sociology, Sports Management, Sports Journalism, Kinesiology-Biomechanics, Sports Training, Sports Medicine, Kinanthropometry, yoga etc.

Degree program in Physical Education covers topics that overlap with the areas outlined above and that address the interfaces of Physical Education with other subjects such as Physiology, Bio- Chemistry, Physics, Physiotherapy, Psychology, Management, and Sociology along with training pedagogy employed for

enhancing the functional status of individuals with varied needs. As a part of the effort, to enhance the employability of graduates of Physical Education, programs include learning experiences that offer opportunities in various spheres of human

## **Program Outcomes:**

### **Program Specific Outcomes of Bachelor's Degree Program in Physical Education**

After successful completion of the program, an individual will be able to :

**PO-1** Interpret practical and sports skills required for physical education

Development

**PO-2** Able to officiate in the tournaments

**PO-3** Able to understand functioning of various internal organs of the human body

**PO-4** Appraise food safety and prevention of injury to maintain a safe and healthy

Environment

**PO-5** Able to applicant and interpret ant of applied psychology

**PO-6** Develop long write goals and strategies that the action needed to each year to

meet the objectives

**PO-7** To conduct the rehabilitation program for the players and society

**PO-8** Able to take anthropometric measurement in the field of sports and physical education

**PO-9** Able to help responsible authorities during natural disaster in their Management.

## **Program Specific Objectives**

### **Program Specific Objectives of Bachelor's Degree Program in Physical Education.**

- To enable students to understand history, philosophy, values, ethics and functions of Physical Education profession, and its linkages with other social science & science disciplines;
- To equip students with knowledge on core and ancillary methods of professional work, and its practice base;
- To inculcate in the student's values of enquiry and research; and thereby develop problem solving and decision making abilities;
- To prepare professionals to practice in diverse field settings and also address contemporary issues and concerns such as of games and sports;
- To make learners- the young professionals sensitive to the needs of the people at individuals, group and community levels and to social problems in changing social, cultural and techno-economic context;

- To develop young professionals with good communication skills and quest for a self-motivated life-long learning, focusing on skilling and re-skilling in their respective field of Physical Education;

### **Program Specific Outcomes (PSOs)**

## **Program Specific Outcomes of Bachelor's Degree Program in Physical Education.**

The learning and abilities or skills that a student would have developed by the end of three-year **B.P.E.S. (three Year Degree Program)**:

- PSO-1** Remembering and Understanding the concepts, theories, functions, structures, terminology and skills of physical education and sports sciences.
- PSO-2** Applying and demonstrating various concepts, theories, procedures and skills in different sports situations.
- PSO-3** Analyzing and relating the valuable knowledge about the Health, related issues various communicable disease, its preventive measures, Nutrition, its role in weight management and healthy life..
- PSO-4** Evaluating and measuring the important methods used for teaching in Physical Education.
- PSO-5** Creating and designing research problem, training sessions, diet plans.

<b>S. N.</b>	<b>Name of Semester</b>	<b>Core course (14)</b>	<b>Ability Enhancement Compulsory Course / MIL(AECC) 02</b>	<b>Skill Enhancement Course (SEC) 02</b>	<b>Elective: Discipline Specific (DSE) 04</b>	<b>Elective Generic (GE) 04</b>
01.	Sem. -1	CC-101 CC-102 CP-102 CP-102	AECC-101 MIL-101			
02.	Sem.- 2	CC-201 CC-202 CP-201 CP-202	AECC-201 MIL-201			
03.	Sem.-3	CC-301 CC-302 CP-301 CP-302	MIL-301	SEC-301		
04.	Sem.-4	CC-401 CC-402 CP-401 CP-402	MIL-401	SEC-401		
05.	Sem.-5			SEC-501	DSC-501 DSC-502 DSP-501 DSP-502	GE-501
06.	Sem.-6			SEC-601	DSC-601 DSC-602 DSP-601 DSP-602	GE-601
	<b>Total</b>	<b>8 Papers Theory 8 x 4 credits= 32 Practical 8 x 2 credits=16 Total = 48</b>	<b>6 papers 6 x 4 credits = 24</b>	<b>4 papers 4x 4 credits = 16 Total = 16</b>	<b>4 papers 4 x 6 credit = 24 Total = 24</b>	<b>4 papers 2 x 6 credit = 12</b>
<b>Grand Total</b>		<b>124</b>				

## Proposed Scheme for Choice Based Credit System in B.P.E.S. in University of Patanajli

S.N	Name of Semester	Core course (14)	Ability Enhancement Compulsory Course (AECC) 02	Skill Enhancement Course (SEC) 02	Elective: Discipline Specific (DSE) 04	Elective Generic (GE) 04
01.	Sem. -1	<b>BPES-CC-101</b> (History of physical education)  <b>BPES-CC-102</b> (Anatomy and exercise physiology)	<b>BPES-AECC-101</b> Basic Sanskritam or English <b>BPES-MIL-101</b> संस्कृतम्-I			
02.	Sem.- 2	<b>BPES-CC-201</b> Kinesiology  <b>BPES-CC-202</b> Track Event	<b>BPES-AECC-201</b> Environmental science <b>BPES-MIL - 202- English-I</b>			
03.	Sem.-3	<b>BPES-CC-301</b> Sports Training  <b>BPES-CC-302</b> Field Event	<b>BPES-MIL - 301-</b> संस्कृतम्-II	<b>BPES-SEC-301</b> Fundamental Computer Application		
04.	Sem.-4	<b>BPES-CC-401</b> Officiating and coaching  <b>BPES-CC-402</b> Test measurement and evaluation in physical education and sports	<b>BPES-MIL - 401</b> English-II	<b>BPES-SEC-401</b> Advanced Computer Application		
05.	Sem.-5			<b>BPES-SEC-501</b> Basketball, Handball & Kho- Kho	<b>BPES-DS-501</b> Research Methodology & Statistics <b>BPES-DS-502</b> Sports Psychology	<b>BPES-GE-501</b> Indian Culture & Tradition <b>BPES-GE-502</b> Ancient Indian Social Life and Institutions
06.	Sem.-6			<b>BPES-SEC-601</b> Volleyball & Kabaddi	<b>BPES-DS-601</b> Dissertation  <b>BPES-DS-602</b> Personality Development	<b>BPES-GE-601</b> Shrimadbhagavad Gita Bodh  <b>BPES-GE-601</b> Ancient Indian Religion
	<b>Total</b>					
<b>Grand Total</b>		<b>124</b>				

## CHOICE BASED CREDIT SYSTEM

S.N.	Subject Code	Subject Title	Credits	Evaluation Scheme				Subject Total
				INTERNAL			ESE	
				CT	TA	Total		
<b>I-SEMESTER (BPES I YEAR)</b>								
1	BPES-CC-101	History of physical education	4	20	10	30	70	100
2	BPES-CC-102	Anatomy and exercise physiology	4	20	10	30	70	100
3	BPES-CC-P-101	Practical-History of Physical Education	2	–	–	30	70	100
4	BPES-CC-P-102	Practical- Anatomy & Exercise Physiology	2	–	–	30	70	100
5	BPES-CC-P-103	<u>Yoga Practicum-I</u>	Non Credit	–	–	–	–	–
6	BPES-AECC-101	Communicative-English	4	20	10	30	70	100
7	BPES-MIL-101	Basic Sanskritam-I	4	20	10	30	70	100
Total			20					600

## II-SEMESTER (BPES I YEAR)

1	<b>BPES-CC-201</b>	Kinesiology	4	20	10	30	70	100	
2	<b>BPES-CC-202</b>	Track Event	4	20	10	30	70	100	
3	<b>BPES-CC-P-201</b>	<b>Practical-Kinesiology</b>	2	-	-	30	70	100	
4	<b>BPES-CC-P-202</b>	<b>Practical - Track Event</b>	2	-	-	30	70	100	
5	<b>BPES-CC-P-203</b>	<u>Yoga Practicum-II</u>	Non Credit	-	-	-	-	-	
6	<b>BPES-AECC-201</b>	Environmental science	4	20	10	30	70	100	
7	<b>BPES-MIL-201</b>	<b>English-I</b>	4	20	10	30	70	100	
<b>Total</b>			<b>20</b>						<b>600</b>

### III-SEMESTER (BPES 2 YEAR)

1	<b>BPES-CC-301</b>	Sports training	4	20	10	30	70	100
2	<b>BPES-CC-302</b>	Field Event	4	20	10	30	70	100
3	<b>BPES-CC-P-301</b>	Practical - Sports Training	2	-	-	30	70	100
5	<b>BPES-CC-P-302</b>	Practical - Field Event	2	-	-	30	70	100
7	<b>BPES-CC-P-303</b>	<u>Yoga Practicum-III</u>	Non Credit	-	-	-	-	-
8	<b>BPES-SEC-301</b>	Fundamental Computer Application	4	20	10	30	70	100
9	<b>BPES-MIL-301</b>	Basic Sanskritam-II	4	20	10	30	70	100
Total			20					600

### IV-SEMESTER (BPES 2 YEAR)

1	<b>BPES-CC-401</b>	Officiating and coaching	4	20	10	30	70	100
2	<b>BPES-CC-402</b>	Test Measurement and evaluation in physical education and sports	4	20	10	30	70	100
4	<b>BPES-CC-P-401</b>	Officiating and coaching -Practical	2	–	–	30	70	100
5	<b>BPES-CC-P-402</b>	Practical – Test Measurement and Evaluation in physical education and sports	2	–	–	30	70	100
7	<b>BPES-CC-P-403</b>	<u>Yoga Practicum-IV</u>	Non Credit	–	–	–	–	–
8	<b>BPES-SEC-401</b>	Advanced Computer Application	4	20	10	30	70	100
9	<b>BPES-MIL-401</b>	English-II	4	20	10	30	70	100
Total			20					600

### V-SEMESTER (BPES 3 YEAR)

1	<b>BPES-DSC-501</b>	Research Methodology & Statistics	4	20	10	30	70	100
2	<b>BPES-DSC-502</b>	Sports Psychology	6	-	-	30	70	100
3	<b>BPES-DSP-501</b>	Case Study-Practicum	2	-	-	30	70	100
4	<b>BPES-CC-P-502</b>	<u>Yoga Practicum-V</u>	Non Credit	-	-	-	-	-
5	<b>BPES-SEC-501</b>	Basketball, Handball & Kho- Kho	4	-	-	30	70	100
6	<b>BPES-GE-501/ BPES-GE-502</b>	Indian Philosophy & Culture/ Ancient Indian Social Life and Institutions	6	-	-	30	70	100
Total			22					

### VI-SEMESTER (BPES 3 YEAR)

1	<b>BPES-DSC-601</b>	Dissertation	4	20	10	30	70	100
2	<b>BPES-DSC-602</b>	Personality Development	6	20	10	30	70	100
3	<b>BPES-DSP-601</b>	Study Tour & Report Writing	2	–	–	30	70	100
4	<b>BPES-SEC-601</b>	Volleyball & Kabaddi	4	–	–	30	70	100
5	<b>BPES-GE-601/ BPES-GE-602</b>	Shrimadbhagavad Gita Bodh / Ancient Indian Religion	6	–	–	30	70	100
8	<b>BPES-CC-P-602</b>	Yoga Practicum-VI	Non Credit	–	–	–	–	–
Total			22					700
Grand Total			<b>124</b>					<b>4,200</b>

**Semester-I**  
**BPES-CC-101**

**Title: History and Foundation of Physical Education**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objective:**

- The aim to develop the student into better rounded ,balanced individuals.
- These activities capture the interest of the students.
- Hey also promote their safety and well-being.
- This is a practical improvement on the usual physical education program.

**The Course Learning outcomes ( Cos ) :**

CO-1. The pass out students would be able to compare the relationship between general education and Physical education.

CO-2. Students would be able to identify and relate with the History of Physical Education.

CO-3. Students would be able to comprehend the relationship between Philosophy, Education and Physical Education.

CO-4. Students would be able to identify the works of Philosophers of Education and Physical Education.

CO-5. Students would be know recent developments and academic foundation of Physical Education.

**Unit-I**

**Introduction to Physical Education**

1.1 Meaning, Definition and Scope of Physical Education

1.2 Aims and Objective of Physical Education

1.3 Importance of Physical Education in present era.

1.4 Misconceptions about Physical Education.

1.5 Relationship of Physical Education with General Education.

1.6 Physical Education as an Art and Science.

**Unit-II**

**Historical Development of Physical Education in India**

- 2.1 Vedic Period (2500 BC – 600 BC), Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD), Medieval period
- 2.2 Post Mughal British Period (Before 1947) Y.M.C.A. and its contributions.
- 2.3 Physical Education in India (After 1947)
- 2.4 The early history and significant stages in the revival and development of the modern Olympic movement
- 2.5 Educational and cultural values of Olympic movement

### Unit-III

#### Philosophical Foundation of Physical Education

- 3.1 Philosophical foundation: Idealism, Pragmatism, Naturalism, Realism.
- 3.2 Philosophy and Culture.
- 3.3 Fitness and wellness movement in the contemporary perspectives
- 3.4 Sports for all and its role in the maintenance and promotion of fitness.

### Unit-IV

#### Foundation of Physical Education

- 4.1 Biological
  - 4.1.1 Growth and development
  - 4.1.2 Age and gender characteristics
  - 4.1.3 Body Types
- 4.2 Psychological
  - 4.2.1 Attitude, interest.
  - 4.2.2 Cognition, emotions and sentiments.
  - 4.2.3 Practical suggestion from psychology.
- 4.3 Sociological
  - 4.3.1 Society and culture
  - 4.3.2 Social acceptance and recognition
  - 4.3.3 Leadership in physical education

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**Teaching Learning Strategies:** The class will be taught by using lectures and demonstration, Seminars, classroom discussion, videos, charts and presentations method.

**Virtual instructional platforms** such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebEx Meeting, OERS, Swayam Platform ([www.swayam.gov.in](http://www.swayam.gov.in)), SwayamPrabha ([www.swayamprabha.gov.in](http://www.swayamprabha.gov.in)) (available on Doordarshan (free dish TV), E-Yantra ([www.e-yantra.org](http://www.e-yantra.org)), Virtual Labs ([www.vlabs.co.in](http://www.vlabs.co.in)), FOSSEE ([www.fossee.in](http://www.fossee.in)), application of spoken tutorials

([www.spokentutorial.org](http://www.spokentutorial.org)), National Digital Library ([www.ndl.iitkgp.ac.in](http://www.ndl.iitkgp.ac.in)), electronic journals ([www.ess.infibnet.ac.in](http://www.ess.infibnet.ac.in)) etc. are to be used.. Courses may also integrate DVD videos as part of the training process.

Students may examine current topics in the field through the use of e- textbooks and e-physical education journals.

Students can complete some portion of the education at approved testing sites for the practical components wherever necessary.

**Initiating Brain based learning-** A stress free environment will be created. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged. Break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Assessment Rubric:** Classroom Test, Project Work, Assignments, Presentations

#### **References:**

1. Bucher, C. A. (n.d.) - Foundation of physical education. St. Louis: The C.V. Mosby Co.
2. Deshpande, S. H. (2014) - Physical Education in Ancient India. Amravati: Degree college of Physical education.
3. Dash, B.N. (2003.) –Principles of Education, Neelkamal publication, Hyderabad,
4. Kamlesh, M.L. (2002) –Sociological Foundation of Physical Education, Metropolitan Book co. Pvt. Ltd., Delhi,
5. Pandey, R.S.( 1991) Philosophical & Sociological Foundation of Education, Vinod PustakMandir, Agra,.
6. Bhatia, K.K. &Narang, C.L. (1984.)– Philosophical & Sociological Bases of Education, Prakash Bros., Ludhiana,
7. Adams, William’s (1991.) – Foundation of Physical Education Exercises and Sports Sciences, Lea and Febigor, Philadelphia,
8. Dr. Kamlesh M.L. (2004) - Principles and History of Physical Education and Sports, Friends Publication (India) New Delhi.
9. Dr. B.C.Kapri, Fundamentals of Physical Education, Friends Publication, DariyaGanj, Delhi (India).

**Semester-I**  
**BPES-CC-102**

**Anatomy & Exercise Physiology**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning objective**

- students in-depth instruction in the organization, structures, and functions of the human body.
- Students will learn the terminology, anatomy and physiology, and pathology of each body system and how they interrelate to maintain homeostasis.

**The Course Learning Outcomes (COs) :**

- CO-1. The student will be oriented with the basic structure and function of human body by identifying, comparing and relating different systems, organs and their functional and structural units.
- CO-2. Students will be able to Relate and interpret the role of exercise on body systems and its relation to well being, through literature reviews and physical conditioning exercises.
- CO-3. Adapt the art to apply the knowledge of anatomy and physiology in physical activity classes at school level.
- CO-4. Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

**Unit-I**

1. Validation of Anatomy and Physiology in the field of Physical Education
2. Structural and functional demonstration of human cell
3. Skeletal System- classification and functions
4. Anatomical terms related to body movements

5. Structure and types of bones, joints in human body, Effects of exercise on skeletal system

## **Unit-II**

2.1 Structure and function of Muscle

2.2 Major classifications of Muscles

2.3 Types of muscle fiber and Sliding Filament Theory of Muscular Contraction

2.4 Types of muscular contractions (Isotonic, Isometric, Iso-kinetic) and their roles in physical activity.

2.5 Concept of agonist and antagonist muscles and muscle imbalance; Effect of exercise on muscular system

## **Unit-III**

3.1 Structural and functional introduction to circulatory system

3.2 Concept of stroke volume, cardiac output and cardiac index

3.3 Respiratory System (structural and organizational overview); Functional mechanism of respiration (External and Internal Respiration)

3.4 Concept of recovery oxygen and second wind

3.5 Cardio-respiratory adaptations to long term exercise

## **Unit-IV**

4.1 Structural units and functional mechanism of digestive system and excretory system

4.2 Effect of exercise on Digestive System and Excretory System

4.3 Classification of Nervous System on the basis of its structure and functions

4.4 Structural and Functional interpretation of neuro-muscular junction with all or none law

4.5 Effect of exercise on nervous system

**Teaching Learning Strategies:** The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

**Virtual instructional platforms** such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform ([www.swayam.gov.in](http://www.swayam.gov.in)), SwayamPrabha ([www.swayamprabha.gov.in](http://www.swayamprabha.gov.in)) (available on Doordarshan (free dish TV), E-Yantra ([www.eyantra.org](http://www.eyantra.org)), Virtual Labs ([www.vlabs.co.in](http://www.vlabs.co.in)), FOSSEE ([www.fossee.in](http://www.fossee.in)), application of spoken tutorials ([www.spoken-tutorial.org](http://www.spoken-tutorial.org)), National Digital Library ([www.ndl.iitkgp.ac.in](http://www.ndl.iitkgp.ac.in)), electronic journals ([www.ess.infibnet.ac.in](http://www.ess.infibnet.ac.in)) etc. are to be used. . Courses may also integrate DVD videos as part of the training process. Students may examine current topics in the field through the use of e-textbooks and e-physical education

journals. Students can complete some portion of the education at approved testing sites for the practical components wherever necessary.

**Initiating Brain based learning-** A stress free environment will be created where students will be reoriented in understanding of the brain as organ which could be developed through various mental exercises, like a muscle developed through weight training. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged / break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Assessment Rubric:** Classroom Test, Project Work, Assignments, Presentations

**Suggested Readings:**

1. Appuseries (2012) *How the Human Body Works - Kids Animation Learn Series*. [Online]

Available from:

[https://www.youtube.com/results?search\\_query=APPUSERIES+human+body+](https://www.youtube.com/results?search_query=APPUSERIES+human+body+)

[Accessed

20th July 2016].

2. Bannister, L. H. & et.al.(2000) *Gray'sAnatomy*.Churchill Living Stone.

3. Boone, T. (2014) *Exercise physiology*.Jones& Bartlett Learning.

4. Davidson, D.S. & Morgan, B. (2002) *Human body revealed*. Great Britian, Dorling Kindersley.

5. E Learning for kids- Founding Dreams (Date not Available) *Science- Body Parts*. [Online]

Available from: [http://www.e-learningforkids.org/science/lesson/body-](http://www.e-learningforkids.org/science/lesson/body-parts/)

parts/[Accessed 20<sup>th</sup> July 2016].

6. Foss, M. L., Keteyian, S. J. & Fox, E. L., (1998).*Fox's physiological basis for exercise and sport*. Boston, Mass, WCB/McGraw-Hill.

7. Get Body Smart (2016) *An online examination of human anatomy and physiology-Animated*

*Text Narrations and Quizzes to Explain the Structures and Functions of the Human Body Systems*. [Online] Available from: <http://www.getbodysmart.com/> [Accessed 20th July2016].

8. Hall, J. E. & Guyton, A. C. (2011).*Guyton and Hall textbook of medical physiology*. Philadelphia, PA, Saunders Elsevier.

9. Jam Campus (2018) *THE PARTS OF A CELL SONG*. [online video] Available at: <https://www.youtube.com/watch?v=NkC9AiJf7gI> [Accessed 03 July 2018].

10. JCCCvideo (2010) *The Plasma Membrane*. [online video] Available at: <https://www.youtube.com/watch?v=moPJkCbKjBs> [Accessed 03 July 2018].

11. Manocchia. P. (2007) *Anatomy of Exercise-A trainer's inside guide to your workout*. New York, A & C Black.
12. Mc Ardle, W.D.; Katch, F.I. &Katch, V.L. (2010) *Exercise physiology- Nutrition, Energy, and human performance*.7th edition. Philadelphia, Wolters Klnwerand Lippincott Williams& Wilkins.
13. Musical Cells (2013) Power Pack - *The Mitochondria Rock Song*. [online video] Available at:  
<https://www.youtube.com/watch?v=418UI5YPVAI&index=1&list=RD418UI5YPVAI> [Accessed 03 July 2018].
14. Nucleus Medical Media (2015) *Biology: Cell Structure I Nucleus Medical Media*. [online video] Available at:  
<https://www.youtube.com/watch?v=URUJD5NEXC8> [Accessed 03 July 2018].

**PRACTICAL'S  
SEMESTER-I  
BPE-CC-P-101**

**Credit: 02  
Max. Marks: 100  
Internal Marks: 30  
End semester exam marks: 70**

**Learning Objective:**

- The aim to develop the student into better rounded ,balanced individuals.
- These activities capture the interest of the students.
- Hey also promote their safety and well-being.
- This is a practical improvement on the usual physical education program.

**HISTORY OF PHYSICAL EDUCATION**

Preparation of report of National Sports awards of the last year (a scrap file).

Pictorial Description of Olympic Games its sites.

Viva-voce

**SEMESTER I**

**BPE-CC-P-102**

**Credit: 02  
Max. Marks: 100  
Internal Marks: 30  
End semester exam marks: 70**

**Practical- Anatomy & Exercise Physiology**

## **Learning objective**

- students in-depth instruction in the organization, structures, and functions of the human body.

Students will learn the terminology, anatomy and physiology, and pathology of each body system and how they interrelate to maintain homeostasis.

## **ANATOMY & PHYSIOLOGY**

Counting of pulse rate

Study of different body system with the help of models

A Scrape File

Viva-voce

**SEMESTER I**  
**BPE-CC-P-103**  
**Yoga Practicum-I**

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**Credit: 00**

**Objectives:** Following the completion of the course, students shall be able to:

- Understand the benefits, procedure and contraindications of all practices.
- Demonstrate each practice with confidence and skill.
- Explain the procedure and subtle points involved.

**The Course Learning Outcomes (Cos) :**

**CO-1.** Demonstrate basic skills associated with yoga and Pilates.

**CO-2.** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3.** Understand and apply the knowledge of basic choreography, and effective group management.

**CO-4.** Demonstrate the ability to create and present various yoga activities.

**Unit I: Eight Baithak by Yogrishi Swami Ramdev ji**

Ardhbaithak, Purnabaithak, Rammurtibaithak, Pahalwani baithak-1, Pahalwanibaithak-II. Hanuman baithak -1, Hanuman baithak-11,

**Unit II: Twelve Dand by Yogrishi Swami Ramdev ji**

Simple Dand, RammurtiDand, VakshvikasakDand, Hanuman Dand, VrishchikDand-I, VrishchikDand-II, Parshvadand, Chakradand, Palatdand, Sherdand, Sarpdand, Mishradand (mixed Dand)

**Unit III: Surya Namaskara&Yogasana (Supine lying postures)**

Suryanamaskar, Naukasana, Pavanamuktasana, Utthana-padasana, Padavrittisana, Chakrikasana, Chakkichalana, ArdhaHalasana, Halasana, Setubandhasana, Sarvangasana, Matsyasana, Chakrasana, Shavasana.

#### **Unit IV: Pranayama**

NadiShodhana (Technique 1: Same Nostril Breathing), NadiShodhana (Technique 2: Alternate Nostril Breathing), NadiShodhana (Technique 3: Alternate Nostril Breathing + Antarkumbhak); NadiShodhana (Puraka + AntarKumbhak + Rechaka + BahyaKumbhak) (1:4:2:2);

#### **Unit V: Mudra&Shatkarmas (Only One kriya)**

Hasta Mudra: Chin, Jnana, Hridaya, Bhairav, Yoni, Pran, Apan, Apanvayu, Shankh, Kamajayi, Shatkriya, Neti (Jalneti, Rubber Neti)

#### **Continuous Evaluation by the Teachers**

##### TEXT BOOKS

1. Balkrishna Acharya: (2015), DainikYogabhyasakram, DivyaPrakashan, Haridwar.
2. Randev Y.S. 2015: Dand-baithak, DivyaPrakashan, Haridwar
3. Saraswati S. S. (2006). Asana Pranayama and Mudra Bandha, "Yoga Publication Trust." Munger, Bihar

## SEMESTER I

**Paper Name: English Communication**

**Paper Code: BPES-AECC-101**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

### **Objectives:**

Unit 1- Improve pronunciation and Use English Grammar worksheets and exercises to improve grammatical knowledge for competitive exams

Unit 2- Enhance reading, understanding and writing abilities in English

Unit 3 -Develop the ability to read, understand and improve English vocabulary

Unit 4 - Demonstrate conversational skills, Asking Questions

### **The Course Learning Outcomes (COs):**

**CO-1.** Improve and widen employment prospects.

**CO-2.** Explore the world with confidence

**CO-3.** Increase cognitive ability.

**CO-4.** Access world-class education system and establishment.

**Method of Teaching & Assessment-** Videos, Audio clippings, discussion, written and oral exercises

Unit-1: -Syllables (stress in simple words), Rhythm, Intonation, & Revision of Basic Grammar

• Tenses, Prepositions, Articles, Conjunctions, Modals, Direct and indirect Speech

Unit-2: Reading & Writing

• Vocabulary- Homophones, Homonyms

• Analytical Skills, Editing Skills- Error Correction, Article Writing, Reading Comprehension

Unit-3: Listening –

• Audio books, Podcasts, Speeches of various renowned Yoga Masters , Ted Talks

Unit-4: - Spoken English

• Accents and dialects , Extempore , Oral Report , Debates and GDs, Public Speaking Skills ,Leadership, Team Work Text books: English Grammar in Use, 4th Edition, Cambridge by Raymond Murphy Suggested Sources: [Britishcouncil.org](http://Britishcouncil.org)

**Text books:** English Grammar in Use, 4th Edition and Cambridge by Raymond Murphy Suggested Sources: [Britishcouncil.org](http://Britishcouncil.org)

## SEMESTER I

**Paper Name: BASICS OF SANSKRITAM-I**

**Course Code: BPES-MIL-101**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

### **Objectives:**

Following the completion of this course, students shall be able to

- Read and understand the colloquial words of Sanskrit.
- Communicate and comprehend Sanskrit to the best of their ability.
- Write in saskrit and have some idea about grammar.

### **Unit-1: संस्कृतभाषा परिचय (5)**

संस्कृतभाषा परिचय, योगशास्त्र के अध्ययन में संस्कृत का महत्त्व और योग एवं संस्कृत का अन्तःसम्बन्ध, संस्कृतवर्णमाला, स्वर, व्यंजन वर्णज्ञान सहित रोमन लिपि में लेखन एवं पठन, वर्णों के उच्चारणस्थान और प्रयत्न ज्ञान। कारक, विभक्ति, लिङ्, वचन, पुरुष, लकार एवं वाक्यांग परिचय। संस्कृत संख्याएं (एक से सौ तक)

### **Unit-2: शब्दरूप (8)**

अजन्त शब्दरूप—राम, बालिका, पुस्तक, मुनि, वारि, नदी, भानु, धेनु, मधु, पितृ, मातृ शब्दों के रूप अर्थज्ञान सहित। सर्वनाम शब्दरूप—अस्मद्, युष्मद्, तद् (तीनों लिंगों में), एतद् (तीनों लिंगों में), किम् (तीनों लिंगों में,) शब्दों के रूप अर्थज्ञान सहित। हलन्तशब्दरूप—भगवत्, नामन्, जगत्, भवत् (तीनों लिंगों में) शब्दों के रूप अर्थज्ञान सहित।

### **Unit-3: धातुरूप (8)**

भू, अस्, पठ्, कृ, लिख्, नम्, दृश्, वद्, गम्, स्था, पा, दा, ज्ञा, कथ्, चिन्त्, श्रु, खाद्, धातुओं के पांच लकारों लट्, लृट्, लङ् लोट्, विधिलिङ्, में रूपज्ञान एवं वाक्य निर्माण अर्थज्ञान सहित।

### **Unit-4: वाक्यनिर्माण (9)**

प्रथमदीक्षा के प्रथम, द्वितीय एवं तृतीय अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।

#### TEXT BOOKS

- 1 द्विवेदी कपिल देव: प्रारम्भिक रचनानुवाद कौमुदी, विश्वविद्यालय प्रकाशन, वाराणसी 2011
- 2 द्विवेदी कपिल देव: रचनानुवादकौमुदी, विश्वविद्यालय प्रकाशन वाराणसी 2011
- 3 द्विवेदी कपिल देव: प्रौढरचनानुवाद कौमुदी, विश्वविद्यालय प्रकाशन, वाराणसी 2007
- 4 प्रथमदीक्षा, राष्ट्रिय संस्कृत संस्थान, नई दिल्ली

#### BOOKS FOR REFERENCE

1. Perry E D : A Sanskrit Primer, MLBD, New Delhi, 2004
2. Kala MR : A Higher Sanskrit Grammar for college students, MLBD, New Delhi, 2011
3. महर्षि दयानन्द सरस्वती: वर्णोच्चार शिक्षा, रामलाल कपूर ट्रस्ट, सोनीपत हरियाणा।

## THE COURSE LEARNING OUTCOMES (COs) :

**CO-1.**The students are able to get an in-depth knowledge of this ancient Indian language and its literature.

**CO-2.**The students must get an overview about the poetry grammar and history of its literature.

**Semester-2<sup>nd</sup>**  
**B PES-CC-201**

**Title: Kinesiology**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objective:**

- Kinesiology and physical education study the role exercise, physical movement and sports play in the development of human health and happiness.
- They apply sciences like biomechanics, anatomy, physiology and psychology to better understand how the human body responds to physical activity.
- Kinesiology studies the mechanics of human movement and how they impact our health and wellbeing.

**The Course Learning outcomes (COs) :**

CO-1. The student would be Oriented with the skeletal structure of human body by identifying. The origin and insertion of various muscles.

CO-2. Orient the students in basic structure and functions of primary joints of the body.

CO-3. Relate and interpret the role of various mechanical principles in human movement.

**Unit-I**

**Introduction to Kinesiology and Sports Biomechanics**

1.1 Meaning and Definition of Kinesiology and Sports Biomechanics

1.2 Importance of Kinesiology and Biomechanics in sports and physical activities

1.3 Origin and Insertion on bones and Action of major Muscles

1.4 Types of joints with their structure and functions

**Unit-II**

**Mechanical Concepts**

2.1 Speed/ Velocity/ Acceleration

2.1.1 Velocity as a Vector Quantity

2.1.2 Determining the Direction of the Velocity Vector

2.1.3 Calculating Average Speed, Average Velocity and average Acceleration

2.1.4 Average Speed versus Instantaneous Speed

2.2 Distance, Displacement (Calculating average distance and displacement)

1. Fundamental concepts of following terms –

2.3.1 Fluid resistance

2.3.2 Buoyancy

2.4 Newton's Laws of Motion – and their application to sports activities.

### **Unit-III**

#### **Kinetic/Kinematics Concept for Analysis Human Motion**

3.1 Fundamental concepts of following terms –

3.2 Axes and Planes

1. Centre of Gravity

2. Equilibrium

3. Line of Gravity

3.3 Basic Concept related to kinetics

3.3.1 Inertia

3.3.2 Mass

3.3.3 Force

3.3.4 Centre of Gravity

3.3.5 Pressure

3.3.6 Density

3.3.7 Torque

3.3.8 Impulse

3.3 The Biomechanics of the Human Upper Extremity.

3.4 The Biomechanics of the Human Lower Extremity.

### **Unit-IV**

#### **Qualitative/ Quantitative Analysis**

4.1 Angular Kinematics of Human Movement.

4.2 Linear Kinetics of Human Movement

**Teaching Learning Strategies:** The class will be taught by using lectures and demonstration,

Seminars, classroom discussion, videos, charts and presentations method.

**Virtual instructional platforms** such as **online lectures**, webcast etc. are to be used. Students can

Participate in coursework through instant messages, emails and video conferencing. Google class

room, Cisco WebEx Meeting, OERS, Swayam Platform ([www.swayam.gov.in](http://www.swayam.gov.in)), SwayamPrabha

([www.swayamprabha.gov.in](http://www.swayamprabha.gov.in)) (available on Doordarshan(free dish TV), E-Yantra

([www.eyantra.org](http://www.eyantra.org)), Virtual Labs ([www.vlabs.co.in](http://www.vlabs.co.in)), FOSSEE ([www.fossee.in](http://www.fossee.in)), application of spoken

tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process

**Initiating Brain based learning-** A stress free environment will be created. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged. Break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Assessment Rubric:** Classroom Test, Project Work, Assignments, Presentations

**References:**

1. Anthony J. Blazevich (2017). Sports Biomechanics: The Basics: Optimising Human Performance: bloomsburry
2. By Peter M. (2013), Biomechanics of Sport and Exercise: Human Kinetics
3. Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
4. BeotraAlka, (2000) Drug Education Handbook on Drug Abuse in Sports: SportsAuthority of India Delhi.
5. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
6. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
7. Fox, E.L., and Mathews, D.K. (1981).The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
8. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co.
9. Richard, W. Bowers.(1989). Sports Physiology. WMC: Brown Publishers.
10. Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers.
11. Shaver, L. (1981).Essentials of Exercise Physiology. New Delhi: Subject Publications.

12. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.

**Semester-2<sup>nd</sup>**  
**BPES-CC-202**

**Title: TRACK EVENT**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objective :**

- Describe the nature and background of athletics
- Identify the basic terminologies
- Identify safety precaution to avoid injuries

**The Course Learning Outcomes (COs):**

**CO-1.** Introduction to athletics (track events) Sprint Events Middle Distance Races  
Long Distance Races

**CO-2.** Rules and regulations (track events), Duties of officials, Equipment's  
Brief background techniques and importance of motor-components of the following  
events:

**CO-3.** Sprint Events, Relay Races, Hurdle Race, Flat Races,

**CO-4.** Brief historical background of track events, Organizing of athletic meet, Role of  
various

**CO-5.** Committees, National records.

Various Awards

**SUGGESTED BOOKS**

Chauhan VS (1999). Khel Jagat Mein Athletics. A.P. Pub, Jalandhar.

Handbook-Rules and Regulation. International Athletic Federation (2010).

Kumar, Pardeep. (2008). Historical Development of Track & Field. Friends Publication. New  
Delhi

Shrivastav AK. Abhay Kumar (1997). Athletics. S & S Parkashan.

Indian Olympic Association, Jan., 1976.

Singh, Ajmer et.al. "Olympic Movement" Kalyani Publishers, Ludhiana,2000

YMCA rule book of games and sports

Barar T.S.(2004) Track and Field- Officiating Techniques friends publication New Delhi  
Arora Monika(2005) Athletics Coaching Coaching Manual sports publication New Delhi.

**SEMESTER 2nd**  
**BPE-CC-P-201**  
**Title: Kinesiology**

**Credit: 02**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objective:**

- Kinesiology and physical education study the role exercise, physical movement and sports play in the development of human health and happiness.
- They apply sciences like biomechanics, anatomy, physiology and psychology to better understand how the human body responds to physical activity.
- Kinesiology studies the mechanics of human movement and how they impact our health and wellbeing.

**KINESIOLOGY**

A scrap file on Bones and Muscles  
Pictorial Description of Bones and Muscles.  
Viva-voce

**SEMESTER 2nd**  
**BPE-CC-P-202**  
**Title: TRACK EVENT**

**Credit: 02**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objective :**

- Describe the nature and background of athletics
- Identify the basic terminologies
- Identify safety precaution to avoid injuries

**TRACK EVENT**

File (history, rules, Techniques & records)

Viva-voce

**SEMESTER 2nd**  
**BPE-CC-P-203**  
**TITLE: Yoga Practicum-II**

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**Credit: 00**

**Objectives:** Following the completion of the course, students shall be able to:

1) State techniques, health benefits, applications, precautions and contraindications of under mentioned yogic practices; &

2) To demonstrate and instruct under mentioned yogic practices.

**The Course Learning Outcomes (COs):**

**CO-1.** Demonstrate basic skills associated with yoga and Pilates.

**CO-2.** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3.** Understand and apply the knowledge of basic choreography, and effective group management.

**CO-4.** Demonstrate the ability to create and present various yoga activities.

**Unit- I: Yogasana (Recommended by Swami Ramdev)**

12 Steps of Yogic Jogging; And A Series of 12 Yogic Postures: Manduk Asana-Variations 1 & 2, Shashakasana, Bakasana, Gomukh Asana, Makarasana-Variations 1& 2, Bhujanga Asanavariations 1, 2 & 3, Shalabhasana- Variations 1, 2 & 3, Markatasana-Variations 1, 2 & 3, Pawanmuktasana- Variations 1, 2 & 3, ArdhaHalasana, Padvritta Asana- Variations 1 & 2 And Dwichakrikasana- Variations 1 & 2; As Recommended by Swami Ramdev.

**Unit-II: Prone Lying Asanas**

Makarasana, Markatasana, Bhujangasana, Sarpasana, Shalabhasana, Dhanurasana, Purnadhanurasana, Chakrasana, ViparitNaukasana.

**Unit- III: Pranayama (Recommended by Swami Ramdev)**

Bhastrika, Kapalbhati, Bahya, Ujjai, Anulom-Vilom, Bhramari, Udgeeth.

**Unit- IV: Shatkarma (Only Two Kriyas)**

Kapalbhati (Vatkram, Vyutkram, Sitkram), Nauli (Madhyama, Vama, Dakshina).

**Unit- V: Mudra & Bandh:**

Jalandhar Bandh, Udyan Bandh and Moolbandh, Maha Bandh Mudra.

**Continuous Evaluation by the Teachers**

**TEXT BOOKS**

1. Yogrishi Swami Ramdev Ji: Pranayama Rahasya, DivyaPrakashan, Haridwar, 2009
2. Basavaraddi, I.V. & others: SHATKARMA: A Comprehensive description about  
Cleansing Process, MDNIY New Delhi, 2009
3. Dr. Nagendra H R: Pranayama, The Art & Science, Swami Vivekananda  
YogaPrakashan, Bangalore, 2005.
4. Iyengar, B.K.S.: Light on Pranayama, Harper Collins, Swami Vivekanand  
YogaPrakashan, 2012
5. Saraswati S. S. (2006). Asana Pranayama and Mudra Bandha, "Yoga  
Publication Trust." Munger, Bihar

**Semester-2<sup>nd</sup>**  
**BPES-AECC-201**

**Title: Environmental Science**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**ABILITY ENHANCEMENT COURSE**  
**ENVIRONMENTAL STUDIES**

**Objectives:**

- Students will integrate knowledge from multiple disciplines representing physical and life sciences perspectives, political and economic perspectives, and social and cultural perspectives on humans' interactions with their environments;
- Students will contribute to and facilitate interdisciplinary research and problem solving, through independent and collaborative work; and
- Students will use quantitative and qualitative research tools and techniques to analyze, implement, envision, assess, and report sustainability efforts.

**The Course Learning Outcomes (COs):**

**CO-1.** Articulate the interconnected and interdisciplinary nature of environmental studies;

**CO-2.** Demonstrate an integrative approach to environmental issues with a focus on sustainability;

**CO-3.** Use critical thinking, problem-solving, and the methodological approaches of the social sciences, natural sciences, and humanities in environmental problem solving;

**CO-4.** Communicate complex environmental information to both technical and non-technical audiences;

**CO-5.** Understand and evaluate the global scale of environmental issues & problems; and Reflect critically on their roles, responsibilities, and identities as citizens, consumers and environmental actors in a complex, interconnected world.

### **Unit-1 Introduction to environmental studies and Ecosystem**

Multidisciplinary nature of environmental studies; Scope and importance; Concept of sustainability and sustainable development. What is an ecosystem? Structure and function of ecosystem. Energy flow in an ecosystem; food chain, food webs and ecological succession. Case studies of the following ecosystems : a) Forest ecosystem b) Grassland ecosystems c) Desert ecosystems d) Aquatic ecosystems (pond, streams, lakes, rivers, oceans, estuaries)

### **Unit-2 Natural Resources**

Renewable and non-renewable Resources. Land resources and land use change; Land degradation, soil erosion and desertification. Deforestation : causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. Water : Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (International & Interstate). Energy resources: Renewable and non-renewable Energy sources, use of alternate Energy sources growing energy needs, case studies

### **Unit-3 Biodiversity and conservation**

Levels of biological diversity : genetic, species and ecosystem diversity; biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots, India as a mega-biodiversity nation; Endangered and endemic species of India. Threats of biodiversity: Habitat loss, poaching of wild life, man-wildlife conflicts, biological invasions; Conservation of biodiversity : In-situ and Ex-situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economy, social, ethical, aesthetic and informational value.

### **Unit-4 Environmental Pollution, Environmental Policies & Practices**

Environmental Pollution : Types causes, effects and controls; Air, Water, soil and noise pollution. Nuclear hazards and human health risks. Solid waste management: Control measures of urban and industrial waste. Pollution case studies. Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture 2/2. Environment Laws : Environment Protection Act; Air (Prevention & control of pollution) Act; Water (Prevention &

control of pollution) Act; Wild life Protection Act; Forest Conservation Act, International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD). Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

### **Unit-5 Human Communities and the Environment**

Human population growth: Impacts on environment, human health and welfare. Resettlement and rehabilitation of project affected persons; case studies. Disaster management : floods, earthquake, cyclones and landslides. Environmental ethics: Role of Indian and other religions and cultures in environmental conservation. Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).

#### **SUGGESTED BOOKS:**

1. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner. b)
2. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India,

**Semester-2<sup>nd</sup>**  
**BPES-MIL-201**  
**Title: English-I**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Objectives:**

- Communicate easily with and enhance the ability to understand native speakers
- Remove personal barriers and enhance confidence in a group setting and in workplaces
- Help translate L2 from L1 in a more efficient manner
  - (L1 is the mother tongue & L2 is the Official Language – here English)
- Enhance formal and business writing skills

**The Course Learning Outcomes (COs):**

**CO-1.** Identify literary techniques and creative uses of language in literary texts

**CO-2.** Adapt their texts to particular audiences and purposes

**CO-3.** Articulate a thesis and present evidence to support it

**CO-4.** Find, evaluate, and use appropriate bibliographic materials in their texts

**CO-5.** Explain the relevance of themes found in literary texts to contemporary, personal, and cultural values

**Method of Teaching & Assessment-** Videos, Audio clippings, discussion, written and oral exercises

**Unit-1: -**

**16 Hours**

Different types of Salutations

Differences between formal and informal speech, between standard and Colloquial language

#### **Unit -2: Verbal and Non-verbal Communication**

**16 Hours**

- Personal – Social – Business
- Inter-personal and Group Communication
- Professional Communication

#### **Unit 3 - Reading Comprehension**

**14 Hours**

- Analysis and Interpretation
- Translation (from Indian Languages to English and vice-versa)
- Loud Reading, Drilling for pronunciation and fluency
- Listening Comprehension

#### **Unit 4 -Writing Skills**

**14 Hours**

- Report Writing
- Paraphrasing
- Professional Writing
- Argumentative Essays

**Semester-3<sup>rd</sup>**  
**BPES-CC-301**

**Title: SPORTS TRAINING**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning objective:**

- Sports training is especially focused on optimal performance in a particular sport.
- Its main aim is to develop the performance capacity of sports persons, so that they achieve the highest possible performance.

**The Course Learning Outcomes (COs) :**

**CO-1.** The learners will be able to identify the fundamental concepts, theories and principles of human body training related to sports performance.

**CO-2.** The learners will be able to demonstrate the skills to train different fitness components and related planning.

**CO-3.** The learners will be able to understand the organization to achieve high performance in sports

**Unit-I**

**Introduction to Sports Training**

- 1.1 Meaning and nature of Sports Training
- 1.2 Aim and Objective of Sports Training
- 1.3 Principles of Sports Training
- 1.4 Characteristics of Sports Training

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**Unit-II**

**Training Components**

- 2.1 Strength: its type and means methods employed for developing them
- 2.2 Speed: its type and means methods employed for developing them
- 2.3 Endurance: its type and means methods employed for developing them
- 2.4 Flexibility: its type and means methods employed for developing them
- 2.5 Coordinative abilities: means methods employed for developing them

**Unit-III**

**Load**

- 3.1 Principles of load and its components
- 3.2 Determination of Optimum load,
- 3.3 Overload its causes and identification
- 3.4 Tackling over Load.

#### **Unit-IV**

#### **Training programming and planning**

- 4.1 Periodization and its types of Periodization.
- 4.2 Aim and Content of Periods–Preparatory, Competition, Transitional period.
- 4.3 Planning: Meaning and types.
- 4.4 Principles of Planning.

**Teaching Learning Strategies:** The class will be taught by using lectures and demonstration,

Seminars, classroom discussion, videos, charts and presentations method.

**Virtual instructional platforms** such as **online lectures**, webcast etc. are to be used. Students can

Participate in coursework through instant messages, emails and video conferencing. Google class

room, Cisco WebEx Meeting, OERS, Swayam Platform ([www.swayam.gov.in](http://www.swayam.gov.in)), SwayamPrabha([www.swayamprabha.gov.in](http://www.swayamprabha.gov.in)) (available on Doordarshan(free dish TV), E-Yantra ([www.eyantra.org](http://www.eyantra.org)), Virtual Labs ([www.vlabs.co.in](http://www.vlabs.co.in)), FOSSEE ([www.fossee.in](http://www.fossee.in)), application of spokentutorials ([www.spoken-tutorial.org](http://www.spoken-tutorial.org)), National Digital Library ([www.ndl.iitkgp.ac.in](http://www.ndl.iitkgp.ac.in)), electronicjournals ([www.ess.infibnet.ac.in](http://www.ess.infibnet.ac.in)) etc. are to be used. . Courses may also integrate DVD videos aspart of the training process

**Initiating Brain based learning-** A stress free environment will be created. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged. Break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Assessment Rubric:** Classroom Test, Project Work, Assignments, Presentations

#### **Reference:**

1. Dick, W. F. (1980).Sports training principles. London: Lepus
2. Books. Harre, D.(1982).Principles of sports training. Berlin: Speculated.
3. Jensen, R. C.& Fisher, A.G. (1979). Scientific basis of athletic conditioning. Philadelphia:Lea and Fibiger, 2ndEdn.
4. Mathyew, L.P. (1981).Fundamental of sports training. Moscow: Progress Publishers.
5. Singh, H. (1984).Sports training, general theory and methods. Patiala: NSNIS.



**Semester-3<sup>rd</sup>**  
**BPES-CC-302**

**Title: FIELD EVENT**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objective :**

- Describe the nature and background of athletics
- Identify the basic terminologies
- Identify safety precaution to avoid injuries

**The Course Learning Outcomes (COs) :**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stance, ground markings and dimensions, rules in the games .

**CO-2.** To develop a knowledge about the historical development of this game.

**Unit-I**

Introduction to athletics (Field events) Throws, Jumps

**Unit-II**

Marking of various field events, throws (Shot put, Discus & Javelin)

Jumps (Long jump & High Jump)

### **Unit-III**

Techniques and training of the following events: Throwing events (Shot put, Discus & Javelin) Jumping events (Long jump & High Jump)

### **Unit-IV**

General rules Officiating (Field events),

### **SUGGESTED BOOKS**

Barar T.S.(2004) Track and Field- Officiating Techniques friends publication New Delhi

Arora Monika(2005) Athletics Coaching Coaching Manual sports publication New Delhi

Chauhan VS (1999). Khel Jagat Mein Athletics. A.P. Pub, Jalandhar.

Gothi E (2004). Teaching & Coaching Athletics. Sport Pub., New Delhi.

Gupta R. (2004). Layout & Marking of Track & Field. Friends Publications. India. New Delhi.

Handbook-Rules and Regulation. International Athletic Federation (2010).

Thani Lokesh (1995). Skills and Tactics-Track Athletics. Sports Pub. Delhi.

Thani Y. (1991). Encyclopedia of Athletics. Gian Pub., Delhi.12 YMCA Rule book of games and sports

**Semester-3<sup>rd</sup>**  
**BPES-CC-P-301**

**Title: SPORTS TRAINING**

**Credit: 02**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objective:**

- Sports training is especially focused on optimal performance in a particular sport.
- Its main aim is to develop the performance capacity of sports persons, so that they achieve the highest possible performance.

**The Course Learning Outcomes (COs) :**

**CO-1.** The learners will be able to identify the fundamental concepts, theories and principles of human body training related to sports performance.

**CO-2.** The learners will be able to demonstrate the skills to train different fitness components and related planning.

**CO-3.** The learners will be able to understand the organization to achieve high performance in sports

**SPORTS TRAINING**

Development of different motor fitness components

Different methods of training

File (history, rules, Techniques & records)

Viva-voce

**Semester-3<sup>rd</sup>**  
**BPES-CC-P-303**

**Title: FIELD EVENTS**

**Credit: 02**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objective :**

- Describe the nature and background of athletics
- Identify the basic terminologies
- Identify safety precaution to avoid injuries

**FIELD EVENTS**

Skills of Shot Put & Long Jump

Record File (history, rules, Technique & records)

Viva-voce

**Semester-3<sup>rd</sup>**  
**BPES-CC-P-303**

**Title: Yoga Practicum-III**

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**CREDIT: 00**

**Objectives:** Following the completion of the course, students shall be able to:

- 1) State techniques, health benefits, applications, precautions and contraindications of undermentioned yogic practices; &
- 2) To demonstrate and instruct undermentioned yogic practices.

**The Course Learning Outcomes (COs) :**

**CO-1.** Demonstrate basic skills associated with yoga and Pilates.

**CO-2.** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3.** Understand and apply the knowledge of basic choreography, and effective group management.

**CO-4.** Demonstrate the ability to create and present various yoga activities.

**Unit-I: Yogasana (Sitting Postures)**

Dandasana, Swastikasana, Padmasana, Vajrasana, SuptaVajrasana, Kagasana, Utkatasana, Gomukhasana, Ushtrasana, Shashankasana, Janusirasana, Paschimottanasana, Bhramacharyasana, Mandukasana, Utthana, Mandukasana, Vakrasana, ArdhaMatsyendrasana, Marichayasana, Simhasana.

**Unit-II: Pranayama (With Antar&Bahyakumbhaka)**

Bhastrika, Kapalbhati, Bahya, Ujjai, Anulom-Vilom, Bhramari, Udgeethand Pranav as recommended by Swami Ramdev. Suryabhedhi, Ujjai, Sheetli, Sitkaari according to Hathpradeepika.

**Unit-III: BANDHA**

Maha Mudra, Mahaved Mudra and Viparitkarni Mudra,

#### **Unit-IV: SHATKARMAS**

**Dhauti Kriya- Vahainisar Kriya, KapalrandhraDhauti and VamanDhauti.**

#### **Unit-V: Meditation**

**Patanjali Dhyana-Sadhana**

#### **Continuous Evaluation bythe Teachers**

#### **TEXT BOOKS**

1. Yogrishi Swami Ramdev Ji: Pranayama Rahasya, DivyaPrakashan, Haridwar, 2009
2. Ramdev Yogrishi Swami Ji2009: Yog-Sadhana evmChikitsaRahasya, DivyaPrakashan, Haridwar.
3. Saraswati S. S. (2006). Asana Pranayama and Mudra Bandha, "Yoga Publication Trust." Munger, Bihar
4. Science Studies Pranayam: Patanjali Research Foundation, Haridwar, 2011
5. Acharya Balkrishna: YogVijnanam, DivyaPrakashan, 2017.

**Semester-3<sup>rd</sup>**  
**BPES-SEC-301**

**Title: FUNDAMENTAL OF COMPUTER APPLICATION**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objective:**

- To understand basics of computer and working with OS.
- To develop working skills with productivity tools, graphics designing and Internet.
- To acquire basic programming skills

**The Course Learning Outcomes (COs) :**

- CO-1.** The student will be oriented with the basic knowledge of computer applications.
- CO-2.** The student will be able to apply the knowledge in the framing of training programs.
- CO-3.** The outcome of this course will help him in gathering, storage and processing of huge information in relation to inputs, outputs and feedback of sports training programs.

**Unit-I**

**Introduction to Computer**

- 1.1 Information and communication technology (ICT).
- 1.2 Application of Computers in Physical Education
- 1.3 Components of computer, input and output device
- 1.4 Application software used in Physical Education and sports

**Unit-II**

**Word Processing**

- 2.1 Getting started with Microsoft Word
- 2.2 Creating, saving and opening a document
- 2.3 Formatting Editing features Drawing table.
- 2.4 Page Setup, Paragraph Alignment, Spelling and Grammar Check, Printing Option, Inserting Page Number, Graph and Footnote.

**Unit-III**

**Spreadsheet Program**

- 3.1 Getting started with Microsoft Excel
- 3.2 Creating, saving and opening spreadsheet
- 3.3 Creating formulas
- 3.4 Format and editing features for charting data.

#### **Unit-IV**

##### **Presentation Software**

- 4.1 Getting started with Microsoft Power Point
- 4.2 Creating, saving and opening a ppt. file
- 4.3 Format and editing features slide show, design, inserting slide number
- 4.4 Enhancing of Picture, Graph, Table
- 4.5 Finalizing of a presentations

**Teaching Learning Strategies:** The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

**Virtual instructional platforms** such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform ([www.swayam.gov.in](http://www.swayam.gov.in)), SwayamPrabha([www.swayamprabha.gov.in](http://www.swayamprabha.gov.in)) (available on Doordarshan (free dish TV), E-Yantra ([www.eyantra.org](http://www.eyantra.org)), Virtual Labs ([www.vlabs.co.in](http://www.vlabs.co.in)), FOSSEE ([www.fossee.in](http://www.fossee.in)), application of spokentutorials ([www.spoken-tutorial.org](http://www.spoken-tutorial.org)), National Digital Library ([www.ndl.iitkgp.ac.in](http://www.ndl.iitkgp.ac.in)), electronicjournals ([www.ess.infibnet.ac.in](http://www.ess.infibnet.ac.in)) etc. are to be used. . Courses may also integrate DVD videos as Part of the training process.

**Initiating Brain based learning-** A stress free environment will be created. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged / break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Assessment Rubric:** Classroom Test, Project Work, Assignments, Presentations

##### **References:**

1. Irtegov, D. (2004). Operating system fundamentals. Firewall Media.
2. Frye, C. & Lambert, J.(2015). Microsoft Office 2016 Step by Step, Microsoft Press.
3. Milke, M.(2007). Absolute beginner's guide to computer basics. Pearson Education Asia.

4. Sinha, P. K. & Sinha, P. (2004). Computer fundamentals. 4th edition, BPB Publication.

**Semester-3<sup>rd</sup>**  
**BPES-MIL-301**

**Title: Basic Sanskritam-II**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

- इकाई (१) संज्ञाप्रकरणम्  
वृद्धि-गुण-संयोग-पद-अव्यय-सम्प्रसारण-उपधा-इत्-अङ्ग-  
उपसर्ग-धातु-सार्वधातुक-आर्धधातुक-विभक्ति-सर्वनाम-सज्ञाः
- इकाई (२) ईषोपनिषद्  
मन्त्रव्याख्या, मन्त्रस्मरणम्, निबन्धात्मकप्रश्नाः
- इकाई (३) हितोपदेशः - मित्रलाभः  
श्लोकव्याख्या, निबन्धात्मकप्रश्नाः
- इकाई (४) मूलरामायणम् - ५१-१००  
श्लोकपठनम्, पदच्छेदः, पदपरिचयः  
पातञ्जलयोगसूत्रम् - समाधिपादः (२६-५१ सूत्राणि)  
सूत्रस्मरणम्, सूत्रव्याख्या, निबन्धात्मकप्रश्नाः
- इकाई (५) धातुरूपमात्रम् - लट्, लृट्, लोट्, लङ्, विधिलिङ् मात्रम् (वाक्यरचना अनुवादश्च)  
(परस्मैपदम्) दिव्, अस्, हन्, शक् (आत्मनेपदम्) वृध्, मुद्, शिक्ष्  
(उभयपदम्) दा, तन्, चुर, भक्ष्, तुद्
- इकाई (६) अलङ्कारपरिचयः  
उपमा, रूपकम्, अर्थान्तरन्यासः, उत्प्रेक्षा, अनुप्रासः

**निर्धारितग्रन्थाः**

1. व्याकरणचन्द्रोदय (१) - डा० आचार्यासाध्वीदेवप्रिया, दिव्यप्रकाशन, हरिद्वारम्
2. एकादशोपनिषद् - डा० सत्यव्रतसिद्धान्तालङ्कार
3. हितोपदेशः - चौखम्बासंस्कृतप्रतिष्ठान, दिल्ली

4. मूलरामायणम् - राष्ट्रियसंस्कृतसंस्थानम्, नईदिल्ली
5. योगदर्शन - स्वामिरामदेव, दिव्यप्रकाशन, हरिद्वारम्
6. रचनानुवादकौमुदी - डा० कपिलदेवद्विवेदी, विश्वविद्यालयप्रकाशन, वाराणसी
7. काव्यदीपिका - डा० श्रीकृष्णमणित्रिपाठी, चौखम्बासुरभारतीप्रकाशन, वाराणसी

### **THE COURSE LEARNING OUTCOME (COs) :**

**CO-1.** The students is able to get an in-depth knowledge of this ancient Indian language and its literature.

**CO-2.** The students must get an overview about the poetry grammar and history of its literature.

**Semester-4<sup>TH</sup>**  
**BPES-CC-401**

**Title: OFFICIATING AND COACHING**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objective:**

- Officials undertake an important role in the staging of competitions.
- They provide leadership and guidance to participants, ensuring that the competition is conducted in a safe and fair manner.
- Coaching is a full time job and it is the process in which coach imparts knowledge to the players.

**The Course Learning outcomes (COs) :**

**CO-1.** The pass out would be oriented with the rules regulations of the chosen game.

**CO-2.** The pass out would be able to lay-out and mark the dimensions of the play court.

**CO-3.** Students would be able to organize the concerned sports event and officiate in it.

**CO-4.** Students would be oriented in the art of coaching the sports team.

**CO-5.** Students shall also be able to organize and officiate in yogic events.

**Unit-I**

**Introduction of Officiating and coaching**

- 1.1 Concept of officiating and coaching
- 1.2 Principles of officiating & Coaching
- 1.3 Importance of officiating and coaching.
- 1.4 Qualifications for Officials conducting various tournaments.

**Unit-II**

**Rules and Layout:**

- 2.1 Dimensions, layouts and marking of fields of chosen Ball Game –I
- 2.2 Rules and their interpretations of chosen Ball Game –I
- 2.3 Qualification and number of officials in the chosen Ball Game –I
- 2.4 Coaching in the chosen Ball Game –I

**Unit-III:**

**Duties of Official:**

- 3.1 Dimensions, layouts and marking of fields of chosen Ball Game –II
- 3.2 Rules and their interpretations of chosen Ball Game –II
- 3.3 Qualification and number of officials in the chosen Ball Game –II
- 3.4 Coaching in the chosen Ball Game –II

**Unit-IV**

**Qualities and Qualifications of Coach and Official:**

- 4.1 Layout, dimensions and markings of Track
- 4.2 Rules and their interpretations of running events in Track.

#### 4.3 Yoga and its rules

#### 4.4 Coaching in Athletics and Yoga

**Teaching Learning Strategies:** The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

**Virtual instructional platforms** such as **online lectures**, webcast etc. are to be used. Students can

participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform ([www.swayam.gov.in](http://www.swayam.gov.in)), SwayamPrabha ([www.swayamprabha.gov.in](http://www.swayamprabha.gov.in)) (available on Doordarshan (free dish TV), E-Yantra ([www.eyantra.org](http://www.eyantra.org)), Virtual Labs ([www.vlabs.co.in](http://www.vlabs.co.in)), FOSSEE ([www.fossee.in](http://www.fossee.in)), application of spoken tutorials ([www.spoken-tutorial.org](http://www.spoken-tutorial.org)), National Digital Library ([www.ndl.iitkgp.ac.in](http://www.ndl.iitkgp.ac.in)), electronic journals ([www.ess.infibnet.ac.in](http://www.ess.infibnet.ac.in)) etc. are to be used. . Courses may also integrate DVD videos as part of the training process. Students may examine current topics in the field through the use of etextbooks and e-physical education journals. Students can complete some portion of the education at approved testing sites for the practical components wherever necessary.

**Initiating Brain based learning-** A stress free environment will be created. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged / break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Assessment Rubric:** Classroom Test, Project Work, Assignments, Presentations

#### **Reference Books:**

1. Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice
2. Hall. Bunn, J. W. (1972). *Scientific principles of coaching*.
3. Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd.
4. Dyson, G. H. (1963). *The mechanics of Athletics*. London: University of London Press Ltd.
5. Lawther, J.D. (1965).
6. *Psychology of coaching*. New York: Pre. Hall.
7. Singer, R. N. (1972). *Coaching, athletic & psychology*. New York: M.C. Grew Hill.
7. Official Rule Book / Handbook of the concerned federation of sports.

**Semester-4<sup>TH</sup>**  
**BPES-CC-402**

**Title: TEST MEASUREMENT AND EVALUATION IN PHYSICAL  
EDUCATION AND SPORTS**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning objective:**

- To evaluate the learners - In the field of physical education and sports Test and Measurement helps in collection of data which further helps in evaluating the learners ability separately.
- It also helps the sports person in enhancing his sports performance.
- Test, measurement, and evaluation are concepts used in education to explain how the progress of learning and the final learning outcomes of students are assessed.

**The Course Learning outcomes (COs):**

- CO-1.** The students will be able to recognize and relate the concept of test, measurement and evaluation in the context of Physical Education.
- CO-2.** The students will be able to construct and conduct the physical fitness and sports skill test.
- CO-3.** The students will be able to implement the criteria of test selection. The syllabus would orient the students in the art of applications of test, measurement and evaluation in physical and sports activities with simultaneous development of practical competency in conducting physical fitness and sports skill tests.

**Unit-I**

**Introduction to Test & Measurement & Evaluation**

- 1.1 Meaning of Test, Measurement & Evaluation in Physical Education.
- 1.2 Importance of Test, Measurement & Evaluation in Physical Education.
- 1.3 Criteria of selecting an appropriate test.
- 1.4 Type and classification of test

**Unit-II**

**Construction and Administration of Test**

- 2.1 Administration of testing programme.
- 2.2 Construction of Physical Fitness / Efficiency Test

2.3 General types of sports skill test items

2.4 Construction of sports skill test

### **Unit-III**

#### **Physical Fitness Tests**

3.1 Youth Physical Fitness Test.

3.2 Tuttle Pulse Ratio Test

3.3 Newton Motor Ability Test

3.4 Phillips JCR Test

### **Unit-IV**

#### **Sports Skill Tests**

4.1 Lockhart and McPherson Badminton test

4.2 Johnson Basketball test

4.3 McDonald soccer test

4.4 S.A.I Hockey test

**Teaching Learning Strategies:** The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

**Virtual instructional platforms** such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform ([www.swayam.gov.in](http://www.swayam.gov.in)), SwayamPrabha ([www.swayamprabha.gov.in](http://www.swayamprabha.gov.in)) (available on Doordarshan (free dish TV), E-Yantra ([www.eyantra.org](http://www.eyantra.org)), Virtual Labs ([www.vlabs.co.in](http://www.vlabs.co.in)), FOSSEE ([www.fossee.in](http://www.fossee.in)), application of spoken tutorials ([www.spoken-tutorial.org](http://www.spoken-tutorial.org)), National Digital Library ([www.ndl.iitkgp.ac.in](http://www.ndl.iitkgp.ac.in)), electronic journals ([www.ess.infibnet.ac.in](http://www.ess.infibnet.ac.in)) etc. are to be used. . Courses may also integrate DVD videos as part of the training process

**Initiating Brain based learning-** A stress free environment will be created. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged. Break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Assessment Rubric:** Classroom Test, Project Work, Assignments, Presentations

#### **References:**

1. Bangsbo, J. (1994). *Fitness training in football: A scientific approach*. Bagsvaerd, Denmark: Ho+Storm.

2. Barron, H. M., & Mchee, R. (1997). *A practical approach to measurement in physical education*. Philadelphia: Lea and Febiger.
3. Barron, H.M. & Mchee, R. (1997). *A Practical approach to measurement in physical education*. Philadelphia: Lea and Febiger.
4. Kansal, D.K. (1996). *Test and measurement in sports and physical education*. New Delhi: D.V.S. Publications.

**Semester-4<sup>TH</sup>**  
**Paper-3<sup>RD</sup>**  
**BPES-CC-P-401**

**Title: OFFICIATING AND COACHING**

**Credit: 02**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objective:**

- Officials undertake an important role in the staging of competitions.
- They provide leadership and guidance to participants, ensuring that the competition is conducted in a safe and fair manner.
- Coaching is a full time job and it is the process in which coach imparts knowledge to the players.

A scrape file related to officiating and coaching of any two games

Viva-voce

**Semester-4<sup>TH</sup>**  
**BPES-CC-P-402**

**Title: TEST MEASUREMENT AND EVALUATION IN PHYSICAL  
EDUCATION AND SPORTS**

**Credit: 02**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning objective:**

- To evaluate the learners - In the field of physical education and sports Test and Measurement helps in collection of data which further helps in evaluating the learners ability separately.
- It also helps the sports person in enhancing his sports performance.
- Test, measurement, and evaluation are concepts used in education to explain how the progress of learning and the final learning outcomes of students are assessed.

Harvard step test. Harbans Hockey Test & Kraus Weber test  
Record File  
Viva-voce

**Semester-4<sup>TH</sup>**  
**BPES-CC-P-403**

**Yoga Practicum-IV**

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**Credit: 00**

**Objectives:** Following the completion of the course, students shall be able to:

- 1) State techniques, health benefits, applications, precautions and contraindications of under mentioned yogic practices; &
- 2) To demonstrate and instruct under mentioned yogic practices.

**The Course Learning Outcomes (COs):**

**CO-1.** Demonstrate basic skills associated with yoga and Pilates.

**CO-2.** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3.** Understand and apply the knowledge of basic choreography, and effective group management.

**CO-4.** Demonstrate the ability to create and present various yoga activities.

**Unit-I: yogasanas (Standing Postures]**

Tadasana, Vrikshasana, Urdhva-Hastottanasana, Kati Chakrasana; ArdhaChakrasana, PaadaHastasana; Trikonasana, ParshvaKonasana; Veerabhadrasa

**Unit-II: Pranayama (with antar&BahyaKumbhaka)**

Bhastrika, Bhramari, Murchha, Kewali.

**Unit-III: Mudras**

Yoga Mudra, Shanmukhi Mudra, Shambhavi Mudra, Kaki Mudra.

**Unit-IV: Shatkarmas**

Gajkarni, Tratak

## **Unit-V: Yajna karma**

Practice and procedure of Yajna including learning and memorization of mantras.  
Do's and Don'ts of Yajna.

## **CONTINUOUS EVALUATION BY THE TEACHERS**

### **TEXT BOOKS**

1. Yogrishi Swami Ramdev Ji: Pranayama Rahasya, DivyaPrakashan, Haridwar, 2009
2. Ramdev Yogrishi Swami Ji 2009: Yog-Sadhana evm Chikitsa Rahasya, DivyaPrakashan, Haridwar.
3. Saraswati S. S. (2006). Asana Pranayama and Mudra Bandha, "Yoga Publication Trust." Munger, Bihar
4. Science Studies Pranayam: Patanjali Research Foundation, Haridwar, 2011
5. Acharya Balkrishna: YogVijnanam, DivyaPrakashan, 2017.

**Semester-4<sup>TH</sup>**  
**BPES-SEC-401**

**Title: ADVANCED COMPUTER APPLICATION**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objective:**

- To understand basics of computer and working with OS.
- To develop working skills with productivity tools, graphics designing and Internet.
- To acquire basic programming skills

**The Course Learning Outcomes (COs) :**

**CO-1.** The student will be oriented with the basic knowledge of computer applications.

**CO-2.** The student will be able to apply the knowledge in the framing of training programs.

**CO-4.** The outcome of this course will help him in gathering, storage and processing of huge information in relation to inputs, outputs and feedback of sports training programs.

**Unit-I Syllabus - Introduction to Computers**

Types of Programming Languages: Machine Languages, Assembly Languages, High Level Languages, Data Organization: Drives, Files, Directories, Number Systems: Decimal, Binary, Octal, Hexadecimal, Number System Conversion, Operations on Number System.

**Unit-II Syllabus - Algorithm and Flowcharts**

Algorithm: Definition, Characteristics, Advantages and disadvantages, Examples, Flowchart: Definition, Define symbols of flowchart, Advantages and disadvantages, Examples

**Unit-III Syllabus - Spreadsheets and Database Packages**

Spreadsheets and Database packages: Purpose, Usage, Command, MicroSoft/MS Excel, Creation of Files in MicroSoft/MS Access, Switching between Applications, MicroSoft/MS Power Point

## **Unit-IV Syllabus - Computer Laboratory and Practical Work of Office**

Practical will be based on Paper Office Automation: Covers UNIT-III

### **Reference Books:**

1. Fundamental of Computers – By V.Rajaraman B.P.B. Publications
2. Fundamental of Computers – By P.K. Sinha
3. MS-Office 2000(For Windows) – By Steve Sagman

**Semester-4<sup>TH</sup>**  
**BPES-MIL-401**

**Title: English-II**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objectives:**

- Develop an ability to read, understand and write about oneself incorrect grammatical English
- Revise basic English Grammar to improve our knowledge for competitive exams
- Provide a forum for healthy discussions
- Demonstrate conversational skills and in addition, develop the ability to listen, read and comprehend English

**The Course Learning Outcomes (COs) :**

**CO-1.** Identify literary techniques and creative uses of language in literary texts

**CO-2.** Adapt their texts to particular audiences and purposes

**CO-3.** Articulate a thesis and present evidence to support it

**CO-4.** Find, evaluate, and use appropriate bibliographic materials in their texts

**CO-5.** Explain the relevance of themes found in literary texts to contemporary, personal, and cultural values

**Method of Teaching & Assessment-** Videos, Audio clippings, discussion, written and oral exercises

**Unit-1: -**

**(15 Lect.)**

**Advanced Writing Skills:**

- Cover Letters & Difference between a Resume, CV, and Biodata
- Survey Reports
- Formal Letters

- Comprehension passages
- Article Writing

**Unit 2: -**

**(15 Lect.)**

**Grammar Revision**

- Tenses
- Translation
- Common Grammatical Errors

**Unit 3: -**

**(15 Lect.)**

**Advanced Comprehension Skills**

- Passages
- Language usage
- Reading Comprehension
- Composition

**Unit 4: -**

**(15 Lect.)**

**Professional Skills**

- Interview Skills
- Extempore
- Group Discussions
- Constructive Criticism and Feedback
- Collaboration

Suggested Resources to be added

## **Semester-5<sup>TH</sup>**

### **BPES-DSC-501**

#### **TITLE: Research and Teaching Methods in Yoga**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Objectives:** Following the completion of this course, students shall be able to

- Understand the basic principles of Research & Teaching Methods.
- Have knowledge of different aspects of research & teaching methods used in Yoga.

#### **THE COURSE LEARNING OUTCOMES (COs):**

**CO-1.** To enable the student to have good health.

**CO-2.** To practice mental hygiene.

**CO-3.** To poses emotional ability.

**CO-4.** To integrate moral values.

**CO-5.** To attain higher level consciousness.

#### **Unit-1: Introduction To Research Methodology (15 Hrs.)**

Definition Of Research; Importance Of Studying Research Methods: Evaluating Research Reports; Conducting Research, Thinking Critically About Research; Types Of Research: Applied Research & Basic Research; Goals Of Research: Description, Explanation, Prediction, And Control Of Behavior; Ethics Of Research: Informed Consent, Anonymity, Confidentiality, and Plagiarism.

#### **Unit-2: Introduction To Research Process (15 Hrs.)**

Research Questions; Literature Review; Different Sources Of Information: Primary, Secondary, Tertiary Source; Electronic Databases: Google Scholar, Pubmed&Psycinfo; Hypothesis Sampling And Generalization - Population And Sample; Probability Sampling: Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling; Sampling Bias And Nonprobability Sampling: Snowball Sampling, Convenience; Types Of Biological Data (Scales Of Measurement) – Nominal, Ordinal, Interval, Ratio; Types Of variables – Independent, Dependent, Confounding Variable; Reliability & Validity.

#### **Unit-3: Introduction To Research Design [15 Hrs.]**

Cross-Sectional Studies And Its Advantages And Disadvantages; Cohort Studies And Its Advantages And Disadvantages; Randomized Controlled Trials And Its Advantages And Disadvantages; Factors Need To Be Considered When Designing A Study: Availability Of Data, Sampling Methods, Data Collection, Cost Of The Design, Time Implications And Loss To Followup, Controls, Ethical Issues, Issues Of Bias And Confounding.

**Unit-4: Principles And Methods Of Teaching Yoga [15 Hrs.]**

Teaching and Learning: Concepts and Relationship between The Two; Principles Of Teaching: Levels And Phases Of Teaching Principles And Types Of

Learning, Qualities Of A Yoga Teacher, Yogic Levels Of Learning, Vidyarthi, Shishya, Mumukshu; Meaning And Scope Of Teaching Methods, And Factors Influencing Them; Sources Of Teaching Methods; Importance Of Teacher Training.

### **TEXT BOOKS**

1. Yogrishi Swami Ramdev; Yoga Manual for parents and Yoga Teachers, DivyaPrakashan, Haridwar, 2010
2. Dr.Gharote ML & Dr S K Ganguly: Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007

### **BOOKS FOR REFERENCE**

1. Dr. Shri Krishna : Notes on basic principles & methods of teaching as applied to Yogic practices and a ready reckoner of Yogic practices, Kaivalyadhama, Lonavala, 2009
2. Dr. Raj Kumar : Principles & methods of Teaching, Printo graphics, Delhi,
3. Saket Raman Tiwari & others : Teaching of Yoga, DPH Publishing Corporation, Delhi, 2007

**Semester-5<sup>TH</sup>**  
**BPES-DSC-502**

**TITLE: Sports Psychology**

**Credit: 06**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objective:**

- to understand how psychological and social factors influence an individual's behavioral outcomes (e.g., sport performance, exercise motivation)
- to understand how participation in sport and exercise influences psychological

**The Course Learning outcomes (COs):**

- CO-1.** The study would orient the student in basic concepts of psychology.
- CO-2.** The student would be oriented in identifying factors determining one's overall personality.
- CO-3.** He would understand various laws of learning and their relevance in teaching learning process.
- CO-4.** The study would orient him in getting through with the psychology of sports person.

**Unit-I**

**Introduction of Sports Psychology:**

- 1.1 Meaning and nature of Sports Psychology.
- 1.2 Historical Evolution of Sports Psychology
- 1.3 Relevance of Sports Psychology in Physical Education and coaching.
- 1.4 Psychological factors affecting sports performances.

**Unit-II**

**Personality and Sports:**

- 2.1 Meaning and nature of Personality.
- 2.2 Theories of personality in sports
- 2.3 Dimensions of personality and development of personality

**Motivation**

- 2.4 Types of motivation and condition of developing achievement motivation.

**Unit-III**

**Learning**

- 2.1 Meaning nature and principles of Learning, Types of Learning.
- 2.2 Laws of learning, Transfer of learning

2.3 Factors affecting learning

2.4 Learning curve, Plateau

#### **Unit-IV**

#### **Sports Sociology and Leadership:**

4.1 Nature of Sports Sociology.

4.2 Importance of Sports Sociology in Physical Education.

4.3 Socialization and value education through Physical Education.

4.4 Impact of society on sports and vice versa

**Teaching Learning Strategies:** The class will be taught by using lectures and demonstration,

seminars, classroom discussion, videos, charts and presentations method.

**Virtual instructional platforms** such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform ([www.swayam.gov.in](http://www.swayam.gov.in)), SwayamPrabha ([www.swayamprabha.gov.in](http://www.swayamprabha.gov.in)) (available on Doordarshan(free dish TV), E-Yantra ([www.eyantra.org](http://www.eyantra.org)),

Virtual Labs ([www.vlabs.co.in](http://www.vlabs.co.in)), FOSSEE ([www.fossee.in](http://www.fossee.in)), application of spoken

tutorials ([www.spoken-tutorial.org](http://www.spoken-tutorial.org)), National Digital Library ([www.ndl.iitkgp.ac.in](http://www.ndl.iitkgp.ac.in)), electronic

journals ([www.ess.infibnet.ac.in](http://www.ess.infibnet.ac.in)) etc. are to be used. Courses may also integrate DVD videos as

part of the training process

**Initiating Brain based learning-** A stress free environment will be created. Constant feedback

regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged. Break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Activities:** Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

**Assessment Rubric:** Classroom Test, Project Work, Assignments, Presentations

#### **References:**

1. Alison and Robinson. (2018), Excelling in Sport Psychology: Planning, Preparing, and

Executing Applied Work, Sean Fitzpatrick

2. Taylor, Jim, (2018), Assessment in Applied Sport Psychology, Human kinetics

3. Coumbe-Lilley , (2018), Complex Cases in Sport Psychology, Routledge
4. Ball, D. W. & Loy, J. W. (1975).Sport and social order; Contribution to the sociology of sport. London: Addison Wesley Publishing Co., Inc.
5. Kamlesh, M.L. (1998) Psychology in physical education and sport. New Delhi: Metropolitan Book Co.

**Semester-5<sup>TH</sup>**  
**BPES-DSC-P-501**

**TITLE: Case Study Practicum**

**Credit: 02**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Objectives:**

Following the completion of the course, students shall be able to

- Understand the concept of research and its methodology for carrying minor and major research.
- Understand the tricks of analyzing the data efficiently.
- Have an idea about various statistical tests and their application.
- Write a research project/Case Study/ Survey.

**LEARNING PRACTICUM**

- The students would must learn case studies of a learners the opportunity to think and act.
- The student must critically reflect on their processing of thinking and actions.

**RESEARCH PRACTICAL**

A Case Study/ Exploratory Research/ Survey Has to be conducted under the supervision of a Lecturer /Assistant Professor.

A pilot research shall be carried out by each student under the supervision of a Lecturer /Assistant Professor. As part of the research project, students will record the effect of any intervention of his/her choice for a common variable in a particular group of sample.

This pilot research should be submitted to the supervisor and the course coordinator.

**Semester-5<sup>TH</sup>**  
**BPES-CC-P-503**

**TITLE: Yoga Practicum-V**

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**Credit: 00**

**Objectives:** Following the completion of the course, students shall be able to:

- 1) State techniques, health benefits, applications, precautions and contraindications of under mentioned yogic practices; &
- 2) To demonstrate and instruct under mentioned yogic practices.

**The Course Learning Outcomes (COs):**

**CO-1.** Demonstrate basic skills associated with yoga and Pilates.

**CO-2.** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3.** Understand and apply the knowledge of basic choreography, and effective group management.

**CO-4.** Demonstrate the ability to create and present various yoga activities.

**Unit-I: Yogasanas**

Karnapeedasana, Kapotasana, Rajkapotasana, Bakasana, Kukkutasana, Garbhasana, Marjariasana, Matsyendrasana, Sirsasana, Padangushthasana, Hastapadangushthasana, Garudasana, Vatayanasana, Natrajasana, Mayurasana, EkpadaKandarasana, Dwipadakandarasana.

**Unit-II: Pranayama (With Antar&BahyaKumbhaka)**

Suryabhedhi, Ujjai, Sheetli, Sitkari, Bhastrika, Bhramari Pranayama,

**Unit-III: Bandh**

Maha Bandha, Tri Bandha.

#### **Unit-IV: Shatkarma**

Dhauti (Danda), Neti (Jala, Sutra), Trataka

#### **Unit-V: Practice Leading To Meditation**

Pranava and Soham Japa, Antarmouna, Dharana, Pracice of Dhyana, Breath Meditation, Om Meditation

**Continuous Evaluation By The Teachers**

**Semester-5<sup>TH</sup>**  
**BPES-SEC-501**

**TITLE: Basketball, Handball & Kho- Kho**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objective:**

- the improvement of various components of physical and skills related fitness like strength, speed, coordination, endurance and flexibility is an important aim and objective of sports training.
- develop techniques and tactics involved in organised physical activities, games and sports.
- acquire knowledge about human body as its functioning is influenced by physical activities.
- understand the process of growth and development as participation in physical activities has positive relationship with it.
- develop socio-psychological aspects like control of emotions, balanced behaviour, development of leadership and followership qualities and team spirit through participation in games and sports.

**The Course Learning Outcomes(COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties

of officials, etc.

**CO-2.** To develop a knowledge about the historical development of this game.

**UNIT - 1**

## **Introduction of Basketball**

Origin, historical perspectives and modern trends in Basketball

Orientation of the fundamental skills

Construction and maintenance of Basketball court- rules of the game.

Introduction of Basketball Association of India (BFI)

Introduction of International Basketball Federation (FIBA)

## **Coaching and Officiating in Basketball**

Duties/responsibilities of a coach, Qualifications and qualities of a coach

Qualifications of an official, Responsibilities of technical officials

## **UNIT-2<sup>nd</sup>**

### **HANDBALL**

Origin & developmental aspects of Handball at global level, Development of Handball in India

Modern trends and developments in Handball.

Organization of Handball (Federation and Association).

Marking, Measurements/ dimensions, Selection of a team.

Conduct of a camp. Conduct of a tournament., Rules, regulations and their Interpretations, Latest Rules, Duties of Officials

Warming up: - General & Specific, Specific conditioning programme for Handball

Basic skills- offensive & defensive, Classification of Techniques

## **UNIT-3<sup>rd</sup>**

Origin & developmental aspects of Kho-kho at global level

Development of Kho-Kho in India

Modern trends and developments in Kho-Kho.

Organization of KKFI ,Marking Measurements/ dimensions, Selection of a team.

## **UNIT-4<sup>th</sup>**

Conduct of a camp, Conduct of a tournament.

Rules, regulations and their Interpretations Latest Rules Duties of Official warming up: - General & Specific

Specific conditioning programme for Kho-Kho

Basic skills- offensive & defensive.

Classification of Techniques

## **SUGGESTED BOOKS**

Chakrabarty G (2002). Kho - Kho Aveloken. Khel Sahitya Kendra. Delhi.

Panday L (1982). Kho - Kho Sarvaswa. Metropolitan

**Semester-5<sup>TH</sup>**  
**BPEES-GE-501**

**TITLE: Indian Philosophy & Culture**      **Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Objectives:**

After completion of this paper:

- Students will have an understanding about various schools of Indian philosophy
- They will have an idea about the various features of traditional Indian culture

**THE COURSE LEARNING OUTCOMES (COs) :**

**CO-1.** The students would must reveals certain western philosophical thoughts.

**CO-2.** The students must gained knowledge on Indian philosophers.

**CO-3.** The students would must learned about the concept such as  
dharma,karma,dhukkha,meditation,etc.

**Unit-1: -Introduction to Indian Philosophy (8 Hours):**

Literal Meaning and Definition of Philosophy, Role of Philosophy in Human Life, Characteristics Of Indian Philosophy, Bodies Of Indian Philosophy: Vedic-Non-Vedic. The Three Main Areas of Philosophy –PramanMimamsa (Epistemology), Tattva Mimamsa (Meta Physics), Achar Mimamsa(Ethics).

(Prescribed Text Book – भारतीय दर्शन, आचार्य बलदेव उपाध्याय– चयनित पाठ्यांश)

**UNIT-2: -Introduction to Six Schools Of Vedic Philosophy (20 Hours):**

General Introduction and Theory (Tattva Mimamsa& Ethics)

1. Nyaya Darshan
2. Vaisheshika Darshan
3. Samkhya Darshan
4. Yoga Darshan
5. Mimamsa Darshan
6. Vedanta Darshan

(Prescribed Text Book – दर्शन प्रवेश, दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार)

**Unit-3: -Introduction to Jain, Buddhist, Charvak Philosophy (20 Hours):**

## General Introduction and Principles (Tattva Mimamsa& Ethics)

1. Jain Darshan
2. Buddhism
3. Charwak Darshan

(Prescribed Text Book – सर्वदर्शन संग्रह, माध्वाचार्य)

## Unit-4: -Introduction To Culture (12 Hours):

Literal Meaning and Definition Of Culture. Concept And Importance Of Culture. General Introduction to The Base Scriptures Of Indian Culture - Vedas, Upanishads, Manusmriti, Mahabharata, Ramayana, Gita. (Prescribed Text Book - वैदिकसाहित्यएवंसंस्कृत--डा० कनकलदेवनद्वेदी)

## Unit-5: -Salient Features Of Indian Culture - (10 Hours):

PurusharthaChaturthya, Ashram System, Varna System, Karma Principles, Sixteen Rites, PanchaMahayajna, Debt-Triad, Co-Existence - Universal Relationship

## References / supporting books

1. दर्शन प्रवेश, दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार
2. भारतीय दर्शन, आचार्य बलदेव उपाध्याय– चयनित पाठ्यांश
3. धर्म दर्शन संस्कृति, डॉ० रूप किशोर शास्त्री
4. Teaching yourself philosophy: Indian Philosophy- Dr. R.P. Sharma
5. An outline of Indian Philosophy- M. Hiriyana

**Semester-5<sup>TH</sup>**  
**BPES-GE-502**

**TITLE: Ancient Indian Social Life and Institutions**

**Credit: 04**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**LEARNING OBJECTIVE**

The ancient education focused on imparting ethics like humility, truthfulness, discipline, self-reliance, and respecting all creations to the students. The education was mostly imparted in ashrams, gurukuls, temples, houses.

**THE COURSE LEARNING OUTCOMES (COs):**

**CO-1.** The students would have a better grasp of a cultural heritage and intellectual growth.

**CO-2.** The students would must learn ancient knowledge place a valuable role in “received wisdom”.

**CO-3.** The student would must gain thoughts and ideas past down by previous generation.

**Unit I: (15**

**Lect.)**

Varna-Ashrama System

Origin and development of Varna Vyavastha

Origin, development and significance of Ashrama

JatiVyavastha

**Unit II: (13**

**Lect.)**

Marriage and Family

Meaning and objectives of marriages

Types of marriages

Concept and component of family

**Unit III: (16**

**Lect.)**

Position and Role of Women

Position and status of women in Ancient society

Stree Dhan and her Property righys

**Unit IV: (14**

**Lect.)**

Purusharth and Samsakaras

Types of Purushartha

Types of Samsakaras

**Unit V: (17**

**Lect.)**

Education System

Objectives of education

Important centers of education: Nalanda, Balabhi, Kashi and Taxila

**Text Book:**

Mishra, J.S., Prachin Bharat ka Samajik Itihas, Patana, 1986

**Recommended Readings:**

Altekar, A. S., Education in Ancient India (Also in Hindi)

Altekar, A.S., Position of Women in Hindu Civilization,

Dutt, N. K., Origin and Growth of Caste in India, Calcutta, 1931.

Jauhari, M., Prachin Bharata Mem VarnasramaVyavastha (Hindi), Varanasi, 1985.

Kapadia, K. M., Marriage and Family in India (English)

Tripathi, L.K. (ed.), Position and Status of Women in Ancient India, 2 Vols., Varanasi, 1988 and 1992

**Semester-6<sup>TH</sup>**  
**BPES-DSC-601**

**TITLE: Dissertation**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Objectives:**

Following the completion of the course, students shall be able to

- Understand the concept of research and its methodology for carrying minor and major research.
- Understand the tricks of analyzing the data efficiently.
- Have an idea about various statistical tests and their application.
- Write a research project/Case Study/ Survey

**THE COURSE LEARNING OUTCOME (COs) :**

**CO-1.** Engage in systematic discovery and critical review of appropriate and relevant information sources. Appropriately apply qualitative and/or quantitative evaluation processes to original data. Understand and apply ethical standards of conduct in the collection and evaluation of data and other resources.

**RESEARCH PRACTICAL**

A Case Study/ Exploratory Research/ Survey Has to be conducted under the supervision of a Lecturer /Assistant Professor.

A pilot research shall be carried out by each student under the supervision of a Lecturer /Assistant Professor. As part of the research project, students will record the effect of any intervention of his/her choice for a common variable in a particular group of sample.

This pilot research should be submitted to the supervisor and the course coordinator.

**Semester-6<sup>TH</sup>**  
**BPES-DSC-602**

**TITLE: Personality Development**

**Credit: 06**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objective:**

- Personality development helps you gain recognition and acceptance from the society as well as people around.
- Personality development plays an essential role not only in an individual's professional but also personal lives.
- It makes an individual disciplined, punctual and an asset for his/her organization

**The Course Learning Outcomes (COs):**

**CO-1.** Explores own identity and culture (e.g., gender, sexual orientation, racial/ethnic background, socioeconomic status)

**CO-2.** Integrates multiple aspects of personal identity into a coherent whole

**CO-3.** Can articulate how personal identities relate to larger social constructs

**Unit-I Introduction**

Personality -meaning and definition.Introduction to acronym CAKE (Commitment to Application of Knowledge Existing)

Components of Personality

**Unit-II Physical Personality**

Meaning, Definition and types of Personality.

Principles of Developing Personality.

Somato type and Personality.

Meaning and Definition of Spiritual Personality.

**Unit-III Personality and Wellness**

Components of Wellness, Relation of Wellness and Personality.

Behaviour Change Method.

Physical Fitness-Components and Role in Physical Personality Development

#### **Unit-IV Mental Personality**

Meaning and Definition of Mental Personality

Type A, B & C Personality Characteristics

Traits affective Personality and Its Development.

Heredity and Environment in relation to Personality Development.

#### **SUGGESTED READINGS**

Singh, Ajmer et.al. "Modern Text Book of Physical Education, Health and Sports", Kalyani, Publishers, Ludhiana, 2000

Singh, Ajmer et.al. "Olympidu, "Health and physical education", lakshmi, publishing house, Rohtak, 2011

Kansal, D.K. (2010). Holistic Personality Development. Sports and Spiritual Science, Publications, New Delhi

Bernard N. (2001). Turn off the Fat Genes. Harmony Books, New York. U.S.A.

Kamlesh M.L.(2002) psychology in physical education and sports, metropolitan book co. pvt. ltd, New Delhi

**Semester-6<sup>TH</sup>**  
**BPES-DSC-P-601**

**TITLE: Study Tour & Report Writing**

**Credit: 02**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Objectives:**

Following the completion of the course, students shall be able to

- Understand the concept of research and its methodology for carrying minor and major research.
- Understand the tricks of analyzing the data efficiently.
- Have an idea about various statistical tests and their application.
- Write a research project/Case Study/ Survey

**THE COURSE LEARNING OUTCOME (COs):**

**CO-1.** Learning is the process of acquiring new knowledge or modifying the existing knowledge, behaviors, skills, values, or preferences. Learning is more effective when it comes through experiences. To acquire first-hand knowledge about a different side of living, such as rural India or tough terrain in Himalayas. Using the knowledge acquired to gain an understanding of programs, policies, services and procedures that impact society's systems.

**RESEARCH PRACTICAL**

A Exploratory Research/ Survey Has to be conducted under the supervision of a Lecturer /Assistant Professor.

A pilot research shall be carried out by each student under the supervision of a Lecturer /Assistant Professor. As part of the research project, students will record the effect of any intervention of his/her choice for a common variable in a particular group of sample.

This pilot research should be submitted to the supervisor and the course coordinator.

**Semester-6<sup>TH</sup>**  
**BPES-SEC-601**

**TITLE: VOLLEYBALL & KABADDI**

**Credit: 04**  
**Max. Marks: 100**  
**Internal Marks: 30**  
**End semester exam marks: 70**

**Learning Objective:**

- the improvement of various components of physical and skills related fitness like strength, speed, coordination, endurance and flexibility is an important aim and objective of sports training.
- develop techniques and tactics involved in organised physical activities, games and sports.
- acquire knowledge about human body as its functioning is influenced by physical activities.
- understand the process of growth and development as participation in physical activities has positive relationship with it.
- develop socio-psychological aspects like control of emotions, balanced behaviour, development of leadership and followership qualities and team spirit through participation in games and sports.

**The Course Learning Outcomes (COs):**

- CO-1.** To train the student teachers to equip with game specialization of any discipline mentioned above so as to enhance their teaching ability and proficiency in handling practical classes.
- CO-2.** To develop a knowledge about the historical development of this game.
- CO-3.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Volleyball.

## **UNIT-I**

### **Introduction of Volleyball**

Origin, historical perspectives and modern trends in Volleyball  
Orientation of the fundamental skills  
Construction and maintenance of Volleyball court- rules of the game.  
Introduction of Volleyball Association of India (VFI)  
Introduction of International Volleyball Federation (FIVB)

## **UNIT-II**

### **Coaching and Officiating in Volleyball**

Duties/responsibilities of a coach  
Qualifications and qualities of a coach  
Qualifications of an official  
Responsibilities of technical officials

## **UNIT- III**

Origin & developmental aspects of Kabaddi at global level  
Development of Kabaddi in India. Modern trends and developments in Kabaddi.  
Organization of Kabaddi. Marking, Measurements/ dimensions.  
Selection of a team. Conduct of a camp.

## **UNIT-IV**

Conduct of a tournament. Rules, regulations and their Interpretations  
Latest Rules, Duties of Officials

## **UNIT-V**

Warming up: - General & Specific  
Specific conditioning programme for Kabaddi  
Basic skills- offensive & defensive.  
Classification of Techniques.

**Semester-6<sup>TH</sup>**  
**BPES-GE-601**

**TITLE: Shrimadbhagavad Gita Bodh**

**Credit: 06**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objectives:**

Following the completion of this course, students shall be able to

- Understand the main teachings of Bhagvadgeeta
- Become familiar with the nature of yoga in various chapters of Bhagvad Geeta.
- Imbibe the essence of teachings of Bhagavad Geeta.

**The Course Learning outcomes (COs):**

**CO-1.** Students would be *Focus on the sure (actions), not on the unsure (results). Because if the results are not as per your expectations, pain is unavoidable.*

**Unit 1: ShrimadBhagwadgita Introduction (12 Hours):**

General Introduction of the Bhagavad Gita, The Great Significance of the Bhagavad Gita and Various Scholars' Views in Relation to It, Synthesis of Yoga in The Bhagavad Gita, The Major Definitions of Yoga, The Nature of Yoga, Yoga Sadhana in The Bhagavad Gita, Relevance of The Bhagavad Gita in The Current Era.

**Unit-2:Gyan Yoga –Atman, Prakriti & Parmatman (12 Hours):**

Sankhya Yoga or Jnana Yoga (Chapter-2,3,4,5,6,13), The Form of the Soul (Chapter-2), The Form of the Supreme Soul (Purushottama), (Chapter-4,8,10,11,13,15), Form of Prakriti (Chapter-9,13,14).

### **Unit-3: Karma Yoga and Meditation Yoga (12 Hours):**

Concepts of Karmayoga (Chapter-2-6), Form Of Yajna, Yajnartha Karma, Nishkam Karma (Chapter-3,4), Lok Sangrah (Chapter-3), Jnana-Karma Coordination (Chapter-5), Forms Of Dhyana Yoga (Chapter-6).

### **Unit 4: Bhakti Yoga (12 Hours):**

Concepts of Bhakti and Mahatmya (Chapters-7, 8, 9, 11, 12), The Necessity of Devotion in Divine Realization (Chapters-11, Verse-52-55), Types of Bhakti (Chapters-7, 12) Characteristics of The Devotee (Chapter-12, Verse-13-20)

### **Unit 5: Personality, Diet and Trigun Concept (12 Hours):**

Role of Diet in Yoga Practice (Chapter-6), Introduction to Trigunas (Chapter-14), Concept of Trigun-Based Personality (Chapter-17), Elements of Personality Development, Ideal Personality- DaiveeSampda (Chapter-16).

### **Prescribed Text Book -**

1. श्रीमद्भगवद्गीता- गीतामृत- योग ऋषि स्वामी रामदेव जी, दिव्य प्रकाशन, ंतंजलि योगपीठ

### **Supporting text book**

1. गीतारहस्यलोकमान्यतिलक (चयनितः षांश)
2. Shrimadbhagvadgeeta- Tattvavivechini-JaidayalGoyandaka, Geeta Press Gorakhpur.

**Semester-6<sup>TH</sup>**  
**BPES-GE-602**

**TITLE: Ancient Indian Religion**

**Credit: 06**

**Max. Marks: 100**

**Internal Marks: 30**

**End semester exam marks: 70**

**Learning Objectives:**

- Discuss fundamentals of Ancient Indian Educations
- Analyse the meaning of the terms attached to ancient education system
- Understand the purpose of studying Vedas Enumerate the main characteristics of education system in Vedic and post Vedic period
- Explain the basic meaning of Swadhyaya.
- Explain the duties of teacher and student during Vedic & post Vedic period. List forms of educational system during Vedic period.
- Understand basic ideas and features of ancient Indian religions as manifested through Vedas, Buddhism and Jainism and Puranas.
- Understand the primitive religious beliefs, the Vedic pantheon and sacrifices.
- Basic features of the Sraman a traditions which include within its fold Buddhism and Jainism.
- Various cults like Vais n avism, Śaivism and Śāktism have played a prominent role in popularizing the basic tenets of Purān ic religion.

**The Course Learning Outcomes (COs):**

- CO-1.** After completing this course students are expected to have a fair knowledge about the prehistory, protohistory and the sources of Ancient Indian History.
- CO-2.** The paper ensures that the students learn the changes in political, social, economic and cultural scenario happening during this chronological span. It will also teach them how to study sources to the changing historical processes
- CO-3.** The course is expected to familiarize the student to theories of state, feudalism, political structure and periodization in history, based on the Indian examples from early medieval period.

**Unit I: Vedic Religion**

**(16 Hrs.)**

Indus Religion: Worship of Mother Goddess, Early form of worship of Yogi Shiva, Origin of Nature worship, Early Vedic Religion: Introduction of Rig-Veda, Rigvedic diety- Indra, Varun, Agni, Rit, Mother Goddess etc, Development Nature worship, Later Vedic Religion: Introduction of Samved, yajurved and Atharvaved, Emergence of religious rituals, The nature

and characteristics of the gods of the later Vedic period: Vishnu, Shiva, Prajapati and Mother Goddess.

## **Unit II : Jainism**

**(16 Hrs.)**

Introduction of Jain Tirthankar: Rishabhdev, Parshwanath and Mahaveer. Various Teachings of Jainism: Teachings of Mahavira: Pancha Mahavrat and Triratn, Svetambara and Digambara, Anekantavada and Syadvada.

## **Unit III: Buddhism**

**(10 Hrs.)**

Life and teachings of Gautama Buddha: Four noble truths, Octagonal Path, Pratitya Samutpad, Buddhist Councils, Hinayana and Mahayana. Various Dimensions in development of Buddhism.

## **Unit IV : Puranic Religions**

**(18 Lect.)**

Shaivism: Bhakti Tradition of Shavism: Pashupat Tradition, Kapalik Tradition, Kalmukh Tradition, Bhakti Tradition Vaishnavism: Panchratr, Bhagavat, Krishna and doctrine of embodiment: Bhagavan Vishnu ke das Avatar, and Shaktism: Trideviyan- Historical sources of Lakshmi, Durga and Saraswati.

### **Text Book:**

Mishra, J.S., Prachin Bharat ka Samajik Itihas, Patana, 1986

### **Recommended Readings:**

Agrawala, V.S., PrachinaBharatiyaLokadharma (Hindi and English), Varanasi, 1964.

Banerjee, J.N., Development of Hindu Iconography, New Delhi, 1985.

Barth, A., The Religions of India, Varanasi, 1985. 19

Bevarkara, S.K. and R.D. Ranade, History of Indian Philosophy, Vol. II, Poona, 1927.

Bhandarkar, R.G., Vaishnavism, Saivism and Minor Religious Systems (Also in Hindi), Varanasi, 1965. Bhattacharya, N.N., History of Sakta Religion, New Delhi, 1974

Chaturvedi, P., Vaishnava Dharma, Varanasi, 1977.

Hiriyanna, M.H., Outlines of Indian Philosophy, London, 1932.

Jaiswal, Suvira, Origin and Development of Vais n avism (also in Hindi), Delhi, 1996 (IInd ed.).

Keith, A.B., The Religion and Philosophy of Veda and Upanis ads (also in Hindi), Cambridge, 1925

Upadhyaya, B. Bharatiya Darshana, Varanasi, 1971.

Bapat, P.V. (ed.), 2500 Years of Buddhism (Also in Hindi), New Delhi, 1987.

Jain, Hiralal, Bharatiya Samskriti me Jaina Dharma ka Yogadana (Hindi). Bhopal, 1962.

Jaini, J.L., An outline of Jainism, Cambridge, 1916.

Jain, Jyoti Prasad, Religion and Culture of the Jains, Delhi, 1995.

Majumdar, R.C. and A. D. Pusalker (eds.), The History and Culture of the Indian People, Vols. I-V (relevant chapters), Bombay, 1951-1957.

## **Semester-6<sup>TH</sup>**

### **BPES-CC-P-602**

#### **TITLE: Yoga Practicum-VI**

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**Credit: 00**

**Objectives:** Following the completion of the course, students shall be able to:

- 1) State techniques, health benefits, applications, precautions and contraindications of undermentioned yogic practices; &
- 2) To demonstrate and instruct undermentioned yogic practices.

#### **The Course Learning Outcomes(COs):**

**CO-1.** Demonstrate basic skills associated with yoga and Pilates.

**CO-2.** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3.** Understand and apply the knowledge of basic choreography, and effective group management.

**CO-4.** Demonstrate the ability to create and present various yoga activities.

### **Yogasana (Advance- Purna)**

Bhujang, matsyendra, pakshi, vrischik, padm-mayura, padm-shirsh, karnapeed, dhanur, goraksha, chakra, omkar, natraj, shalabha.

### **Dhyanatmak Asanas and Other Practices Leading to Meditation**

Sukhasan, Siddhasan, Simhasan, Bhadrasan, Swastikasan, Gaurakshasan, Vajrasan, Pranay and Soham Japa; Yoga Nidra (1,2,3); Antarmauna; Ajapa Dharana (Stage 1, 2, 3)

### **Mudra**

Kaki Mudra, Tadagi Mudra, VipareetKarni Mudra, Simha Mudra, Nasagra Mudra, Bhuchari Mudra, Ashwini Mudra, Mahavedha Mudra.

### **Shatkarma**

VastraDhauti, Shankh-prakshalan

### **Practices Leading To Meditation**

Ajapa Dharana (Stage 4,5,6), Yoga Nidra (4,5), Practices leading to Breath Meditation, Practices leading to Om Meditation

### **Continuous Evaluation by the Teachers**

# University of Patanjali, Haridwar, Uttarakhand.

## DIPLOMA IN NATUROPATHY & YOGATHERAPY (DNYT)

Syllabus of DNYT





University of Patanjali  
Haridwar, Uttarakhand.

**Syllabus of  
DIPLOMA IN NATUROPATHY & YOGA THERAPY**

**DNYT  
For the year 2022-23**

**NAME of PROGRAM: DIPLOMA IN NATUROPATHY & YOGA THERAPY**

**Preamble**

The Mother Nature has all resources to maintain health and harmony of all the living organisms in this world. But we, human beings in the name of civilization, modernization and technical advancement, adopted and habituated to unnatural life style and going against Natural Laws of Health.

In this Era of Modernization, the prevalence of psychosomatic disorders, Infections and Auto immune diseases are in rage. The covid-19 Pandemic is an example for that; we are losing our Innate Immunity due to our wrong life style habits.

Naturopathy & Yoga in like “Two wheels of a Cart”. A holistic approach to health & well-being. Naturopathy & Yoga in essentially lifestyle and spiritual discipline based on an extremely subtle sciences, which focuses on establishing harmony between body & mind, thought & action and restrains & fulfillment. Naturopathy & Yoga is an ancient art of science for Healthy living which includes Visual - Neuro Anatomy and scientific communication between Mother Nature and Human Beings. It’s a holistic approach to Health & Well-being.

Revered Yog Rishi Pujya Swami Ramdevji and Ayurveda Shiromani Pujya Acharya Balkrishnaji have given the clarion call “Back to Nature” and propounded the path of Natural food to health and happiness through Yoga & Naturopathy practices. With the Growing mass following more Indians are eager to go back to ancient roots of wisdom. Asceticism, Health care, Integral educations and Entrepreneurship are its major domains of teachings- learning’s.

University of Patanjali, Haridwar proposed to start DNYT Program with the vision to prepare highly skilled, trained competent and dedicated Naturopathy & Yoga Therapists.

## 1. Title of the Programme

### "Diploma in Naturopathy & Yoga Therapy" (DNYT)

## 2. Aim of the Programme

To produce high quality Naturopathy & Yoga therapists for clinical setups & wellness centers.

## 3. Objectives of the Programme

- To impart knowledge about Naturopathy & Yoga with its concepts.
- To educate the disease prevalence and role of Naturopathy & Yoga therapy in preventive and educative aspects.
- To Train items in technically in natural treatment modalities & procedures.
- To produce high quality caliber therapist to serve society
- To bring peace and harmony in the society by introducing natural way of life and also creating job opportunities.

## 4. Duration:

The minimum duration of the program will be one year (2semesters) 6 months each.

## 5. Eligibility

The candidate should have completed 12th Standard from any stream of recognized board.

## 6. Scheme of Teaching and Evaluation

Semester I											
S.No	Course Code	Subject	Periods per Week			100Hrs	Evaluation Scheme				Course Total
			L	T	P		Seasonal			SEE	
							Credit	CT	TA		
1	DNYT-CT101	Biology	5	1	-	100Hrs	6	20	10	70	100
2	DNYT -AECCT102	Sanskrit	5	1	-	100Hrs	6	20	10	70	100
3	DNYT -DSE103	Philosophy of Nature Cure	5	1	-	100Hrs	6	40	20	70	100
4	<u>DNYT-CT104</u>	Yoga Philosophy	6	-	-	100Hrs	6	20	10	70	100
<b>36 Hrs. per week/06 Hrs. per day</b>						<b>400Hrs</b>	<b>24</b>	<b>Total</b>		<b>500</b>	
Semester II											
1	DNYT-CT201	Human Physiology	5	1	-	100Hrs	6	20	10	70	100
2	DNYT-DSE202	Naturopathy Therapies	2	-	4	100Hrs	6	20	10	70	100
3	DNYT-DSE203	Holistic Therapies	2	-	4	100Hrs	6	20	10	70	100
4	DNYT-CP204	Yoga Therapy	2	-	4	100Hrs	6	20	10	70	100
<b>36 Hrs. per week/06 Hrs. per day</b>						<b>400Hrs</b>	<b>24</b>	<b>Total</b>		<b>400</b>	

*CT- Core Theory, CP- Core Practical, AECCT-Ability Enhancement Compulsory Core Theory. AEECT- Ability Enhancement Elective Core Theory, DSE - Discipline Specific Elective, GE- Generic Elective, L - Lecture, T- Tutorial, P- Practical (practice/ field), CT- Cumulative Tests, TA - Teachers Assessment, SEE - Semester Examination, PR- Practical Record,*

## 7. Attendance

A candidate shall be considered to have satisfied the requirement of attendance if he/she attends not less than 80 per cent of the classes actually conducted up to the end of the Phase in that subject in each semester.

## 8. Scheme Of Examination

The examination shall be held as per the date of Examination notified by University: There should be one Internal & One External for each subject

## 9. Internal Assessment

There shall be an internal assessment which follows broadly the principles enunciated by the University in each subject for which 20 per cent of the marks are set apart these will be added in the final grade in the University examinations.

**10. Criteria for Pass**

To be eligible for promotion of the course, the candidate has to complete and pass in all the subjects in both the semesters. The candidate is declared to have been successful provided he/she secures minimum 50% and above in subjects.

**11. Declaration of Class**

A candidate who passes all the subjects in the first attempt only be eligible for a class. No class or rank shall be declared for candidate who does not pass any examination in the first attempt.

**12. Grading system**

The students will be assigned a grade in each course based on his or her combined performance in the sectional work and the final examination. Grade distinction and grade point of each grade is as follows:

<b>Grade Distinction</b>			
<b>Marks Obtained</b>	<b>Grade</b>	<b>Grade Point</b>	<b>Class</b>
<b>Less than 50%</b>	<b>F</b>	<b>0</b>	<b>Fail</b>
<b>50 % to 54 %</b>	<b>C</b>	<b>1</b>	<b>Pass</b>
<b>55% to 64 %</b>	<b>B</b>	<b>2</b>	<b>Second class</b>
<b>65% to 74%</b>	<b>A</b>	<b>3</b>	<b>First class</b>
<b>75% to 100%</b>	<b>O</b>	<b>4</b>	<b>Distinction</b>

**Subject Title:** Biology

**Subject code:** DNYT – CT101

Total Number of Hrs.: 100 hours		Theory: 100 hours		Practical: --	
Credits: 6		6		---	
6 hours/week		6			
SCHEME OF EXAMINATION					
TOTAL MARKS: 100					
Theory: 100				Practical: --	
Final Theory Exam	Internal Assessment	Viva Voce	Final Practical Exam	Internal Assessment	
70	20 +10 = 30	--	--	--	

### GOALS AND OBJECTIVES

**Goal:**

The goal of introducing biology to DNYT students is to make them understand about living world, process of evolution, classifications of animal and plant kingdoms, bio-diversity & ecosystem.

**Course Objectives:**

- To know about basic knowledge of life on earth, living world and characters of living.
- To understand about normal cell & its organelles their structure and functions.
- Comprehend histological structures of various tissues and organs and co-relate structure and function in order to understand diseased states.
- Brief knowledge about the organisms and its organ system.
- To impart necessary knowledge of eco system, organisms and population

**Course Outcomes (Cos) :**

After completion of the program, the student must be able to:

- **CO 1** - Locate and identify body structures, organs and their functions.
- **CO 2** - Identify the microbes causing ill health and effected populations.
- **CO 3** - Understand some common features of living organisms and their habituations.

### THEORY

**1. Cell: structure & functions**

1. Definition of cell, types of cell-prokaryotic and eukaryotic, Structure of cell. Cell components- plasma membrane, cytoplasm, and nucleus.
2. Cell organelles (structure and function with diagram)  
Endoplasmic reticulum, Golgi complex, Lysosomes, Peroxisomes, Mitochondria, Ribosomes, Centrosomes

**2. Tissue**

- a. Epithelium
- b. Connective tissue- Areolar tissue, adipose tissue, cartilage, bone, blood.
- c. Muscular tissue
- d. Nervous tissue

**3. Vital Organs & its functions**

- |             |              |
|-------------|--------------|
| i. Heart    | v. Spleen    |
| ii. Lungs   | vi. Testis   |
| iii. Liver  | vii. Ovaries |
| iv. Kidneys |              |

**4. Environmental Issues**

- |   |                     |
|---|---------------------|
| a. Air pollution and its control              | d. Global warming's |
| b. Water pollution and its control            | e. Ozone depletion  |
| c. Solid wastes and Biomedical Waste Disposal |                     |
| f. De forestations                            |                     |

**5. Human Health & Disease**

- a. Immunity
- b. Cancer
- c. Drugs and Alcohol abuse
- d. Common Disease in Human

**TEXT BOOKS:**

1. Biology text book for class XI : CBSE Board.
2. Biology text book for class XII : CBSE Board.
3. Environmental Studies for Undergraduate Courses – Erach Bharucha for University Grants Commission

**Subject Title:** Sanskrit

**Subject code:** DNYT – AECCT102

Total Number of Hrs.: 100 hours	Theory: 100 hours		Practical: --	
Credits: 6	6		---	
6hours/week:	6		-----	
SCHEME OF EXAMINATION				
TOTAL MARKS: 100				
Theory: 100			Practical: --	
Final Theory Exam	Internal Assessment	Viva Voce	Final Practical Exam	Internal Assessment
70	20 +10 = 30	--	--	--

### GOALS AND OBJECTIVES

**Goals:**

The goal of teaching Sanskrit to DNYT students is to provide a comprehensive knowledge of Sanskrit in order to be able to study, understand, comprehend and utilize the knowledge contained in Indian traditional texts in their professional practice, especially in the field of Yoga.

**Course Objectives:**

- Demonstrate knowledge of complete Sanskrit script;
- Describe kinds of nouns, verbs, pronouns, etc. with examples;
- Illustrate kinds of gender, number, and declensions employed in Sanskrit,
- Demonstrate skill in pronunciation of different kinds of Sanskrit words, phrases and sentences.

**Course Outcomes (Cos) :**

After the completion of the course, the student shall be able to

- **CO 1** - Read and understand Sanskrit with respect to script and basic grammar.
- **CO 2** - Familiarize themselves with various texts and compositions such as Madhurashtakam, Vaidyakeeyasubhashitasahityam, etc.;
- **CO 3** - Speak fluently in Sanskrit after having learnt the various peculiar pronunciations.

### THEORY

**1. Basic orientation**

- Introduction to language and subject; Devanagari script – alphabets i.e., vowels, consonants, vowels & consonant combination; Two consonant combinations, special conjunct consonants and pronunciation associated with their articulation; Formation of writing; Introduction to Sanskrit grammar, story of Panini & his works; Concept of place of letters & mechanism of birth of each letter.; Basic rules for recognition of nouns and collection of Sanskrit word genders.

**2. Spoken Sanskrit with special words**

- Mama nama – bhavatah, bhavatyah nama kim?; Sah, saa, tat – kah, kaa, kim; Eshah, esha, etat – kah, kaa, kim; Aham, bhavan, bhavati; Asti- naasti, aam, na, va; Prepositions- atra, tatra, ekatra, sarvatra, anyatra, kurta; Verbs- gachati, pathati, khadati, gachaami, pathami, khadami, gachatu, patahu, khadatu etc.; Plural formations of all nouns in all genders; Plural formation of all pronouns in all genders; Sapta kakara- kim, kurta, kati, kadaa, kutah, katham & kimartham.; 6<sup>th</sup> and 7<sup>th</sup> case practice with questioning & answers

**3. Genders, verbs, pronouns and declensions**

- Introduction to genders- masculine, feminine and neuter genders.
- 24 forms of a noun in all genders and its declensions; practice of other similar declensions. Usage of the 24 forms of all nouns.
- Verb roots with meaning. Nine forms of verbs for three persons and three numbers. Practice all the verb roots and their forms for correct pronunciation. Usage of prefixes and how they change the meaning of the verb root and how to find them in dictionary.

- Pronouns: introduction to pronouns; declensions of pronouns; corresponding translations of pronouns into English, forming sentences with pronouns; different aspects of pronouns being used as demonstrative pronouns and as interrogative pronouns and details of distance specification.
- Questioning words with its 24 declensions in all genders and practice of all of them with nouns and pronouns.
- Introduction to write a simple sentence. Sentences in singular, dual and plural. Practice of question and answers

#### **4. Prepositions, Tenses and Cases**

- Prepositions and its meaning with usage in sentence, asking question and answers.
- Introduction to time and it's all variations. Practice of numbers 1-100 with writing practice with Sanskrit symbols.
- Days in Sanskrit with question and answers
- Introduction to tense- present, past and future tenses. Practice of conversion of one tense into another tense

#### **Recommended books:**

1. Vyakarna Pravesh
2. Darshan Pravesh

#### **Reference books:**

1. Samskratabhasadipika, SriSurasaraswati Sabha (R) Sringeri, Bangalore 2003.

**Subject Title:** Philosophy of Naturopathy

**Subject code:** DNYT – DSE 103

Total Number of Hrs.: 100hours	Theory: 100 hours		Practical	
Credits: 6	6		--	
6hours/week	6		--	
SCHEME OF EXAMINATION				
TOTAL MARKS: 100				
Theory: 100			Practical: 100	
Final Theory Exam	Internal Assessment	Viva Voce	Final Practical Exam	Internal Assessment
70	20 +10 = 30	--	--	-----

### GOALS AND OBJECTIVES

**Goals:**

The goals of introducing philosophy of Naturopathy to the DNYS students is to make them understand philosophical basis of the system of Naturopathy, including concepts of health, causes and pathogenesis of disease and brief introduction to the various therapeutic modalities used in Naturopathy.

**Course Objectives:**

- Elucidate the history of Naturopathy including major contributors to the field and their work;
- Understand the evolution and composition of the human body according to different schools of medicine such as Naturopathy, Yoga, Ayurveda, Homeopathy, Modern Medicine, etc.
- Firmly establish his/her diagnostic and therapeutic thought processes in the fundamental principles of Naturopathy:

**Course Outcomes (Cos) :**

At the end of the course, the student will be able to:

- **CO 1** - Demonstrate basic knowledge of the various therapeutic modalities utilized in Naturopathy;
- **CO 2** - Describe the various principles of Naturopathy with respect to the body, health, disease and therapy.

### THEORY

**1. Fundamental Principles, Concepts and Theories of Naturopathy**

- i. Concepts of Panmahabhoota and Naturopathy
- ii. Foreign matter and toxin accumulation in the body and its importance of elimination through different ways and channels
- iii. Unity of Disease, Unity of Cure and way of treatment
- iv. How Nature Cures – the Natural Healing mechanisms & Concept of Vitality and Vital Economy
- v. Arogya Raksha, Panchatantra and their importance in maintenance of health prevention and treatment of disease through lifestyle modifications
- vi. Shareera Dharma – Ahara, Nidra, Bhaya and Maithuna
- vii. Inflammation – Naturopathic perspectives & Natural immunity and how to acquire Natural Immunity in diseases

**2. Naturopathic Nutrition and Dietetics.**

1. Eliminative diet
2. Smoothing diet
3. Constructive diet.

**Text books**

1. S.D. Dwivedi: Naturopathy for perfect health.
2. Dr. Nagendra Neeraj: Mera Ahara Mera Swasth
3. S.J. Singh: My Nature Cure
4. H.K. Bhakru: Complete hand book of Nature Cure.
5. Wellness Upachara Paddhathi or Integrated Yoga.

**Subject Title:** Yoga Philosophy

**Subject code:** DNYT – CT104

Total Number of Hrs.:100hours	Theory: 100 hours		Practical:	
Credits: 6	6		-----	
Hrs./Week: 6hours/week;	6		----	
SCHEME OF EXAMINATION				
TOTAL MARKS: 100				
Theory: 100			Practical: 100	
Final Theory Exam	Internal Assessment	Viva Voce	Final Practical Exam	Internal Assessment
70	20 +10 = 30	--	----	---

### GOALS AND OBJECTIVES

**Goal:**

The goal of teaching Yoga philosophy to DNYT students is to understand the intricacies of Yoga as a philosophy, its relation to ancient texts, other religious thoughts like Buddhism, with reference to Patanjali Yogasutras.

**Course Objectives:**

- Explain the basic understanding of Yoga as a philosophy
- Describe the various schools of philosophy which had an influence on Yogic text like Buddhism.
- Comprehend the concept of Brahman according to Vedanta,yoga.

**Course Outcomes (Cos) :**

After the completion of the course, the student shall be able to:

- **CO 1** - Perform and demonstrate various Asanas, Pranayama, Kriyas and Meditations;
- **CO 2** - Describe various philosophies of Yoga and apply them therapeutically, relating to a patient's life situation or personality.

### THEORY

**1. Concept of mind. Obstacles and Kleshas in the context of Patanjali Yoga Sutras**

1. Concept of Chitta, Chittabhomi, Chitta-vrttinirodhapaya (Abhyasa and Vairagya), Chittavikshepas (Antarayas) and Chitta-prasadanam
2. Obstacles and hindrances of Sadhana (Vyadhi, Styana, Samsaya, Pramada, Alasya, Avirati, Bhranti, Alabdha, Bhumikatva, Anavasthi)
3. Cultivating positive attitudes
4. Kriya Yoga (Tapas, Svadhyaya, IsvaraPranidhana); Pancaklesah (Avidya, Asmita, Raga, Dvesa, Abhinivesah); Methods of destroying Kleshas (Pratiprasava and Dhyana)

**2. Hatha Yoga its philosophy and practices**

1. Hatha Yoga, its meaning, definition, aim & objectives and misconceptions
2. Concept of Mitahara, Pathya and Apathya
3. Relationship between Hatha Yoga and Raja Yoga

**3. Pratyahara and Samadhi in Hatha Yoga and Gheranda Samhita**

1. Concept of Pratyahara, Dharana and Dhyana their techniques and benefits
2. Concept of Samadhi in Hatha Yoga Pradipika, Samadhi Lakshanam and Hatha yoga siddhi lakshanam
3. Concept of Bindu, its evolution and techniques to preserve it

**Recommended books:**

1. Yog ke moolbhut Sidhhant by Yogrishi Swami Ramdevji Ji, Divya Prakashan, Haridwar.
2. Patanjali Yog Darshan by Yogrishi Swami Ramdevji Ji, Divyayog Prakashan, Haridwar.
3. Yog Sadhana by Yogrishi Swami Ramdevji Ji, Divyayog Prakashan, Haridwar.
4. Yoga Rahasya by Yogrishi Swami Ramdevji Ji, Divyayog Prakashan, Haridwar.
5. Pranayama Rahasya by Yogrishi Swami Ramdevji Ji, Divyayog Prakashan, Haridwar.
6. Raja, Hatha, Jnana, Bhakti Yoga - Swami Vivekananda.

**Subject Title:** Human Physiology

**Subject code:** DNYT – CT201

Total Number of Hrs.: 100 hours		Theory: 100 hours		Practical: --	
Credits: 6		6			
Hrs./Week: 6 hours/week		6			
SCHEME OF EXAMINATION					
TOTAL MARKS: 100					
Theory: 100				Practical: --	
Final Theory Exam	Internal Assessment	Viva Voce	Final Practical Exam	Internal Assessment	
70	20 +10 = 30	--	--	--	

### GOAL AND OBJECTIVES

**Goals:**

The goal of teaching Physiology to DNYT students is aimed at giving the comprehensive knowledge of the normal functions of the organ systems of the body facilitate comprehension of the physiological basis of health and disease.

**Course Objectives:**

- Explicate the normal functioning of all the organ systems and their interactions for well-coordinated body functions;
- appreciate the relative contribution of each organ system to the homeostasis;
- Explain the physiological aspects of normal growth and development;
- Illustrate the physiological response and adaptations to environmental stresses;
- List physiological principles underlying pathogenesis and disease management.

**Course Outcomes (Cos) :**

After the completion of the programs, the students should be able to.

- **CO 1** - Conduct experiments designed to study physiological phenomena;
- **CO 2** - Interpret experimental/investigative data;
- **CO 3** - Differentiate between normal and abnormal data from results of tests, which he/she has done and observed in the laboratory.

### THEORY

**1. Digestive system**

- i. Introduction, functional anatomy of digestive system.
- ii. Stomach: Functional anatomy of stomach; Functions of stomach.
- iii. Functions of liver and gall bladder; Composition, function of bile.
- iv. Small intestine: function and mechanism of secretions of small intestine
- v. Large intestine: Functional anatomy and functions of large intestine
- vi. Gastro-intestinal movements: Mastication, deglutition and vomiting, Movements of stomach; Movements of small intestine; Movements of large intestine and defecation; Regulation of movement

**2. Nerve Muscle Physiology**

- i. Neuron: Structure of neuron; Properties of nerve
- ii. Muscle: Classification of muscles; Skeletal muscle functions;
- iii. Smooth muscle functions
- iv. Cardiac muscle functions

**3. Excretory system**

- i. General introduction, organs of excretion with special emphasis on evolution of excretory mechanisms
- ii. Skin-structure and functions and temperature regulation

**4. Cardiovascular system**

- i. Heart sounds: Description, Clinical significance of heart sounds
- ii. Blood pressure: Definition and factors influencing BP
- iii. Circulations: Blood vessels, Physical principles of blood flow, Coronary & capillary circulation

**5. Respiratory system**

- i. Introduction, functional anatomy of respiratory system
- ii. Mechanism of respiration: Inspiration and expiration; Role of respiratory muscles and thoracic cage.
- iii. Characteristic of hypoxia, cyanosis, asphyxia, hypercapnia, dyspnea, apnea, and orthopnea and periodic breathing

**6. Blood**

- i. Hemoglobin and its types; Anemia- definition and classifications;
- ii. Jaundice- definition and classifications; Spleen- structure and function
- iii. Blood groups: ABO and Rh system; Lymph and tissue fluids: Formation and functions of lymph; Physiology of reticular system

**TEXT BOOKS**

1. Pranayama Rahasya by Yogrishi Swami Ramdevji Ji, Divyayog Prakashan, Haridwar
2. Ross & Wilson Anatomy and Physiology in Health and Illness by Allison Wynn Grant, Anne Waugh, and Kathleen J. W. Wilson
3. Manual of first AID: L.C. Gupta.
4. Complete first AID (Hindi): Dr. Rajesh Dixit.
5. Anatomy and physiology with clinical Importance for nurses (Hindi): K. Jary

**Subject Title:** Naturopathy Therapies.

**Subject code:** DNYT – DSE202

Total Number of Hrs.: 100 hours	Theory: 30 hours		Practical: 70	
Credits: 6	2		4	
6hours/week	2		4	
SCHEME OF EXAMINATION				
TOTAL MARKS: 100				
Theory: 100			Practical: --	
Final Theory Exam	Internal Assessment	Viva Voce	Final Practical Exam	Internal Assessment
50		10	30	10

### GOALS AND OBJECTIVES

**Goals:**

The goal of teaching Naturopathy Therapies to DNYT students is to provide them with comprehensive knowledge of treating diseases using water and mud, and the physiological effects of various kinds of such applications, and utilization of the same for therapeutic purposes

**Course Objectives:**

- Describe the properties and chemical composition of water and mud used for therapeutic purposes, physiology of the skin, production of heat and body temperature regulation, which are essential as a foundation for hydrotherapy.
- Illustrate physiological effects of hot and cold water upon the different systems of the body and applications to reflex areas;
- Explain action and reaction mechanisms and physiology, with their effects and uses
- Demonstrate use of water in preservation, acute diseases, chronic diseases
- Show in-depth knowledge of general principles of hydrotherapy, therapeutic applications of water, along with therapeutic actions, indications and contra-indications; and classification of mud, storing of mud, modes. of mud treatment, cosmetic uses of mud and research updates in hydrotherapy and mud therapy
- Demonstrate techniques and procedures of various types of hydriatic applications

**Course Outcomes (Cos) :**

After the completion of the course, the student shall be able to:

- **CO 1** - Utilize knowledge of hydrotherapy and mud therapy in managing various diseases;
- **CO 2** - Demonstrate usage of therapeutic aspect of hydrotherapy and mud therapy treatments in Promotive, Preventive, Curative and Rehabilitative Therapy.

### THEORY

**1. Hydrotherapy**

- i. Baths: hipbath; spinal bath; steam bath; foot bath; full immersion bath
- ii. Packs: chest pack; abdominal pack; gastro-hepatic pack; kidney pack; full wet sheet pack
- iii. Irrigations: enema; colon hydrotherapy; water drinking
- iv. Compresses, fomentations, Douches.

**2. Mud Therapy.**

- i. Preparation of mud, applications & benefits.
- ii. Types of mud and its therapeutic uses.

**3. Manipulative Therapies:**

Swedish massage; Salt Glow Massage; Hot Stone Massage

**TEXT BOOKS**

1. Dr. Nagendra Neeraj: Mud therapy
2. DR. Nagendra Neeraj: Jal Chikitsa.
3. S.J. Singh: My Nature Cure
4. H.K. Bhakru: Complete hand book of Nature Cure.

**Subject Title:** Holistic Therapies

**Subject code:** DNYT – DSE 203

Total Number of Hrs.: 100hours		Theory: 30 hours		Practical: 70 hours	
Credits: 6		2		4	
6hours/week		2		4	
<b>SCHEME OF EXAMINATION</b>					
TOTAL MARKS: 100					
Theory: 50				Practical:50	
Final Theory Exam	Internal Assessment	Viva Voce	Final Practical Exam	Internal Assessment	
50	---	10	30	10	

### **GOALS AND OBJECTIVES**

**Goals:**

The goal of teaching Holistic therapies to DNYT students is to provide them with comprehensive knowledge of treating diseases using Holistic approach, and the physiological effects of various kinds of such applications, and utilization of the same for therapeutic purposes

**Course Objectives:**

- Describe the properties treatment modalities used for therapeutic purposes, physiology of the skin, production of heat and body temperature regulation, which are essential as a foundation for all therapies.
- Illustrate physiological effects of acupressure points upon the different systems of the body and applications to reflex areas;
- Explain action and reaction mechanisms and physiology, with their effects and uses of magnet and Chromo therapies.
- Demonstrate use of water in preservation, acute diseases, chronic diseases
- Show in-depth knowledge of general principles exercise therapy & electrotherapy therapeutic applications, indications and contra-indications
- Demonstrate techniques and procedures of various types of Panchakarma therapies and its applications

**Course Outcomes (Cos) :**

After the completion of the course, the student shall be able to:

- **CO 1** - Utilize knowledge of Holistic therapies in managing various diseases;
- **CO 2** - Demonstrate usage of therapeutic aspect of color and magnet treatments in Promotive, preventive, curative and rehabilitative therapy.
- **CO 3** - Institute and evaluate remedial measures in Panchakarma for various disease conditions in wellness.

### **THEORY**

- |  |                               |
|--|-------------------------------|
| 1. Acupressure & Reflexology.          | 4. Leech therapy & Agni karma |
| 2. Color therapy & Magneto therapy.    | 5. Reiki & Pranic healing.    |
| 3. Electro therapy & Exercise therapy. | 6. Panchakarma.               |

**Text Books:**

1. Dr. Attar Singh : Acupressure & Reflexology
2. Devender Vora : Acupressure
3. Park Jae Woo : SuJok therapy
4. Prof. Sunil Agarwal : Colors
5. A.R. Hari : The Magic therapy of colors
6. Rajendra Menon : Magneto Therapy
7. Master Choa Kok Sui : Pranic Healing

8. M. Dena Gardiner : Exercise therapy.

**Subject Title:** Yoga Therapy

**Subject code:** DNYT – CT204

Total Number of Hrs.: 100	Theory: 30 hours		Practical: 70 hours	
Credits: 6	2		4	
Hrs./Week: 6hours/week;	2		4	
<b>SCHEME OF EXAMINATION</b>				
<b>TOTAL MARKS: 100</b>				
Theory: 100			Practical: 100	
Final Theory Exam	Internal Assessment	Viva Voce	Final Practical Exam	Internal Assessment
50	----	--	50	---

### **GOALS & OBJECTIVES**

#### **Goal**

The goal of teaching yoga and its applications to DNYT student is to provide them with comprehensive understanding traditional texts like Patanjali Yogasutras, Hatha Yoga Pratipika, various streams of Yoga, advanced meditative techniques like Yoganidra, Omkar, cyclic meditation, Vipassana meditation and learn about their psychological & physiological benefits compared to exercises.

#### **Course Objectives:**

- Illustrate the knowledge of traditional texts like Patanjali Yoga Sutras, Hatha Yoga.
- Understand the principles behind various meditative practices like Yoganidra, Om meditation, cyclic meditation, Vipassana and so on
- Explain about yoga in relation to its application in education, sports;
- Demonstrate basic understanding of procedures of stretching an exercise.
- Describe basic physiological changes in asana
- Be aware of the effects of Shatkriyas and their adverse effects

#### **Course Outcomes (Cos) :**

After the completion of the course, the student shall be able to:

- **CO 1** - Describe the concept of yoga as explained in the traditional texts
- **CO 2** - Deliver a meditative session using any of the meditative styles.
- **CO 3** - Implement various exercises loosening or eye exercises or stretching to complement yoga practice.

### **THEORY**

**Unit-1:** Introduction to Yogic Therapy / Basis of Yogic Therapy

**Unit-2:** Specific importance of Pranayama in curing various diseases

**Unit-3:** Vital role of Bandhas, Mudras, Drishti, in curing various diseases

**Unit-4:** Role of Shat Kriyas in curing various diseases

**Unit-5:** Role of general exercises in health and diseases

**Unit-6:** Yoga therapy for

- |                               |                             |
|-------------------------------|-----------------------------|
| 1. Cardiovascular diseases    | 7. Respiratory diseases     |
| 2. Psychiatric disorders      | 8. Metabolic diseases       |
| 3. Musculoskeletal disorders  | 9. Ophthalmologic disorders |
| 4. Nervous system disorders   | 10. Pediatric disorders     |
| 5. Gastrointestinal disorders | 11. ENT Disorders           |
| 6. Hormonal diseases          | 12. OBG disorders           |

**Unit-7:** Meditation and its applications on psychosomatic disorders

**Unit-8:** Yoga and relaxation techniques

- i. QRT- Quick Relaxation Technique
- ii. IRT- Instant Relaxation Technique
- iii. DRT - Deep Relaxation Technique

**Unit-9: Stress management through Yoga**

1. Yoga Nidra-methods, applications, effects and benefits
2. Meditation-types-omkar. Cyclic, Vipassana.
3. Methods of application, benefits, precautions
4. Eye exercises- benefits, methods and precautions
5. Physiological Aspects of Asana

**TEXT BOOKS:**

1. Acharya Balkrishna: Dainik Yogabhyasakram, Divyayog Prakashan, Haridwar.
2. Yogrishi Swami Ramdevji Ji: Dand-baithak,
3. Basavaraddi: Yogasana: A Comprehensive description about Yogasana, MDNIY.
4. Tiwari, O.P.: Asana Why and How? Kaivalyadhama, Lonavala
5. Iyengar, B.K.S: Light on Yoga, Harper Collins Publishers.
6. Swami Satyananda Saraswati: Asana, Pranayama, Bandha, Mudra



**UNIVERSITY OF PATANJALI,  
HARIDWAR**

**Syllabus**

**of**

**Master of Arts in Psychology**

**Department of Psychology**

**Duration: 2 Years (4 Semesters)**

**July, 2022 Onwards**

## CONTENTS

S. No.	Name of the Program
1	Master of Arts in Psychology
a.	Program Educational Objectives (PEOs)
b.	Program Outcomes (POs)
c.	Program Specific Outcomes (PSOs)
d.	Eligibility of Admissions
2	Structure of the Courses
a.	Semester I
b.	Semester II
c.	Semester III
d.	Semester IV

### 1. Program Educational Objectives (PEOs)

PEO1	To impart the knowledge of Psychology by assimilating it with Yoga Vidya.
PEO2	Incorporating Indian healing methods with the western psychotherapies for the treatment of mental diseases & disorders.
PEO3	Adaptation of a creative, scientific and culturally appropriate approach of learning.
PEO4	Empowerment of Indigenous and Vedic concepts and practices related to health, well-being, treatment and therapy.
PEO5	To spread knowledge & role of Psychology in various areas of life.

### 2. Program Outcomes (POs) :

PO1	Application of traditional and scientific Knowledge to understand mind and interpret psychological phenomena.
PO2	Applications of rational and philosophical thinking approach in the solution of problems.
PO3	To promote the ability to work with <i>Manoyoga</i> (passion).
PO4	To make the learners competent by helping to acquire knowledge and skills to advance the field of mental health.
PO5	To enable the learners to be able to understand and diagnose various types of psychological problems.

### 3. Program Specific Outcomes (PSOs) :

<b>PSO1</b>	Analytical skills, interdisciplinary collaboration and contribution to the wide-ranging humanistic services to focus on preventive and curative approaches to stimulate positive mental health in society at various levels.
<b>PSO2</b>	Enabling the creation of specialized work-force trained to offer services in educational institutions, corporate, primary health cares settings etc.
<b>PSO3</b>	Students of Psychology will be able to provide unconditional positive regard, empathy and ethical behavior towards human beings.
<b>PSO4</b>	Analyze various contemporary trends in the field of psychology along with Indian yogic and meditative techniques.
<b>PSO5</b>	Students will be able to provide healthy, peaceful and yogic ambience in various work settings.

The distribution of theory and practical papers for M.A I year and II year examinations (semester wise) is as follows-

### **PROGRAMME STRUCTURE**

<b>Year</b>	<b>Semesters</b>	
First Year	Semester: 1	Semester: 2
Second Year	Semester: 3	Semester: 4

The Master of Arts in Psychology Programme is divided into Two Parts as under. Each Part consists of two Semesters as Semester-1 and Semester-2.

**Structure of Choice Based credit scheme (CBCS)**

Semester	Core Course			Elective /Discipline Specific Course/DC			Generic Elective Course/Open Elective			Total credits	Foundation	
	No. of Papers	Credit	Total	No. of Papers	Credit	Total	No. of Papers	Credit	Total		Core AECC	Elective SEC
1.	4+1 (Practical)	4	20	-	-	-	1	4	4	24	Communicative English	
2.	4+1 (Practical)	4	20	-	-	-	1	4	4	24		Basic Computer Application
3.	2+1 (Case Study)	3	12	2	4	8	-	-	-	20	EVS	
4.	3+1(Dissertation)	3	12	2	4	8	-	-	-	20		Basic Sanskrit
<b>Total credits for the course</b>			<b>64</b>			<b>16</b>			<b>8</b>	<b>88</b>		

- **CGPA:** Cumulative Grade Point Average
- **AECC:** Ability Enhancement Compulsory Course/ CF: Compulsory Foundation
- **SEC:** Skill Enhancement Course
- Co/Extra Curricular Activities ( any one)

### Choice Based Credit System (CBCS)

- We are offering 14 core papers across the semester. We are offering 2 DSE papers across the 4 semesters. Each of the core courses and DSE shall be of 4 credits.
- We are offering 2 GE's across the 4 semesters. Each generic elective paper will be of 4 credits.
- We are also providing foundation courses including Ability Enhancement Compulsory course (AECC), Skill Enhancement course (SEC) across the semester.

#### Semester I

Semester I shall consist of 4 Core papers which will be compulsory for all students. Each core paper will be of 4 credits. 4 credits each will be given for the practicum that will be compulsory for all students. The Generic Elective Paper has 4 credits to be chosen by students from the pool of papers provided by the Interdisciplinary departments. The total credits points for this semester shall be 24.

Paper Code	Title of the Paper	Credits	Hrs. of Instruction/ Week (L-T-P)	Evaluation		
				Int.	Ext.	Total Marks
MPs-CT-101	Cognition & Emotion	4	(3-1-0)	30	70	100
MPs-CT-102	Approaches to Personality	4	(3-1-0)	30	70	100
MPs-CT-103	Neuro-Biological Psychology	4	(3-1-0)	30	70	100
MPs-CT-104	Science of Yoga :Principles & Applications	4	(3-1-0)	30	70	100
MPs-CP-105	Psychology Practical	4	(0-0-8)	30	70	100
<b>Selection of any One GE paper</b>						
MPs-GE -106	Hygiene, diet and nutrition	4	(3-1-0)	30	70	100
MPs-GE -107	Introduction of Ayurveda	4	(3-1-0)	30	70	100
MPs-GE -108	Introduction to Physical Education	4	(3-1-0)	30	70	100
<b>Ability Enhancement Compulsory course (Non Credit)</b>						
MPs-AECC-101	Communicative English	2	(3-1-0)	20	30	
<b>Total</b>		<b>24</b>				<b>600</b>

**Note:** CT: Core theory CP: Core Practical GE: Generic Elective AECC: Ability Enhancement Compulsory Course/ CF: Compulsory Foundation SEC: Skill Enhancement Course Co/EC: Extra Curricular Activities

## Semester II

Semester II consists of 4 Core papers (4 credits per paper). 4 credits are given for the practicum that will be compulsory for all students. The Generic Elective Paper has 4 credits to be chosen by students from the pool of papers provided by the interdisciplinary departments. Total credits for this semester are 24.

Paper Code	Title of the Paper	Credits	Hrs. of Instruction/ Week (L-T-P)	Evaluation		
				Int.	Ext.	Total Marks
MPs-CT-201	Research Methods	4	(3-1-0)	30	70	100
MPs-CT-202	Psychological Assessment	4	(3-1-0)	30	70	100
MPs-CT-203	Psychopathology	4	(3-1-0)	30	70	100
MPs-CT-204	Social Psychology	4	(3-1-0)	30	70	100
MPs-CP-205	Psychology Practical	4	(0-0-8)	30	70	100
<b>Selection of any One GE paper</b>						
MPs-GE -206	Yoga health and tourism	4	(3-1-0)	30	70	100
MPs-GE -207	Principles of Vocal Music	4	(3-1-0)	30	70	100
MPs-GE -208	Aspects of Ancient Indian Culture	4	(3-1-0)	30	70	100
<b>Skill Enhancement Compulsory Course</b>						
MPs-SECC-101	Basic Computer Applications	2	(3-1-0)	20	30	
<b>Total</b>		<b>24</b>				<b>600</b>

**Note:** CT: Core theory      CP: Core Practical      GE: Generic Elective.

### Semester III

Semester III consists of 3 Core + 1 DSE papers (4 credit points per paper). Case study of 4 credits will be compulsory for all the students. Total credits points for this semester are 20.

Paper Code	Title Of Course	Credits	Hrs. of Instruction/ Week (L-T-P)	Evaluation		
				Int	Ext	Total Marks
MPs-CT-301	Clinical Psychology	4	(3-1-0)	30	70	100
MPs-CT-302	Statistical Techniques and Experimental Designs	4	(3-1-0)	30	70	100
<b>Selection of any two DSE paper</b>						
MPs-DSE-303	Positive Psychology	4	(3-1-0)	30	70	100
MPs-DSE -304	Human resource and management	4	(3-1-0)	30	70	100
MPs-DSE-305	Psychometry	4	(3-1-0)	30	70	100
MPs- DSE -306	Yoga Ayurveda and mental health	4	(3-1-0)	30	70	100
MPs-CP-307	Case Study	4	(2-1-2)	30	70	100
<b>Ability Enhancement Compulsory course (non credit)</b>						
MPs-AECC-102	Environmental Science	2	(0-0-3)	20	30	50
<b>Total</b>		<b>20</b>				<b>500</b>

**Note:** CPT: Core theory      CPP: Core Practical      DSE: Discipline Specific Elective      GE: Generic Elective

- **The subject which will be selected by maximum number of students, that subject will be taught in the course under the current session.**

## Semester IV

Semester IV consists of 3 Core papers + 1 DSE each with 4 credit points. The semester involves a Dissertation paper of 4 Credits. The total credit points for this semester are 20.

Paper Code	Title Of Course	Credits	Hrs. of Instruction/ Week (L-T-P)	Evaluation		
				Int.	Ext.	Total Marks
MPs-CT-401	Counselling Psychology	4	(3-1-0)	30	70	100
MPs-CT-402	Psychotherapy	4	(3-1-0)	30	70	100
<b>Selection of any Two DSE paper (based on norms)</b>						
MPs-DSE- 403	Health Psychology	4	(3-1-0)	30	70	100
MPs-DSE- 404	Indigenous techniques in psychotherapy	4	(3-1-0)	30	70	100
MPs-DSE- 405	Therapeutic Techniques	4	(3-1-0)	30	70	100
MPs-DSE- 406	Stress management	4	(3-1-0)	30	70	100
MPs-CP-407	Dissertation/Project Work/ Field Training	4	(0-4-0)	30	70	100
Skill Enhancement Compulsory Course						
MPs-SECC-102	Basic Sanskrit	2	(3-1-0)	20	30	
<b>Total</b>		<b>20</b>				<b>500</b>

**Note:** CT: Core theory CP: Core Practical EC/ DSE: Discipline Specific Elective GE/OE: Generic Elective/Open Elective

- **The subject which will be selected by maximum number of students, that subject will be taught in the course under the current session.**

**List of Other DSE/ Elective Subjects:**

<b>Paper Code</b>	<b>Semester</b>	<b>Title of Course</b>	<b>Credits</b>	<b>Marks</b>
<b>MPs-DSE-303</b>	Third Semester	Positive Psychology	<b>4</b>	100(70+30)
<b>MPs-DSE-304</b>		Human Resource Management	<b>4</b>	100(70+30)
<b>MPs-DSE-305</b>		Psychometry	<b>4</b>	100(70+30)
<b>MPs-DSE-306</b>		Yoga and Ayurveda for managing mental health	<b>4</b>	100(70+30)
<b>MPs-DSE-403</b>	Fourth Semester	Health Psychology	<b>4</b>	100(70+30)
<b>MPs-DSE-404</b>		Indigenous techniques in psychotherapy	<b>4</b>	100(70+30)
<b>MPs-DSE-405</b>		Therapeutic Techniques	<b>4</b>	100(70+30)
<b>MPs-DSE-406</b>		Stress Management	<b>4</b>	100(70+30)

**Semester- I**  
**MPs-CT-101**  
**Cognition and Emotion**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

**The course will**

- Introduce the basic Psychological processes through scientific experiments.
- Explain various mental processes: attention and consciousness, memory processes, reasoning and decision making.

**Course Outcomes (Cos):**

After completion of the course, students will be able to:

- **COs1-** Explain perceptual and emotional processes.
- **COs2-** Apply holistic approach of Emotion along with decision making power.
- **COs3-** Describe Meta- cognitive knowledge and Meta cognitive regulations.

**Course Contents**

- Unit 1 : **Attention and Perceptual Processes:** Attention: forms of attention, models of attention, factors affecting attention, Perceptual organization: Figure and ground, law of organization. Perception of depth and movement, Perceptual constancy: Brightness, size and shape.
- Unit 2 : **Memory and Forgetting:** Memory processes: encoding, storage, retrieval, Types of memory (Sensory, STM and LTM), determinants of memory, methods for enhancement of memory, Forgetting – Concepts, Causes and theories of forgetting – Interference Theory, retrieval failure, motivated forgetting.
- Unit 3 : **Thinking and Problem solving:** Thinking – Meaning and Types, Language and thinking. **Problem solving: types, strategies and obstacles. Meta-cognition: meta-cognitive knowledge and meta-cognitive regulations.**
- Unit 4 : **Emotion and emotional regulation: physiology of emotion, types of emotion as per psychological and yogic perspective, emotional intelligence, emotional regulation and controlling strategies of emotion.**
- Unit 5 : **Decision Making:** Nature, types and models, Factors affecting decision making ability.

**Reference Books:**

1. M.R. D'Amato (1979). Experimental Psychology: Methodology, Psychophysics and learning. New Delhi: Tata McGraw Hill.
2. B.E. Goldstein (2002). Sanstation and Perception. USA: Wadsworth.
3. J.W. Kling and L.A. Riggs (1984). Woodworth and Schlosberg's Experimental Psychology. New Delhi: Khosla Publishing House.
4. R.L. Solso (2001). Congnitive Psychology, Singapore: Pearson Education.
5. A. Baddley (1997). Human Memory: Theory and Practice. New Yark: Psychology Press.

**Text Books**

6. Suleiman, M. (2009). Ucchtar Samaj Manovigyan. New Delhi: MotilalBanarasi Das.
7. Singh, R.N. (2001). Modern Social Psychology. Agra: Vinod PustakMandir.

## Semester: I

MPs-CT-102

### Approaches to Personality

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To develop an understanding of the concept of individual difference.
- To develop an appreciation of the biological and social impact on personality.

#### Course Outcomes (Cos):

After completion of the course, students will be able to:

- **Cos 1-** Describe holistic approach about personality along with its various dimensions.
- **Cos 2-** Explain about various important theories related to the personalities.
- **Cos 3-** Utilize social learning and cognitive concepts of personality in their lives.

#### Course Contents

- Unit 1** : **Concept and Definition of Personality:** Meaning and definition of Personality, Views on self and Personality: Upanishad, Bhagavad Geeta and Gautam Buddhaji
- Unit 2** : **Determinants of Personality:** Biological or physical determinants, psychological determinants, environmental and social determinants
- Unit 3** : **Trait and type Approaches:** Allport: structure, dynamic and growth of personality research and assessment, evaluation of Allport's theory, R. B. Cattell: structure, dynamic and development of personality, measurement of personality and research methods, evaluation of Cattell's theory. Five dimensional model of personality.
- Unit 4** : **Psychoanalytic theory of Personality:** Sigmund Freud: structure, dynamics and development of personality. Evaluation of Freud's theory. Adler: inferiority feelings, striving for superiority or perfection, the style of life, birth order. Evaluation of Freud's theory.
- Unit 5** : **Social Learning and Cognitive theories:** Bandura's Theory: concept of reciprocal Determinism, self system, motivation, modeling: learning by observation, measurement of research, Evaluation of Bandura's theory, George Kelley: structure, dynamics and development, research and measurement of personality.

#### Reference books:

1. G.C. Hall, G. Lindzey and J.C. Campbell (1998). Theories of Personality. New York: John Wiley and Sons.
2. W. Mischel (1976). Introduction to Personality. New York: Holt Reinhart and Winston.
3. R.M. Rchman (2000). Theories of Personality. USA: Thomson Wadsworth.
4. R. Frager and J. Fadiman (1998). Personality and Personal Growth, New York : Longman.

#### Text Books:

5. R.B. Tripathi and R.N. Singh (2001). Psychology of Personality Varansi :Gangasran and Grand Sons.
6. Singh, A.K. and Singh, A. K (2010). The Psychology of personality. New Delhi: Motilal Banarasi Das.

**Semester- I**  
**MPs-CT-103**  
**Neuro-biological Psychology**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To learn about biological foundations of behavior.
- To understand about physiology and importance of brain functions.

**Course Outcomes (Cos):**

After completion of the course, students will be able to

- **COs 1-** Describe the Neuro- biological Perspective of Psychology.
- **COs 2-** Explain how human behavior is affected through neurology.
- **COs 3-** Apply neuro-psychological mechanism human life.

**Course Contents**

<b>Unit 1</b>	<b>Nature of Biopsychology:</b> Meaning and approach; Major divisions of Biopsychology; <b>Methods of study and research, sensory systems: general and specific sensations, receptors and processes. Neurons: structure, functions, types, neural impulse, synaptic transmission. Neurotransmitters.</b>
<b>Unit 2</b>	<b>Nervous System: Central Nervous System:</b> Structure and Function of Brain and Spinal cord. <b>Peripheral Nervous System:</b> Somatic Nervous System: Cranial and Spinal nerves. <b>Autonomic Nervous System:</b> Sympathetic and Parasympathetic Nervous System, Neuroplasticity.
<b>Unit 3</b>	<b>Biological basis of Affecter and Effectors:</b> Visual system, auditory system; Motor system and Endocrine glands, chromosomal anomalies
<b>Unit4</b>	<b>Biological basis of Ingestive behaviour:</b> Hunger and Thirst, Biological basis of Sleep: Stages and Types of Sleep; Physiological mechanism of Sleep; Disorders of Sleep
<b>Unit 5</b>	<b>Recent advances in neurophysiology:</b> hemispheric specialization and localization, Invasive methods –anatomical, lesion, chemical methods, Non-invasive method –EEG, Scanning methods.

**Reference Books:**

1. F. Leukel. (1985). Introduction to Physiological Psychology. New Delhi: CBS Publishers and Distributors.
2. Morgan, C.T. (1965). Physiological Psychology. New York: McGraw Hill.
3. Kalat, J.W. (1995). Biological Psychology. (7<sup>th</sup> Ed.) Wadworth, Thomson Learning, Belmont, CA, USA.
4. Carlson, N.R. (1994). Physiological Psychology. (5<sup>th</sup> Ed), Boston: Allyn Baco

**Text Books**

5. Tiwari, G & Pal, R. (1985). Experimental Psychology: A Dynamic Approach. Agra: Vinod Pustak Mandir.
6. Tiwari, B.D. (2001). Modern Physiological Psychology. Varanasi: Motilal Banarasidas.

## Semester- I

MPs- CT-104

### Science of Yoga: Principles and Applications

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To initiate the understanding of psychological knowledge within yoga and meditation linking with the idea of mental health and well-being.
- To deepen the practice of yoga and meditation systems and linking to applications in various contexts.

#### Course Outcomes (COs):

After the completion of this course, students will be able to:

- **COs 1-** Experience the divine aspects of great Yogic Science.
- **COs2-** Describe interconnection between Yoga & Psychology.
- **COs3-** Apply yogic knowledge in the enhancement of personality.
- **Course Contents**

**Unit 1: Yoga Introduction:** Definition and meaning of Yoga, Historical Development of Yoga over the ages including a brief philosophical overview (Patanjali yoga)

**Unit 2: Yoga in Modern Context:** Vivekananda's framework of Raja Yoga; Karma Yoga, Swami Ramdevji and his ideas on yoga for mental health promotion.

**Unit 3: Yoga school in contemporary context:** Bihar school of Yoga, Art of living and Sri Sri Ravi Shankar, Integral Psychology by Sri Aurobindo.

**Unit 4: Fundamental text of Yoga Psychology:** Samadhi Paada- Concept Svaroop, Samskara, Vasana, Viveka, Vairagya and Ishwar. Saadhana Paada- Kriya Yoga, Tapas, Svadhyaya, Ishwar Pranidhana, Kleshas, Avidya, asmita, raga-dvesa, abhinivesha, yama, niyam pranayama, pratyahara, two yoga therapies: Meditation and yognidra (with practical knowledge).

**Unit 5: Application of Yoga:** Yoga for mental health promotion, yoga and stress management, yoga for behaviour modification, yoga for personality development, yoga for cognitive restructuring.

#### Reference Books:

1. Taimni, I. K. (1961). The science of yoga. Adyar, India: The Theosophical Society of India.
2. Feuerstein, G. (2002). The yoga tradition: Its history, literature, philosophy and practice. Delhi, India: Bhavana Books and Prints.
3. Jacobsen, K. A., Larson, G. J. (2005). Theory and practice of yoga: Essays in honour of Gerald James Larson. Leiden, Holland: Brill.

#### Text Books:

1. Vivekananda, S. (1982). Raja yoga or conquering the internal nature. Calcutta, India: Advaita Ashram.

**Semester- I**  
**MPs-CP-105**  
**Psychology Practical**

Marks-100

**Course Objectives:**

- The course aims to deliver practical and in-depth experience in accordance to the principles learnt in the theory courses covering the areas of verbal learning, memory, forgetting etc.
- To provide the students with the practical knowledge of conducting various experiments and Psychological Tests.

**List of Practicals:**

➤ **Any five of the following:**

1. Marital Adjustment Inventory
2. Emotional Competency
3. Depth Perception
4. Eysenck Personality Inventory
5. Sixteen Personality Factors
6. Retroactive Interference
7. Reaction time
8. Division of attention
9. Mirror Drawing Apparatus
10. Effect of noise of attention

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- COs1- Conduct test administration and interpretation of tests.
- COs2- Explain psychological characteristics of human beings

➤ **Division of Marks:**

- |                               |   |          |
|-------------------------------|---|----------|
| • Conduction of 02 Practicals | : | 40 Marks |
| • Viva Voce                   | : | 35 Marks |
| • Practical Record Book       | : | 15 Marks |
| • Internal Viva-Voce          | : | 10 Marks |

Total : 100 Marks

**Note:** Any five practicals shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

## MPs-GE -106

### Hygiene, Diet & Nutrition

Marks-70

Time- 03 Hrs

#### Course Objectives:

- Understand the concept of diet and the medical value of nutrition.
- Advise appropriate diet to different age groups.

#### Course Outcomes (COs):

After the completion of this course the student will be able to

- COs 1- Explain the basic concepts and components of food and nutrition.
- COs 2- Gain expertise in the field of Hygiene, diet & Nutrition and its role in life.
- COs 3- Keep themselves healthy in all aspects

#### Course Contents:

##### Unit-1: Basic concepts and components of food and nutrition

Understanding Nutrition, Basic Terminology in Relation to Nutrition, Human Nutritional Requirements; Concept of food, Acceptance of Food, Functions of Food; Components of Food & their Classification; Macro Nutrients -Sources, Functions and Effects on the Body; Micro Nutrients - Sources, Functions and Effects on the Body; Fat Soluble Nutrients - Sources, Functions Water soluble Nutrients - Sources, Functions.

**Unit-2: Food groups:** Cereals & Millets -Selection, Preparation and Nutritive Value; Pulses, Nuts and Oil Seeds- Selection, Preparation and Nutritive Value; Milk and Milk Products - Selection, Preparation and Nutritive Value; Vegetables and Fruits- Selection, Preparation and Nutritive Value, Fats, Oils and Sugar, Jaggery. Selection, Preparation and Nutritive Value.

**Unit-3: Food and metabolism :**Energy-Basic Concepts, Definition and Components of Energy Requirement, Energy Imbalance, Concept of Metabolism, Anabolism, Catabolism, Caloric Requirement-BMR, SDA, Physical Activity, Metabolism of Carbohydrates, Lipids and Protein; Factors Affecting Energy Requirement and Expenditure, Factors affecting BMR.

**Unit - IV: Yogic concept of diet & Nutrition :**General Introduction of Ahara (Diet), concept of Mitahara; Definition and Classification of Yogic diet according to traditional Yoga texts; Concepts of Diet according to Gheranda Samhita, Hatha Pradeepika and Bhagavadgeeta; Pathya and Apathya in diet according to Yogic texts; Guna and Ahara; Yogic Diet and its role in healthy living: Diet according to the (Prakriti) - Vata, Pitta and Kapha.

##### Unit-V: Swasthavritta

Swasthavritta: Meaning, Definition, Aims and Aspects; Three pillars of Swasthavritta-Aahaar(Diet),Nidra(Sleep), Brahmacharya(Celibacy). Dincharya (Daily regimen) &Ratricharya (Night Regimen): Ritucharya .

##### Text Books:

1. Balkrishna, A.(2013) .Ayurveda Sidhant Rahasya. ,Divya Prakashan.
2. Balkrishna, A . (2016).Ayurveda Jadi-Buti Rahasya. Divya Prakashana .
3. Gaur, S.K.(2019). Ayurvediya Shareer Kriya Vigyan. Nath Pustak Bhandar.

##### Reference Books

- Stanley Davidson & others: Human Nutrition & Dietetics, The English Language Book Society & Churchill Livings, Revised Edition
- Dennis Thompson : The Ayurvedic Diet, New age books, New Delhi, 2001.

**Introduction to Ayurveda**

**Marks-70**

**Time- 03 Hrs**

**Course Objectives:**

- Understand the basic principles of Ayurveda.
- Have knowledge of different techniques used in Ayurveda to cure general ailments.
- Have basic knowledge of Panchkarma and useful domestic herbal remedies

**Course Outcomes (COs):**

After completion of this course the students will be able to

- COs 1- Describe holistic approach of Ayurveda.
- COs 2- Apply and spread scientific use of ayurveda treatment.
- COs 3 – utilize basic knowledge of Panchkarma for keeping good health.

**Course Contents:**

**Unit: 1** Ayurveda: Origin, Meaning, Definition, Purpose, History and Principles of Diagnosis and Testing.

**Unit: 2** *Dosha*: Meaning, definition, types, functions and results of deformity; *Dhatu*: Meaning, definition, types, and results of deformity; *Updhatu*: Meaning, definition, types, functions and results of deformity; *Mala*: Meaning, definition, types, functions and results of deformity; *Srotas*: meaning, definition, type and functions; *Indriyas*: meaning, definition, types and functions; *Agni*: meaning, definition, types and functions; *Prana*: meaning, definition, types, place and functions; *Prakriti*: meaning, definition, characteristics and its disorders; *Deha- prakriti*: meaning, definition, types and recognition; *Manas Prakriti*: meaning, definition, types and recognition.

**Unit-III** General introduction, properties, health promotion and medical uses of Major Herbs - Aak, Ajwaain (carom seeds), Amla, Apamarg, Ashwagandha, Tulsi, Giloy, Brahmi, Coriander, Ginger, Cardamom, Harad, Neem, Turmeric and Gwarpatha (Aloe vera).

**Unit-IV** Panchakarma (Pre-Karma, Pradhan Karma and Post-Karma): Meaning, Definition, Types, Purpose, Benefit, Precautions and Health Promotional and Medical Use.

**Unit-V** Detailed interpretation of Pradhan Karma and its applications in various ailments (Gout, Arthritis, Obesity, Diabetes, Back- pain, Colitis, IBS, CAD, UBITs, Liver disorders, Insomnia, Depression, Anxiety and Stress etc.)

**Text Books**

1. Balkrishna, A.(2013).Ayurveda Sidhant Rahasya. ,Divya Prakashan.
2. Balkrishna, A . (2016).Ayurveda Jadi-Buti Rahasya. Divya Prakashana .
3. Gaur, S.K.(2019). Ayurvediya Shareer Kriya Vigyan. Nath Pustak Bhandar.

**Reference Books:**

- Stanley Davidson & others: Human Nutrition & Dietetics, The English Language Book Society & Churchill Livings, Revised Edition
- Dennis Thompson : The Ayurvedic Diet, New age books, New Delhi, 2001.

## MPs-GE -108

### INTRODUCTION TO PHYSICAL EDUCATION

Marks-70

Time- 03 Hrs

#### Course Objectives:

- The module is prescribed in the course to inform the students about the role of Physical education on holistic health & development
- Provide knowledge of emerging trends in physical education.

#### Course Outcomes (COs):

After completion of the course the students will be able to

- COs 1- Describe and understand the basic concepts of Physical Education.
- COs 2- Apply the knowledge of physical education for their physical development.
- COs 3- Explain emerging trends of physical education in current scenario.

- **Course Contents:**

#### Unit-I Introduction:

Definition, Aim and Objectives of Physical Education., Principles of Physical Education, Relationship of Physical Education with general education.  
Misconception, regarding Physical Education. Personality development of an individual.

#### Unit-II Philosophical aspect of Physical Education

Meaning of Philosophy, Different philosophies applied to Physical Education: Idealism, Pragmatis, Realism, Naturalism, Existentialism. Need and importance of different philosophies in modern Physical Education programme.

#### Unit-III Biological Concept of Physical Education:

Biological principles of Physical Education, Growth and development. Heredity and environment, Somato types, Sex differences. Use, Disuse and Over use, Chronological, physiological and anatomical ages

#### Unit-IV Emerging Trends in Physical Education

Career opportunities in Physical Education and Sports:As a Physical Education teacher, Coach / trainee ,Gym instructor, Physiotherapist.Psychologist., Dietitian.,Sports administrator/manager, Rehabilitator Adventure SportsWater Sports :Worldwide therapeutic acceptance of Yoga, Fast growing professional in sports.

#### Reference Books:

1. Kamlesh M.L., "Physical Education, Facts and foundations", Faridabad P.B. Publications.
2. Barrow Harold M., "Man and movements principles of Physical Education", 1978.
3. Ravanes R.S., "Foundation of Physical Education", Houghton Millin Co. Boston USA (1978)

**Semester- I**  
**MPs-AECC- 101**

**Communicative English (Non Credit)**

**Course Objectives:**

**The course will**

- Introduce the basic concepts of effective communication skills.
- Improve English communication of the students.

**Course Outcomes:**

After the completion of this course the students will be able to

- COs 1- Read and Write the English texts.
- COs 2 - Establish efficient social relations with different cultures.

**Communication:**

Definitions and concept, Process of Communication. Elements of Communication steps/phases of Communication. Means, methods, mode of Communication. Verbal-oral-written communication. Nonverbal-sign language, Body Language. Flow of Communication: Formal/Informal. Barriers of Communication- Intrapersonal, interpersonal and organizational barriers. Recapitulation Linguistic Communication Pattern of Communication, Group Discussion (GD), History of print Media in India.

**Grammar and usage:** Noun, Pronoun, Verb, modal, Tenses, Adjective, Adverb, Preposition, conjunction, Interjection, Rules of Translation, Punctuation, capitalization and Abbreviation, subject verb Agreement, Sentence correction rules, one word substitution, active and passive voice, direct and indirect speech, suffixes and prefixes, antonyms and synonyms, homophones and Homonyms, letters writing.

**Readings:**

Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead effectively, by Helio Fred Garcia, 2012

Pone Communicates, Few Connect: 'What the Most Effective People Do Differently, haC. Maxwell, 2010

Interviewing: A Programmed Approach to Effective Communication, by David Dans, Margaret T. Hearn, Max R. Uhlemann and Allen E. Ivey, 2010

Art and Science of Communication: Tools for Effective Communication in the place, by P. S. Perkins and Les Brown, 2008

Listening Effective Groups: The Art of Small Group Communication, by Randy Fujishin,

**Semester- II**  
**MPs-CT-201**  
**Research Methods**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To inform students about the basics of scientific research in applied psychology.
- To make them learn the statistical rigours in designing research and processing data.

**Course Outcomes (COs):**

After completion of the course, the students will be able to

- COs 1- Explain the basic concepts of research.
- COs 2 – Conduct various types of research in his career life.
- COs 3- Create and write scientific research report.

**Course Contents :**

Unit 1: **Research Process:** Nature of scientific research, Problem: meaning, operational definition, types, importance and formulation of research problem, hypothesis: meaning, definitions, sources, characteristics and types, Variables: meaning, definitions, types of variables, controlling methods.

Unit 2: **Types of Research:** Descriptive research, Experimental research, Qualitative research, Ex-post facto research.

Unit 3: **Sample and Sampling:** Meaning, Purpose and Types, Sampling error, Factors affecting sampling error.

Unit 4: **Methods of Data Collection:** Observation, Interview, questionnaire, content analysis, case study method, grounded theory

Unit 5: **Report Writing:** Research proposal and Report Writing based on APA Style. Ethical issues in Psychological research.

**Reference Books:**

1. F.N. Kerlinger (1973). Foundation of Behavioural Research, Delhi: Surjeet Publications.
2. L.H. Kidder (1981). Research Methods in Social Science. Tokyo: Holt Saunders.
3. Mohsin: Research Methods in behavioural Sciences, New Delhi; Longman.

**Text Books:**

4. K.D. Broota (1992). Experimental Design in Behavioural Research, New Delhi: Willey Eastern.
5. A.K. Gupta and R. Singh (2009). Research Methodology, New Delhi: Vayu Education of India.

**Semester- II**  
**MPs-CT-202**  
**Psychological Assessment**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To gain familiarity with psychological testing and its nature and functions
- To create understanding about different types of testing.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- COs 1- Provide help in psychological assessment.
- COs 2- Provide help of Clinical Psychologists in Clinical Practice.
- COs 3- Assist in psychological testing in different fields of life.

**Course Contents:**

- Unit 1: **Psychological Test:** Nature, Uses, Functions and Types of Psychological Tests. Test Administration- Effects of examiner and situational variables. Test-takers perspective, Effects of training on test performance.
- Unit 2: **Measurement of Aptitude and Abilities:** Multidimensional Aptitude Battery, Multiple Aptitude Test Batteries: Differential Aptitude Test.
- Unit 3: **Personality assessment:** Eight State Questionnaire, Vedic Personality Inventory, Triguna, Beck Depression Inventory, Eysenck Personality Inventory, MMPI, WAIS.
- Unit 4: **Projective tests and Adjustment Inventories:** TAT, Rorschach test, Bell's Adjustment Inventory, Adjustment Inventory (A.K.P. Sinha & R.P. Singh).
- Unit 5: **Tests for special Population:** Infant and Pre-school testing, assessment of mentally retarded and physically handicapped.

**Reference Books:**

1. A. Anastasi (1998). Psychological Testing. New Delhi: McMillan.
2. Paul Kline (1993). The Hand Book of Psychological Testing. London Poutlege.
3. K.R. Morphy and C.O. Davidshofer (1988). Psychological Testing: Principles and Application. New Jersey: Prentice Hall of India Pvt. Ltd.
4. F.S. Freeman (1971). Theory and Practices of Psychological Testing. New York: Oxford Press.
5. L.J. Cronbach (1972). Essentials of Psychological Testing. New York: Harper and Row.
6. L.R. Alken and G.G. Marnat (2009). Psychological Testing and Assessment, New Delhi: Dorling Kindersley Pvt. Ltd.

**Text Book:**

7. Kusum Mathur (1983). Psychological Testing. Agra : Vinod PustakMandir.

**Semester- II**  
**MPs- CT- 203**  
**Psychopathology**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To develop understanding of the various manifestations of psychopathology.
- To familiarize with DSM IV and ICD II to classificatory systems in the context of diagnosis of various psychiatric/psychological disorders.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- COs 1 – Describe the basic concepts of mental health.
- COs 2- Spread awareness about mental health issues.
- COs 3- Identify the symptoms, causes and treatment of mental disorders.
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**Course Contents:**

- Unit 1: **Models of Mental Illness:** Overview of latest version of Diagnostic and statistical Manual (DSM-5), International classification of diseases (ICD10). **Historical views of abnormal behavior, Meaning and definition of normality and abnormality.** Factors: Biological, Psychological, Environmental & Socio-cultural. Theories: Psychodynamic, Behavioural, Humanistic & **Eastern Approaches.**
- Unit 2: **Brain & Behaviour:** Concept of Brain & Behaviour, Nervous System - Brain: Structure & Functions, Spinal Cord & Other Parts of the Brain, Peripheral Nervous System: SNS & ANS
- Unit 3: **Anxiety disorders:** The nature of anxiety and autonomic arousal, generalized anxiety disorder, panic disorder, phobia, obsessive-compulsive disorder and post traumatic stress disorder.
- Unit 4 : **Mood disorders:** Depression-symptom Presentation, Associated Features, etiology of depression-biological, psychological, sociocultural, treatment of depression.
- Unit 5 : **Psychotic and Cognitive Disorders:** Schizophrenia: symptoms, types development and treatment. Cognitive Disorders: delirium and dementia.

**Reference Books:**

1. Buss, A.H. (1999). Psychopathology. New York: John Wiley and Sons.
2. Lamm, A. (1997). Introduction to Psychopathology. New York : Sage Publications
3. Davison, G.C., & Neals, J.M. (1996). Abnormal Psychology. New York: John Wiley and Sons.
4. Mohanty, G.B. (1998). Text Book of abnormal Psychology. New Delhi: Kalyani Publishers.

**Text Books:**

5. Singh, A.K. (2004). Modern Abnormal Psychology. Varanasi: Motilal and Banarashidas.
6. Veeraraghavan, V., & Singh, S. (2014). A textbook of Abnormal and Clinical Psychology. Mcgraw Hill Education (India) Private Limited.

**Semester- II**  
**MPs-CT -204**  
**Social Psychology**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To understand the use of social psychological perspectives to explore human experiences and behaviour within social situations.
- To develop insight about the basic assumptions and scope of social psychological perspectives.
- To explore the use of social psychological perspectives in addressing the issues and problems of the real world.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Describe various aspects of social psychology in different scenario.
- COs 2- Explain and analyze social structure of India in scientific way.
- COs 3 – Resolve various social issues of the society.

**Course Contents:**

**Unit 1: Introduction to Social Psychology:** scientific nature: Accuracy, objectivity, scepticism and open-mindedness, history and scope, Social psychology advances at the boundaries: cognition and behaviour, the role of emotion in the social side of life, social relationships: how important they are for well-being

**Unit 2: Methods of Social psychology:** Systematic observation, correlation: the search for relationship, the experimental method: knowledge through systematic Intervention, further thoughts on causality: the role of mediating variables, meta-analysis: assessing a body of knowledge

**Unit 3: Aggression:** Drive theory of aggression, General aggression Model (GAM), causes of human aggression: social, cultural Personal and situational, aggression in the classroom and work place: what is Bullying, cyber bullying, reduction of bullying.

**Unit 4: Group and Social Influence:** social facilitation, social loafing, Conformity: how groups and norms influence our behaviour, social pressure: the irresistible Force, how social norms emerge, factors affecting conformity compliance: the underlying principles of compliance, tactics based on friendship or likes, tactics based on commitment or consistency, tactics based on scarcity.

**Unit 5: Social issues in India:** Domestic violence: causes and management, poverty: causes and management, Alcoholism: cause and management, migration: causes and management. Practical exposure of these issues by outside visit in rural and urban areas.

**Reference Books:**

1. Baron, R.A. & Byrne, D. (2000). Social Psychology: fourteenth edition, New Delhi: Prentice Hall of India Pvt. Ltd.
2. Myers, D. (2007.) Social Psychology. New Delhi: Cengage Learning.

**Text Books:**

3. Singh, A.K. (2009). An outline of Social Psychology. New Delhi: Motilal Banarasi Das.
4. S. Mohamad (2009). Advanced Social Psychology. New Delhi: Motilal Banarasi Das.

**Semester- II**  
**MPs-CP-205**  
**Psychology Practical**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To provide a understanding of psychological tests having applications in clinical practice.
- Exposure to the general concepts of psychology through experimentation and testing.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- COs 1- Detect various mental diseases through psychological tests.
- COs 2- Provide scientific report of psychological qualities.
- COs 3- Conduct psychological testing in various areas of life.

**List of Practicals:**

**Any Five of the following:**

1. Defense Mechanism
2. Emotional Maturity Scale
3. Attribution Style
4. Adjustment Inventory
5. Mental Health Scale/Inventory
6. Muller Lyer
7. Two Hand Coordination
8. Maze learning
9. Aggression Scale
10. Judging Emotions by Photographs

**Division of Marks:**

Conduction of 02 Practicals	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks

Total : 100 Marks

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Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

**MPs-GE -206**  
**Yoga, Health and Tourism**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To upgrade the knowledge of the latest trends in tourism particularly the health tourism in the country.
- Enable the students to define the trends, issues and challenges in the field of health tourism in India.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Explain about the aspects and importance of health tourism.
- COs 2- Aware of various government policies related to medical tourism.
- COs3 – Explain the basic concepts of health and medical tourism.

**Course contents:**

**Unit 1** Basic Meaning of word ‘Yoga’, Aims & objectives, Introduction to Tourism: Meaning, nature, scope & objectives, Relevance of Yoga in relation to Tourism.

**Unit II** Tourism Types, Products & Concepts, Tourism Elements & Components, Peace & Wellness Tourism, Factors affecting Wellness Tourism.

**UNIT III** Health and Medical Tourism: Meaning, nature and scope, Health and Medical tourism Product, Health and Medical Tourism markets at global level, Advantages and disadvantages for India in Global Medical Tourism Market.

**UNIT IV** Health and Medical Tourism in India, Role of Private sector in health and medical tourism, Traditional Health Care system in India, Government incentives for health and medical tourism in India.

**Unit V** Health Tourism Centres in India: Health Tourism Resources in Haridwar & Rishikesh, Patanjali Health Tourism Institutions, Health & Medical Tourism in Kerala & Tamil Nadu.

**Reference Books:**

1. Asana- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
2. Pranayama- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
3. Smith, Melanie, & Puczko, Laszlo, Health and Wellness Tourism.
4. Conell, John, Medical Tourism.
5. Kumar, Medical Tourism in India (Management and Promotion)
6. Edlin, Gordon & Golanty, Eric, Health and Wellness.

## MPs-GE -207

### Principles of Vocal Music

Marks-70

Time- 03 Hrs

#### Course Objectives:

- The course intends to upgrade the knowledge of vocal music.
- Enable the students to understand the basic concepts of vocal music.

#### Course Outcomes (COs):

After completion of the course, the students will be able to

- COs 1-Describe the basic concepts of Vocal Music along with its applications.
- COs 2 - Explain the general principle of vocal music.
- COs - Lead their life meaningful and happy.

#### Course Contents:

**UNIT- I** Definitions :- Sangeet, Dhvani , Nada , Swara , Saptak , Alankar, Laya , Sama, Taal , Vadi, Samvadi , Vivadi , Anuvadi, Aroh , Avroh , Pakad, Khayal , Sthai , Antra, Thaata & its Names , Raag, Alaap, Jaati , Bhajan, Lokgeet, Lakshan Geet , Thumri. Brief Parichay of Raag Bhairav.

**UNIT- II** Origin of Sangeet , Origin of Sound, Twenty Alankars According to Kramik Pustak Malika, Swarlipi Paddhati of Vishnu Narayan Bhatkhande & Vishnu Digambar Palushkar , Relation Between Life & Music, UOP (Koolgeet, Yagya Prarthna ) , Five Swastivachan Mantra Two Patriotic Song , Three Arya Samaj Bhajan, Biography of Musician Tansen.

**UNIT- III-** Practice of Twelve Swar in Saptak, Practice of om in Khadaj swar, Twenty Alakaarr according to Kramik pustak Malika-I, Practice of one Chota Khyal in Raag Bhairav in Madhya Laya. Two Taan in Raag Bhairav.

**UNIT-IV-** Practice of Koolgeet, Yagya Prarthna, Five Swastivachan Mantra, Two Patriotic Song, Three Arya Samaj Bhajan with two Sargam each in Related Bhajan, One Hori Song.

#### Reference Book:

1. Hamady, J. The Art Of Singing. Hal Leonard Corporation.

**Course Objectives:**

- To connect students with Indian culture, Institutions and religion.
- Create a sense of national unity among the students.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to:**

- COs 1- Adept in aspects of ancient Indian Culture.
- COs 2- Create a healthy environment by knowing the religious systems.
- COs3- Respect and spread awareness about Indian culture and religion.

**Course Contents:**

**Unit I: Introduction of Ancient Indian Culture:**

- a. The main characteristics of Ancient Indian Culture: Vishwa- Bandhutva, Sarva-Dharm-Sambhav, The wonderful amalgamation of materiality and spirituality
- b. Geographical and ethnic profile
- c. Vedic Literature: Vedas, Brahman Granth, Aranyak, Upanishad, Vedang and Sutra Sahitya

**Unit II: Political Ideas and Institutions:**

- a. Origin, nature and functions of State
- b. Theories of kingship
- c. Republics, Monarchy and its feudal transformations

**Unit III: Social Institutions:**

- a. Origin and development of Varna system
- b. Ashram System- Antiquity of the Ashram and its importance
- c. Position of women- their abilities and limitations, proprietary rights and right to education

**Unit IV: Educational Institutions:**

- a. Education and educational Institutions: Concept and Aims, Relation between Master and disciple, centre of learning- Taxilla, Nalanda and Vikramshila
- b. Sanskar: Spiritual and material life education
- c. Purusharth: Teaching of Karma

**Unit IV: Religious system:**

- a. Vedic Religion: Rigvedic Religion: Worship system and its scientific interpretation, Religion of Later Vedic Period: Worship system, Spiritual development, invaluable treasure of spiritual thought
- b. Life and teaching of Jain
- c. Life and teaching of Buddha, Shavishm, Vaishnavism and other Religious system.

**Books Recommended:**

- P.V. Kane: History of Dharmashatra Vol. I & II
- P.H. Prabhu: Hindu Social Organization
- Jai Shankar Mishra: Prachin Bharat Ka Samajik Itihas
- R.B. Pandey: Hindu Sanskar

## MPs-SECC-101

### Basic Computer Applications

#### Course Objectives:

- The module is prescribed in the course to inform the students about the role of Computer Information systems in travel and trade.
- The prescribed units enhance the skills of students especially when they will be attached for practical.

#### Course Outcomes (COs):

After completion of the course, the students will be able to

- COs 1- Describe the basic concepts of computer knowledge.
- COs 2- Apply computer knowledge in various organization sectors.
- COs 3- Improve their technical skills.

#### Course Contents:

**UNIT-I: Computer System:** Introduction to Computers, Characteristics of computers, Applications of computers, Different units of computer, Component of computers, Input / Output and auxiliary storage Devices. CD/DVD ROM, RAM, ROM.

**UNIT-II: Windows & MS Office:** Introduction to windows MS –Office: MS Word, MS Excel, MS Power Point.

**UNIT-III: Network and Communication:** Networking: Concept, User, Types, Devices Used, LAN, MAN, WAN. Basic Communication Components: Modems, Routers, Client, Server, Communication processors, Host Computers, Types of Transmission.

**UNIT-IV: Internet: Internet:** Concept, uses, components, browsing, Search Engines, E-mail: Opening Account. Internet. Information and Communication Technology (ICT) ICT: need definition, its uses for tourism, and future role.

**UNIT-V: Hotel & Travel Software:** What is CRS, How it functions. CRS for Rail Transport, Hotel Bookings, Airlines: Different packages used: Amadeus, Galileo, Sabre etc.

#### REFERENCES:

1. Leon Alexis and Mathews Leon: Introduction to Computers, Vikas Publishing House Pvt Ltd. New Delhi
2. Bhatnagar S C and Ramani K V: Computers and information management. A Primer for Practicing Managers, New Delhi, Prentice Hall of India Pvt. Ltd.
3. Bansundara, S: Computer Today.
4. Goel Ritender and D N Kakkar: Computer Application in Management, New Age International Publishers, New Delhi.

**Semester- III**  
**MPs-CT-301**  
**Clinical Psychology**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To familiarize with the history and development of clinical psychology as a field in India and its evolving professional identity.
- To orient students to major theoretical models which guide clinical psychological practice and research
- To orient about clinical assessment process and its application in various domains.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Describe Holistic approach of clinical Psychology.
- COs 2 Adept with Professional setup of clinical psychology in India.
- COs 3- Provide assistance in clinical practices.

**Course Contents:**

Unit 1: **Clinical Psychology:** a brief history of clinical psychology, psychological assessment and the role of world wars in shaping clinical psychology, the task and work settings of a clinical psychologist, related Professional Psychology Sub-fields.

Unit 2: **Assessment and Evaluation:** Clinical interview, mental status examination, case history, the diagnostic impression, psychological testing.

Unit 3: **Treatment plan and models of treatment:** short term therapy model, intermittent long-term therapy model, cognitive behaviour and social skills training model, the therapeutic contracting Programme (Heinseen, lewendusky and Hunter, 1995)

Unit 4: **Theoretical Models of Clinical Psychology:** Psychoanalytic approach, Behavioural approach, Humanistic approach, attempt at integration: bio-psycho-social.

Unit 5: **The profession of Clinical Psychology in India:** Rehabilitation Council of India, RINPAS, NIMHANS, IBHAS, NIEPID.

**Reference Books:**

1. Llewelyn, S., Murphy, D. (Eds.) (2014). What is clinical psychology? Oxford UK: Oxford University Press.
2. Bellack, A. S., & Hersen, M. (1980). Introduction to clinical psychology. New York: Oxford University Press.
3. Korchin, S. J. (1986). Modern clinical psychology. Delhi: CRR Publishers and Distributors.
4. Ray, S. D. (1996). The practice of psychotherapy. New Delhi: New Age International.

**Text Book:**

5. Veeraraghavan, V., & Singh, S. (2014). A textbook of Abnormal and Clinical Psychology. Mcgraw Hill Education (India) Private Limited.

**Semester- III**  
**MPs-CT-302**  
**Statistical Techniques and Experimental Designs**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To develop an understanding of various statistical techniques in terms of their Applications
- To create understanding about different types of Design employed in Psychological Research

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Gain expertise in the application and usage of various useful statistical techniques.
- COs 2- Familiar with the use of current software used in this field.
- COs 3- Utilize statistical knowledge in the field of research, health and business.

**Course Contents:**

- Unit 1** : **Measures of central tendency and Variability:** Calculation of mean, median and mode. Measures of variability: range, standard deviation (SD), Quartile deviation (Q), coefficient of variation. Percentile and percentile ranks in frequency distribution.
- Unit 2** : **Test of Statistical Significance:** difference between parametric and non parametric test, parametric (t-test) and non parametric (sign test, wilcoxon Signed rank test, Mann- Whitney test).
- Unit 3** : **Correlation:** Concept and Significance of correlation, Product Moment Correlation (Ungrouped Data), Rank Difference Correlation, Special correlation: biserial, Point biserial.
- Unit 4** : **Normal distribution and factor analysis:** NPC- Characteristics & applications of Normal Probability Curve, Assumptions of factor analysis, methods, rotation and interpretation
- Unit 5** : **Introduction to SPSS and Experimental Design:** Introduction to SPSS and related technical tools and software for research, Analysis of Variance , one way & two way classified data

**Note:**

1. Students can use simple calculator (Without Programming/Nonscientific) during the Examination.
2. Statistical Tables will be provided during the Examination.

**Books Recommended:**

1. Haslam, S.A., & Mcarty, C. (2003). Research Methods and Statsics in Psychology. London: Sage Publication.
2. Siegal, S. (1994). Non-Parametric Statistics for Behavioural Sciences. New York: McGraw Hill.
3. Guilford, P. (1975). Fundamental Statistics in Psychology and Education. New York: Mc Graw Hill

**Text Books:**

4. Gareett, H.E. (2005). Statistics in Psychology and Education. New Delhi. Paragon International Publishers.

**Semester- III**  
**MPs- DSE-303**  
**Positive Psychology**

**Marks-70**

**Time- 03 Hrs**

**Course Objectives:**

- To recognize what contributes/does not contribute to happiness.
- To understand the right kind of vocation relationship and values in life that enhances one's well-being
- To recognize the role of positive emotions and traits in enhancing happiness.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Gain expertise in the field of role of positivity for psychological well –being.
- COs 2 - Adept in the interconnectivity between thoughts, emotion and mental health and physical health.
- COs 3- Apply positive health perspectives of life.

**Course Contents:**

1. **Introduction: concept of positive psychology,** historical and philosophical traditions: western influence: Athenian and Judeo-Christian traditions, eastern influences: Confucianism, Taoism, Buddhism and Hinduism
2. **Resilience:** meaning and definition of resilience, the roots of resilience research, resilience recourses, positive youth development, successful aging, strategies for promoting resilience in children and Youth.
3. **Emotional Intelligence:** Salovey & Mayer's ability model of emotional intelligence (E.I), emotion focused coping and adaptive potential of emotional approaches, life enhancement strategies
4. **Self-efficacy:** definition, childhood antecedents, the neurobiology of self efficacy, self-efficacy's influence in life areas.
5. **Optimism:** definition, childhood antecedents of learned optimism, the neurobiology of optimism and pessimism, what learned optimism predicts.

**Reference Books:**

1. Snyder, C.R., & Lopez, S.J. (2002). Handbook of positive Psychology. New York: Oxford University.
2. David, S, A., Boniwell, I & Ayers, A.C. (2013). The oxford handbook of happiness. Oxford: Oxford University.

**Text Book:**

3. Kumar, V., Archana, & Prakash, V. (2015). Positive Psychology-Application in work, health and well-being. Delhi& Chennai, India:Pearson.

## Semester- III

MPs- DSE-304

### Human Resource Management

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To gain knowledge about Human Resource Management.
- To create understanding and awareness about the psychological well-being in Organization.

#### Course Outcomes (COs):

After completion of the course, the students will be able to

- COs 1- Explain about the concept of Human resource and its management especially in organizational setup.
- COs 2- Gain knowledge of future startup.
- COs 3- Apply obtained knowledge in the field of human resource development.

#### Course Contents:

**Unit 1: Fundamentals of Human Resource Management:** Meaning, Scope and Importance of Human Resource Management. Assumption and Characteristics of HRM. Difference between Personnel Management and HRM.

**Unit 2: Acquisition of Human Resources:** Planning, Assessment and Job Analysis, Recruitment and Selection- Procedure, Sources.

**Unit 3: Industrial Relations:** Nature and Objective of industrial relations. Importance and approaches in industrial relations. Strategy and role of human resource management.

**Unit 4: Performance Appraisal:** Performance Management System. appraisal process. Methods, creating effective personnel management system.

**Unit 5: Job Satisfaction and Well Being in Organization:** Meaning, nature and factors of job satisfaction. Theories of job satisfaction. Importance of job satisfaction.

#### Reference Books:

1. De Cenzo, D.A. & Robbins, S.P. (1999). Human Resource Management. New York, NY: John Wiley and Sons.
2. Varkkey, B. (2008) Human Resource Management. New Delhi, ND: Pearson Education.
3. Hersy, P. & Blanchard, K.H. (1995). Management of Organizational Behaviour: Utilizing Human Resources. New Delhi, ND: Prentice Hall of India Pvt. Ltd.
4. Dessler, G. (1998). Human Resource Management. New Delhi, ND: Prentice Hall of India Pvt. Ltd.

#### Text Books :

5. Sudha, G.S. (2008). Human Resource Management. Jaipur, Ramesh Book Depot.
6. Kaila, H.L. (2006). Industrial Organizational Psychology. New Delhi, ND: Kalpaz Publication.

**Semester- III**  
**MPs- DSE-305**  
**Psychometry**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To gain familiarity with Psychometry and psychological measurement.
- To make students know about criteria of psychological test and the steps used in test construction.

**Course Outcomes:**

After completion of the course, students will be able to:

- COs 1- Describe the various aspects of Psychometry along with its applications.
- COs 2- Apply obtained knowledge in various settings like counseling and guidance.
- COs 3- Construct psychological tools.

**Course Contents:**

Unit 1: **Foundations of Psychometric:** Basic of measurement theory, Speed vs. power test, history of Psychological testing.

Unit 2: **Test Construction:** Item writing – method of scoring, step use in test construction, Item analysis – meaning and purpose, items difficulty, difficulty value and index of discrimination.

Unit3: **Standardization of tests:** Types of norms, specificity of norms.

Unit 4: **Reliability and Validity:** Meaning of reliability, Methods – test retest, internal consistency/ split half. Factors influencing reliability of a test. Validity – meaning, types-content, criterion, predictive, concurrent and construct validity. Factors influencing validity of the test.

Unit 5: **Application of Tests:** Applications of Psychological testing in various settings- education, counseling and guidance, and ethical issues.

**Reference Books:**

1. Guilford, J. P. (1989). Psychometric Methods, New Jersey: John Wiley and Sons.
2. C. Jackson (2003). Understanding Psychological Testing, Mumbai: Jaico Publishings House.
3. Nunnally, J. C. (1978). Psychometric Theory. New York: McGraw Hill.
4. Chandha, N. K. (1996). Theory and Practice of Psychometry. New Delhi: New Age international Publishers.

**Text Books:**

5. Chadha, N. K. (2009). Applied Psychometry. New Delhi: Sage Publications.
6. Singh, A.K. (1997). Tests, Measurement, Research Methods in Behavioural Sciences Patna: Bharati Bhawan.

**Semester- III**  
**MPs- DSE-306**  
**Yoga Ayurveda and Mental Health**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- Understand the basic principles of yoga and Ayurveda.
- Have knowledge of different techniques used in yoga and Ayurveda for mental illness treatment and management.
- Have basic knowledge of herbal remedies.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Apply the knowledge of yoga and ayurveda, to overcome the problems of daily life.
- COs 2 - Provide solution for mental diseases from the root.
- COs 3- Spread awareness about herbal medicine and its utility.

**Course Contents:**

**Unit-1: Concept of mental health and illness:**

Concept of health according to WHO, Yoga and Ayurveda, Concept of mental health, Components of mental health, Classifications of mental illness – Neuroses and Psychoses, Diagnostic manuals- DSM-5 and ICD-11.

**Unit-2: General Introduction to Yoga:**

Meaning and definition of Yoga, Yoga practices for healthy life, Importance of yoga in therapy and research, Main Streams of yoga - Gyan Yoga, Bhakti Yoga, Karma Yoga, Ashtanga Yoga, Kriya Yoga, Hatha Yoga and Mantra Yoga with their effects

**Unit 3: - Concept of Mind and mental health with reference to Patanjali Yog Darshan:**

Concept of *Chitta*, *Chitta Bhoomi*, *Chittavrittis* and their types, *ChittaVrittiNidrodhopaya (Abhyas-Vairagya)*, *Chitta Vikshep (Antaraya)*, *Antarayabhava*, *Chitta Prasadana*, Om chanting and its effects, Importance of Ashtanga Yoga for mental health, *Kleshas*: yogic cause of mental illness, Measures of *Klesha* elimination

**Unit-4: General Introduction to Ayurveda:**

Ayurveda: Meaning, Definition, Purpose, Principles of Diagnosis and Testing.

Concept, types and functions of *Doshas*, *Dhatu*, *Mala*, *Indriyas*, *Agni* and *Prana*;

*Prakriti*: meaning, characteristics and related mental disorders;

Ayurvedic Panchakarma (Pre-Karma, Pradhan Karma and Post-Karma): Meaning, Definition, Types, Purpose, Benefits, and contraindications

**Unit-5 Yoga and ayurveda for managing mental illness:**

Concept of yogic counseling, skills of counseling, code of ethics for counselors, building counseling relationship, process of counseling; Yoga and ayurveda for managing stress, anxiety, phobia, obsessive compulsive disorder and depression; Overview and therapeutic benefits of major herbs - Amla, Ashwagandha, Tulsi, Giloy, Brahmi, Ginger, Cardamom, Harad, Neem, Turmeric and Gwarpatha (Aloe vera).

**Reference Books:**

1. Frawley, D. (1997). *Ayurveda and the Mind: The Healing of Consciousness*. Delhi, India: Motilal Banarsidass.

**Text Books:**

2. Ramdev, S. (2004). *Yog Saadhna Evam Yog Chikitsa Rahasya*. Haridwar, India: Divya Prakashan.
3. Ramdev, S. (2007). *Pranayam Rahasya*. Haridwar, India: Divya Prakashan. Balkrishna, A. (2017). *A practical approach to the science of Ayurveda : A Comprehensive Guide for Healthy Living*. Haridwar, India: Divya Prakashan..

**Semester- III**  
**MPs-CP-307**  
**Case Study**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- Skills development in problem solving. Analytical tools, quantitative and/or qualitative depending on the case.
- For engaging students in research and reflective discussion.
- The students will work towards identifying their own theoretical frameworks
- The students will learn how to make treatment recommendations, formulate a treatment plan and establish a treatment contract.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1 - Gain expertise in taking the case history, MSE, along with Follow up & other required elements with skilful approach.
- COs 2- Provide scientific treatment recommendations of various physical and mental problems.
- COs 3- Assist clinical psychologists and health care expert.

**Guidelines:**

Students have to prepare two case studies in clinical setting and will actually do counseling under supervision. They will present

- Their own particular difficulties with the client, as well as their own issues of transference and other personal issues that get triggered off in relation to clients issues.
- Administration of tests as per requirement.

## MPs-AECC-102

### ENVIRONMENTAL SCIENCE

#### Course Objectives:

- To upgrade the knowledge of the latest trends in Environment.
- Familiarize the students with various environmental issues & bring awareness regarding conservation of Natural resources and importance of an Eco-friendly lifestyle.

#### Course Outcomes (COs):

After completion of the course, the students will be able to

- COs 1- Gain expertise in the holistic approach of Environmental Science.
- COs 2- Aware of various environmental policies.
- COs 3- Provide help in the formation of eco-friendly atmosphere.

#### Course Contents:

##### Unit- 1: Introduction to environmental studies and Ecosystem

Multidisciplinary nature of environmental studies; Scope and importance; Need for public awareness; What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

##### Unit-2: Natural Resources: Renewable & Non-renewable Resources

Land resources and land use change; Land degradation, soil erosion and desertification; Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations; Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state); Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

##### Unit-3: Biodiversity & Conservation

Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots; India as a mega-biodiversity nation; Endangered and endemic species of India; Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity; Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

##### Unit 4: Environmental Pollution, policies & practices

Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution; Nuclear hazards and human health risks; Solid waste management: Control measures of urban and industrial waste; Environmental Policies & Practices; Sustainability and sustainable development; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture; Environment Laws: environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

#### TEXT BOOKS:

1. Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.
2. Carson, Rachel. 1962. Silent Spring (Boston: Houghton Mifflin, 1962), Mariner Books, 2002.
3. Economy, Elizabeth. 2010. The River Runs Black: The Environmental Challenge to China's Future.

#### REFERENCE BOOKS:

1. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
2. Heywood V.H. & Watson, R.T. 1995. Global Biodiversity Assessment. Cambridge University Press.

**Semester- IV**  
**MPs- CT- 401**  
**Counselling Psychology**

**Marks-70**

**Time- 03 Hrs**

**Course Objectives:**

- To gain the knowledge about guidance and counseling
- To know about importance of counseling in real life.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Adept in understanding about Counselling along with practical importance & experience.
- COs 2 – Describe and explain the moral values of behaviour very well.
- COs 3- Apply counseling skills education, research, health, business, career and social areas of life.

**Course Contents:**

**Unit 1 : Counselling Psychology:** Nature of counselling psychology, the Counsellor as a Role Model, The Counsellor's Needs, Emotional Involvement, and Counsellor Limits in Practice. Difference between counseling & Psychotherapy.

**Unit 2 : Expectations and goals of Counselling:** Goals and expectations, Process, Basic Counselling Skills: Observation Skills, Questioning, Communication Skills (Listening, Feedback, Non-Verbal), Making Notes and Reflections, Role and functions of the counsellors.

**Unit 3 : The Counselling Interview:** History Taking, Interviewing (Characteristics, Types, Techniques), Developing Case Histories: Collecting, Documenting Information, Working with Other Professionals

**Unit 4 : Areas of Counseling:** Educational, Career, Family and Martial, counseling in community centers, counseling in community centers

**Unit 5 : Ethics in Counselling:** Need for Ethical Standards , Ethical Codes and Guidelines , Rights of Clients , Dimensions of Confidentiality.

**Reference Books:**

1. C.J. Gelso and B.R. Fretz (1995). Counseling Psychology. Bangalore: Prism Books Pvt. Ltd.
2. A. David (2004). Guidance and Counseling. New Delhi: Common Wealth Publishers.
3. S. Gladding (2009), Counseling: A Comprehensive Profession, New Delhi: Pearson Education.
4. T.S. Sodi and S.P. Suri (2006). Guidance and Counseling. New Delhi: Tata McGraw Hill.
5. S.N. Rao (2002). Counseling and Guidance, New Delhi : McGraw Hill
6. Amarnath Rai and Madhu Asthana (2006). Guidance and Counselling. Varanasi: MotilalBanarasidas.

**Semester - IV**  
**MPs-CT- 402**  
**Psychotherapy**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To provide knowledge about different therapies
- To create understanding and awareness about the use of therapies in professional life.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Explain and analyze the basic concepts & application of various psychotherapies techniques.
- COs 2- Able to solve practical problems appropriately.
- COs 3- Utilize psychotherapeutic skills in health sectors.

**Course Contents:**

- Unit 1: **Psychotherapies:** Concept, Roles and responsibilities of the therapist, The Client and therapist Relationship, Ethical issues.
- Unit 2: **Psychodynamic Therapy:** Freudian Psychoanalysis, Alfred Adler and Erik Erikson.
- Unit 3: **Behaviour Therapy:** Guided Exposure, Systematic desensitization, Aversion Therapy, Assertion training, Modeling, Biofeedback.
- Unit 4: **Cognitive Behaviour Therapy:** Beck's Cognitive Therapy, Rational emotive behavior Therapy, Michenbaum's cognitive behaviour therapy.
- Unit 5: **Humanistic Therapies:** Person centered therapy, existential therapy. Transactional therapy. Interpersonal relationship Therapy- Marital and Family Therapy.

**Reference Books:**

1. G. Corey (2001). Theory and Practice of Counselling and Psychotherapy. Belmont CA: Brooks Cole.
2. S. Culari (1998). Foundations of Clinical Psychology. New York: Allyn and Bacon.
3. T. Plante (2005). Contemporary Clinical Psychology, New York: John Wiley and Sons.
4. R. Erskine (1988) Integrative Psychotherapy in Action, New York: Sage Publications
5. A Bandura (1969). Principle of Behaviour Modification. New York: Holt Rinehard and Winston.
6. G.D. Rastogi (1991). Psychopathology and Treatment. New Delhi: Wiley Eastern Ltd.
7. M.B. Ghorpade and V.B. Kumar (1988). Introduction to Modern Psychotherapy. New Delhi: Himalaya Publishing House.

**Semester- IV**  
**MPs- DSE- 403**  
**Health Psychology**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To familiarize students with the concept of health psychology to live healthy life.
- To orient the students about management of stress.

**Course Outcomes (COs):**

**After completion of the course, the student will be able to**

- COs 1- Adept in the knowledge of psycho-somatic & somato -psychic approach of psychology and its relation with health.
- COs 2- Manage stress effectively.
- COs3- Provide help in health sectors.

**Course Contents:**

**Unit 1:** Introduction: Definition of Health Psychology, early research literature, current research literature, health psychology in India, the individual Perspective, Bio-psycho-social model vs biomedical model

**Unit 2:** Being a health Psychologist and the mind body connection: role of health psychologist in India, Traditional view of Mind-Body, Psychosomatic and Behavioral Medicine

**Unit3:** Stress and Illness: Meaning and sources of stress, Psychoneuroimmunology: stress, mood and Immune Functioning, Social Support and Immune Functioning, Emotional Health and Immune Functioning, stress and Cardiovascular Disorders: hyper tension, Coronary Heart Disease (CHD).

**Unit 4:** Coping with Stress: coping process, problem solving and emotional regulation, cognition and coping, cognitive coping style, causal attributions, explanatory styles, eastern approaches.

**Unit 5 :** The future of Health Psychology: :morbidity versus Mortality, women's health, attaining universal Healthcare For Indian Citizens healthy aging.

**Reference Books:**

1. Dimatteo, M.R. & Martin, L.R. (2010). Health Psychology. New Delhi: Dorling Kindersley Pvt. Ltd
2. Baum, A., R.J. Gatchel, R. J. & Krantz, D.S (1997). An Introduction to Health Psychology. New York: McGraw Hill.
3. Baum, A., Revenson, T.A & Singer, J.E. (2001). Handbook of Health Psychology. New Jersey: Lawrence Erlbaum.
4. Taylor, S.E. (1994). Health Psychology. New York: Random House.

**Text Books:**

5. Khokhar, C.P. (2007). A Text Book of Stress Coping and Health Meerut: Shalab Publication.

**Semester- IV**  
**MPs-DSE-404**

**Indigenous techniques in psychotherapy**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To provide knowledge about different Indian therapies
- To create understanding and awareness about the use of therapies in professional life.

**Course Outcome (COs):**

**After completion of the course, the students will be able to**

- COs 1- Gain expertise in the Indigenous approach of psychotherapy along with its various applications.
- COs 2- Make their life successful by accepting the truth of Indian knowledge.
- COs 3- Spread and create psycho-yogic changes in the field of health.

**Course Contents:**

**Unit 1 : Introduction:** Eastern assumption of mental disorder, historical background of mental disorder, Significance & importance of Indian Mental disorder in present Scenario.

**Unit 2 : Mental Disorder & Concept of Diagnosis:** Yogic assumption of mind and mental disorder, Causes of mental disorder in Yoga shastra- Punch klesh, Taap-traya, Types of mental disorder in Yoga Shastra- Yoga Antaray, Vichep Sahbhava .

**Unit 3 : Psychotherapy in Yogasatra :** Characteristics of Yoga Psychotherapist, techniques of Psychotherapy in Athurveda, Athervani, Angirasi, Daiveya Manusyai, concept of Psychotherapy in Ayurveda, Psychotherapy in Ram charitra manas & Bhagvad Gita, Psychotherapy in Yoga Darshan.

**Unit 4 : Yoga Psychotherapy in psychological context:** Yoga Psychotherapy- classification based on psychological approaches, Psychodynamic approaches: Meditation, Prayer Yoganidra. Homa therapy : Concept & Applications.

**Unit 5 : Management of Mental disorder through Music therapy:** Meaning & application of Music therapy , Healing of Tridosha through Music therapy, Effect of Om Chanting & Gayatri mantra .

**Reference Books:**

1. Taimni, I. K. (1961). The science of yoga. Adyar, India: The Theosophical Society of India.
2. Feuerstein, G. (2002). The yoga tradition: Its history, literature, philosophy and practice. Delhi, India: Bhavana Books and Prints.

**Text Books:**

1. Sinha, J.N. (1969) Indian epistemology of perception. Sinha Publishing House.
2. Dalal, A.S. (2004) A greater psychology, Pondicherry: Sri Aurbindo ashram Press.

**Semester- IV**  
**MPs- DSE- 405**  
**Therapeutic Techniques**

**Marks-70**

**Time- 03 Hrs**

**Course Objectives:**

- To gain knowledge about different therapies
- To create understanding and awareness about the use of therapies in professional life.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Describe different approaches of therapeutic techniques.
- COs 2- Utilize western knowledge of psychotherapies.
- COs 3- Apply psychotherapeutic knowledge in the betterment of life.

**Course Contents:**

**Unit 1: Psychotherapies:** Concept, Roles and responsibilities, The Client and therapist Relationship, Ethical issues.

**Unit 2: Psychodynamic Therapy:** Freudian Psychoanalysis, Alfred Adler and Erik Erikson.

**Unit 3: Behavior Therapy:** Guided Exposure, Systematic desensitization, Aversion Therapy, Assertion training, Modeling, Biofeedback.

**Unit 4: Cognitive Behaviour Therapy:** Beck's Cognitive Therapy, Rational emotive behavior Therapy, **Michenbaum's cognitive behaviour therapy.**

**Unit 5: Humanistic Therapies:** Person centered therapy- **Gestalt Therapy**, existential therapy. **Transactional therapy, Interpersonal Relationship Therapy- Marital and Family Systems Therapy.**

**Reference Books :**

1. G. Corey (2001). Theory and Practice of Counselling and Psychotherapy. Belmont CA: Brooks Cole.
2. S. Culari (1998). Foundations of Clinical Psychology. New York: Allyn and Bacon.
3. T. Plante (2005). Contemporary Clinical Psychology, New York: John Wiley and Sons.
4. R. Erskine (1988) Integrative Psychotherapy in Action, New York: Sage Publications
5. M.B. Ghorpade and V.B. Kumar (1988). Introduction to Modern Psychotherapy. New Delhi: Himalaya Publishing House.
6. A Bandura (1969). Principle of Behaviour Modification. New York: Holt Rinehard and Winston.

**Text Books:**

7. G.D. Rastogi (1991). Psychopathology and Treatment. New Delhi: Wiley Eastern Ltd.

**Semester- IV**  
**MPs-DSE-406**  
**Stress Management**

**Marks-70**  
**Time- 03 Hrs**

**Course Objectives:**

- To gain knowledge about Stress Management.
- To create understanding and awareness about the therapeutic approaches to Stress Management.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Gain expertise in the understanding of stress and its management.
- COs 2- Organize stress management workshops in various government and public institutions.
- COs 3 – Apply stress management skills in various areas of life.

**Course Contents:**

**Unit 1: Organizational Stress:** Meaning of Stress, Individual factor influencing job stress. Different perspectives and symptoms of stress, conflict –Concept and types of conflict, stages and sources of conflict. Approaches of conflict resolution.

**Unit 2: Causes of Job Stress:** Personal Characteristics, Organizational structure and change, Properties of work and work setting, job role machine pacing and shift work. Coping with Stress – Types of coping strategies.

**Unit 3: Consequences of job Stress:** Job behaviour, Job satisfaction, Performance, absenteeism, Health Strains- Physical illness, mental / Psychological Symptoms.

**Unit 4: Stress Management Interventions:** Individual centered – cognitive, behavioural and psychical, Organization centered – Preventing, mitigating and moderating organizational stressors.

**Unit 5: Therapeutic Approaches to Stress Management:** Counselling, Hypno-suggestive, Hypnosis, Self talk, music therapy.

**Reference Books:**

1. Pestonjee, D.M. (1992). Stress and Coping. New Delhi, ND: Sage Publications.
2. Davis, K. (1981). Human Behaviour at Work: Organizational Behaviour. New Delhi, ND: Tata McGraw Hill.
3. Pestonjee, D.M. (1991). Motivation and Job Satisfaction. New Delhi, ND: Macmillan India Ltd.

**Text Books :**

4. Gosh, P.K.,&Ghorpade, M.B (1991). Industrial and Organizational Psychology. New Delhi, ND: Himalaya Publishing House.
5. Srivastava ,A.K. (1999). Management of Occupational Stress: Theory and Practice. New Delhi, ND: Gyan Publishing House.

**Semester- IV**  
**MPs- CPT- 407**  
**Dissertation**

**Course objectives:**

- Assess the student's mastery level of the factual information and the theoretical concepts, and the methodological approaches.

**Course Outcomes (COs):**

After the completion of this course students will be able to:

- COs 1- Conduct original research including: Literature review and generation of hypothesis
- COs 2- Apply an appropriate techniques of research methodology.
- COs 3 – Analyze Statistical data with report writing skill.

The students securing a minimum of 70% marks in total in I, II and III Semester examination (Subject to clearing all the theory and practical papers) will have an opportunity to select a Dissertation Work (100 Marks) in lieu of only 4<sup>th</sup> paper of IV semester. The student opting for Dissertation will select a topic related to his/her group of specialization (Clinical Psychology) with the help of supervisor (one of the faculty member) and later on submit an application along with relevant information through the supervisor to the Head of the Department within 30 days from the declaration of the result of III semester. **The students securing less than 60% marks in total I, II, and III will have prepare project report.** The dissertation in typed form (two copies) following APA manual between seventy-five to hundred pages shall be submitted on or before 30<sup>th</sup> April to the Head of the Department along with Supervisor certificate.

**Division of Marks:**

**Report Writing** : 70 Marks

**Viva Voce** : 30 Marks

Total : **100 Marks**

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Note: Supervisor will act as an internal examiner. The marks will be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

# Basic Sanskrit

## MPs-SECC-102

### Course Objectives:

- Read and understand the colloquial words of Sanskrit.
- Communicate and comprehend Sanskrit to the best of their ability.
- Write in Sanskrit and have some idea about grammar.

### Course Outcomes (COs):

After completion of the course, the students will be able to

- COs 1- Describe the basic understanding and aspects of Sanskrit language along with grammatical aspects.
- COs 2 – Communicate in Sanskrit language.
- COs 3 - Promote Sanskrit language in current scenario.

### Course contents:

#### Unit-1: laLd`rHkk"kk ifjp; (5)

laLd`rHkk"kk ifjp;] ;ksx'kkL= ds vè;;u easa laLd`r dk egÜo vkSj ;ksx ,oa laLd`r dk vUr%lEcU/k, laLd`ro.kZekyk] Loj] O;atu o.kZKku lfgr jkxseu fyfi esa ys[ku ,oa iBu] o.kkZsa ds mPpkj.kLFkku vkSj izz;Ru KkuA dkjd] foHkfDr] fy<sup>3</sup>] opu] iq#"k] ydkj ,oa okD;k;x ifjp;A laLd`r la[;k,a ¼,d ls lkS rd½

#### Unit-2: 'kCn:Ik (8)

vtUr 'kCn:i&jke] ckfydk] iqLrd] eqfu] okfj, unh] Hkkuq] /ksuq] e/kq] fir`] ekr` 'kCnksa ds :Ik vFkZKku lfgrA loZuke 'kCn:i&vLen~] ;q"en~] rn~ ¼rhuksa fyxksa esa½] ,rn~ ¼rhuksa fyxksa esa½] fde~ ¼rhuksa fyxksa esa½] 'kCnksa ds :Ik vFkZKku lfgrA gyUr'kCn:i&Hkxor~] ukeu~] txr~, Hkor~ ¼rhuksa fyxksa esa½] 'kCnksa ds :Ik vFkZKku lfgrA

#### Unit-3: /kkrq:Ik (8)

Hkw] vl~] iB~] d`] fy[k~] ue~] n`'k~, on~] xe~] LFkk] ik] nk] Kk] dFk~] fpUr~] Jq] [kkn~] /kkrqvksa ds ikap ydkjksa yV~] y`V~] y<sup>3</sup> yksV~] fof/kfy<sup>3</sup>~] esa :iKku ,oa okD; fuekZ.k vFkZKku lfgrA

#### Unit-4: okD;fuekZ.k (9)

izFkenh{kk ds izFke] f}rh; ,oa r`rh; vè;k; ls okD;fuekZ.k ,oa vFkZKku dk vH;kla

### TEXT BOOKS:

1 f}osnh dfiy nso% izkjfEHkd jpukuqokn dkSeqnh] fo'ofok|ky; izdk'ku] okjk.klh 2011

2 f}osnh dfiy nso% jpukuqokndkSeqnh] fo'ofokky; izdk'ku okjk.klh  
2011  
3 f}osnh dfiy nso% izkS<jpukuqokn dkSeqnh] fo'ofokky; izdk'ku]  
okjk.klh 2007  
4 izFkenh{kk] jkf"V<sup>a</sup>; laLd`r laLFkku] ubZ fnYyh

**Reference Books:**

1. Perry E D : A Sanskrit Primer, MLBD, New Delhi, 2004
2. Kala MR : A Higher Sanskrit Grammar for college students, MLBD, New Delhi, 2011
3. egf"kZ n;kuUn ljLorh% o.kksZPpkj f'k{kk] jkeyky diwj V<sup>a</sup>LV]  
lksuhir gfj;k.kkA

**ORDINANCE AND COURSE CURRICULUM FOR**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**

**TWO YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

**[www.universityofpatanjali.com](http://www.universityofpatanjali.com)**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**Scheme of Examinations**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**  
**SEMESTER LAYOUT**

<b>Semester-I</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-101</b>	<b>Tourism Concepts and Principles</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -102</b>	<b>Tourism in Uttarakhand</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -103</b>	<b>Yoga Health &amp; Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-104</b>	<b>Adventure Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-105</b>	<b>General Viva-Voce</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-II</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-201</b>	<b>Travel Agency &amp; Tour Operation</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -202</b>	<b>Tourism Resource in India</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -203</b>	<b>Transport Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -204</b>	<b>Computer Applications in Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-205</b>	<b>Educational Tour</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-III</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-301</b>	<b>Culture Heritage and Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -302</b>	<b>Airlines Ticketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -303</b>	<b>Hotel &amp; Resort Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-304</b>	<b>Research Methodology</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-305</b>	<b>Project Report &amp; Presentation</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-IV</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM -401</b>	<b>Major Destinations of world</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --402</b>	<b>Tour Packaging Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --403</b>	<b>Tourism Marketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --404</b>	<b>Tourism Policy &amp; Planning</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --405</b>	<b>On-The Job Training</b>	<b>100</b>	<b>-</b>	<b>100</b>

## Semester -I

### **TOURISM CONCEPTS & PRINCIPLES (MTTM-101)**

#### **Course objectives:**

1. This will be an introductory module giving the basis of tourism studies.
2. This will give an overview of the Tourism Industry and various organisations.
3. Give an insight into how travel and tourism involved over a period of time and reached the modern stage.
4. Enhance the knowledge of students in various areas related to Tourism and how it affects the destination.

**Course Outcomes:** After studying this paper, students will able to

CO 1. assume the elementary concepts of Tourism that are applied in Tourism and Hospitality Industry.

CO 2. classify the role, function and operation in Tourism Industry.

CO 3. divide the concept of Travel and Tourism, the framework of the system, types and form of tourism as well as the impacts of tourism.

CO 4. describe the different types tourism resources of India, there importance in tourism and management.

#### **Unit – I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components
4. Different approaches to the study of tourism.

#### **Unit – II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

#### **Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

#### **Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

#### **Unit- V Tourism Organization:-**

Origin, location, and functions of WTO, IATA,PATA,TAAI, ITDC.

**Suggested Readings:**

- Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.
- Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.
- Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.
- Mill, R.C., (1990), Tourism: The International Business, Pretience Hall, New Jersey.
- Bhatia, A.K., - International Tourism  
Seth, P.N., (1999) Successful Tourism Management (Vol 1 & 2 )

## **Tourism in Uttarakhand (MTTM-102)**

### **Course Objectives:**

1. The module gives information of tourist places of Uttarakhand that helps students to know the background elements of tourism resources of Uttarakhand state.
2. Establishing world class infrastructure, attracting private sector for infrastructure development and identifying new tourism destination.
3. Gives the knowledge of religious and pilgrimage sites.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Enrich about the different Tourism resources of Uttarakhand that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. List of the Tourism prominent role in Uttarakhand. The draw of the Himalayas, the beauty and cool relief of hill stations and the wealth of Hindu religious pilgrimage sites are a part of the attraction.

CO 3. Explore the importance of religious places.

### **Unit 1 Geographical and Historical Background**

Geographical features, divisions, mountain ranges, rivers, main symbol of Uttarakhand Reason , climate, General introduction of History Garhwal and Kumaon region.

### **Unit 2 Social and Cultural Heritage**

Important caste and tribes, Main dances, Fairs and Festival, Handicrafts, Tradition, Main Cusin.

### **Unit 3 Spiritual Tourism in Uttarakhand**

Background of historical tourism, important places -Haridwar, Rishikesh, Jageshwar, Chardham in Uttarakhand, Panch Prayag, Hemkund, panch Badri ,panch kedar.

### **Unit 4 Natural Based Tourism**

Vedani and Dayara Bugyal, Roopkund, Nainital, Devtaryatal, Sahastra tal, Mussiore, Kosani, Ranikhet, Munasyari, ,Kotdwar, Valley of Flowers, Rajaji and Jim Corbett National Park.

### **Unit 5 Adventure Sports**

Trekking, Mountaineering, Skiing, River Rafting and Paragliding, Bungi Jumping - General Introduction.

### **Suggested Readings:**

- - Uttranchal 'the abode of gods'
- - Uttrakand ka smagra darshan – Savita Mohan.
- - Uttrakhand year book – 2010 –Lokesh Navbani
- - Uttranchal- Aitihashik avem Sanskritic Ayam- Uma Prashad Thapaliya
- Uttranchal ke Devalaya – Triloke Chandra Bhatt.
- Uttranchal me Paryatan naye chitize – Dr. Harimohan.

## **Yoga Health and Tourism (MTTM-103)**

### **Course Objectives:**

1. The course intent to upgrade the knowledge of the latest trends in tourism particularly the health tourism in the country.
2. Since health tourism constitute a niche market for the industry and the government as well, it becomes desirable for the students to get in touch with this new segment of tourism industry.
3. After studying this course, the student shall be able to define the trends, issues and challenges in the field of health tourism in India.
4. After reading this subject, students get the knowledge of health and wellness.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Classify the Health and wellness tourism paper can provide opportunities to students to learn new skills or knowledge related to nutrition, fitness, and other aspects of health and wellness.

CO 2. Interpret in enhancing self-awareness among the students by practically taking them in various health & wellness activities, as per the requirements and needs.

CO 3. Classify the importance of health and wellness of the country.

### **Unit 1**

Meaning of word 'Yoga', its definition, Aims & objects, Brief history of yoga, Introduction of Patanjali Yoga Sutra, Relevance of Yoga in relation to Tourism.

### **Unit II**

Health aspects of Yoga: Meaning of Health Yoga, its definition, Aims & objects, its brief history and significance of Hathyoga in Tourism, limbs of Hathyoga.

### **Unit III**

Role of Asanas, Pranayama & Mudra during Travelling. Importance of Yoga while in high Altitudes, Study of Depiction of Yogic love in the places of Pilgrimages.

### **UNIT – IV**

Health and Medical Tourism: Meaning, nature and scope Health and Medical tourism Product

Health and Medical Tourism markets at global level Advantages and disadvantages for India in Global Medical Tourism Market

### **UNIT – V**

Health and Medical Tourism in India Role of Private sector in health and medical tourism

Traditional Health Care system in India Government incentives for health and medical tourism in India

## **References**

1. Asana- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
2. Pranayama- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
3. Ghrand Samhita ----do----
4. Hath Pradipika ----do----
5. Ghrand Samhita-Swami Niranjananda Saraswati, Bihar School of Yoga, Mungher.  
Asana, Pranayama, Bandha and Mudra-: Swami Satyananda Paramhansa Bihar School of  
Yoga, Maugher
6. Smith, Melanie, & Puczko, Laszlo, Health and Wellness Tourism.
7. Conell, John, Medical Tourism.
8. Kumar, Medical Tourism in India (Management and Promotion)
9. Edlin, Gordon & Golanty, Eric, Health and Wellness.

## **Adventure Tourism (MTTM-104)**

### **Course Objectives:**

1. Memorize the concepts related to adventure tourism.
2. Explains the status of the adventure tourism market in India.
3. Illustrate the challenges, opportunities, and future prospects for adventure tourism in India.
4. Examine the various types of adventure sports in India
5. Evaluate the role of government and other stakeholders in adventure tourism.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Relate the adventure tourism.

CO 2. Explain this type of tourism tourists do some adventures activities like as skydiving, hill climbing, scuba diving for their pleasure and fun purposes.

CO 3. Demonstrate the practical & theoretical aspects of Adventure Tourism.

### **Unit –I: Introduction:-**

Definition, Nature and scope of Adventure tourism: Adventure motives through the ages and their contribution to inventions, explorations and discoveries.

Adventure in the present context, contemporary trends in Adventure tourism Geographical diversities and opportunities for A.T.in India. Potential and existing adventure tourism in different states. Planning and development perspective, major thrust areas, promotional steps taken by states and centers. Organization and institutions promoting Adventure Tourism in India.

### **Unit –II: Land based Adventure activities:-**

Mountaineering, Trekking, Rock climbing, skiing, skating; their necessary equipments, techniques and problems. Wildlife tourism: status of wildlife tourism, popular National parks and Wildlife sanctuaries.

### **Unit –III: Water based activities:-**

Water resources of India; rivers, sea and lakes. River reading, nature of white water, silent water and sea water. Rafting, Kayaking canoeing, yachting, water scooter, Hover craft. Surfing, SCUBA diving, under water activities, coastal activities. Places, organizations, equipments associated with above activities.

### **Unit-IV: Air based activities:-**

Air based activities, Atmosphere, seasons, wind pressure and wind movement in India. Hang gliding, Ballooning, Para jumping , Sky diving, Para sailing. Places, organizations and equipments associated with above activities.

**References:-**

1. Ahmad Aizaz : 'General Geography of India, NCERT, New Delhi
2. Goh Cheong long : An Economic Atlas of India, Oxford University
3. National Atlas of India, Govt. of India Publication, Calcutta
4. Atlas of World Oxford
5. Singh, R.L.(ed) India : A Regional Geography National Geographical Society of India (Varansi 1989)
6. Manorama Year Book
7. Indian Year book, Publication Division, Govt. of India, New Delhi
8. Aluwalia H.P.S. and Manfred Garner : Himalayas: A Practical Guide, Himalayan Books ( Delhi, 1985)
9. Bedi, Ramesh and Rajesh : Indian Wildlife, Brijbasi Printers ( New Delhi, 1989)
10. Bose, S.C. Geography of the Himalayas, National Book trust, India ( New Delhi,1976)
11. Chand Gian and Manohar Puri 'Trekking' International publisher India ( new Delhi,1989)
12. Gamma, Karl 'The Handbook of Skiing Pelham Books (London, 1985)
13. Lozawa, Tomoya : Trekking in the Himalayas, Allied published Pvt. Ltd., ( New Delhi, 1980)
14. Law, B.C. (ed) : Mountains and Rivers of India, Calcutta, 1968
15. Rowe, Ray 'White in Water Kayaking', Salamander Books (London, 1987)
16. Saharia, V.B. "Wildlife in India' Natraj Publisher (Dehradun, 1982)

## **General Viva-Voce (MTTM-105)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions studied in current semester.
2. The purpose is to study the destinations followed in different circuits.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will go for the general Viva Voce Examination. The curriculum of this exam is curriculum of MTTM 1<sup>st</sup> sem and the major tourist interest in India.**

The Viva exam and evaluation will jointly taken by the internal & external examiner.

## **Travel Agency & Tour Operation (MTTM-201)**

### **Course Objectives:**

1. The students will understand the conceptual meaning and differentiation between Travel agency and Tour operation. Further they will understand formalities and documentation needed to set up these units.
2. Organize the services being provided to the customer, such as transportation and accommodation.
3. Understand various skills necessary for travel agency and tour operation business
4. Understand various travel terminology.
5. Acquire knowledge on documentation in travel industry.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend the travel agencies can be defined as a sector that books, sells, and arranges travel, tour, and accommodation services provided by suppliers of the industry.
- CO 2. Interpret everything possible even with complicated dates.
- CO 3. Infer Some of primarily engaged in making travel arrangements and reservation services.
- CO 4. Outline the skills necessary to identify sales and marketing strategies for travel agencies

### **Unit - I : Travel Agency and Tour Operation business:**

Travel Agencies and Tour Operators- meaning, concept, types and importance Historical growth and development of travel agency and tour operation business. Linkages and integrations in travel agency and tour operation The future role of Travel intermediaries

### **Unit - II: Organizational structure and functions**

Organizational structure of travel agency and tour operator-main operational and managerial staff. Travel agency HR planning and job analysis of major positions Major functions of Travel agency and tour operators

### **Unit - III: How to Set Up a Travel Agency**

Procedure for approval of Travel Agents, Tour Operators by Department of Tourism, Government of India and IATA Ownership structure and revenue source of travel agency and tour operation fiscal and non-fiscal incentives available to travel agencies and tour operators business.

### **Unit - IV: Understanding the role of Government and other organizations in Travel Trade**

Role and contribution of Department of Tourism, Government of India, ITDC and State Government Travel Trade Associations and Organizations- Role and contribution of WTO, IATA, TAAI and IATO. Present business Trends and Future prospects of travel agencies and tour operators business.

**Unit - V: Case Studies**

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COX & KINGS

ORBIT

MAKEMYTRIP.COM

**Suggested Readings:**

Holloway, J. c., The Business of Tourism (1983), Mac Donald and Evans, Plymouth.

Syratt Gwenda, Manual of Travel Agency Practice, Butterworth Heinmann, London, 1995

Stevens Laurence, Guide to Starting and Operating Successful Travel Agency, Delmar Publishers Inc., New York. 1990

Gee, Chuck and Y. Makens, Professional Travel Agency Management, Prentice Hall, Nt.: York, 1990.

Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

Foster D.L. The Business Of Travel Agency Operations and Administration

## **Tourism Resource in India (MTTM-202)**

### **Course Objectives:**

1. The module gives information of countries tourist places of national and international importance and it helps students to know the background elements of tourism resource
2. To provide entertainment to tourists, organise tourism related activities such as cultural shows, fairs and festivals etc.
3. To take over and develop and manage places of tourist interest, parks, lakes, avenues, beaches and recreational places, sports etc.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Compare about the different Tourism resources of India that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. Go through the planning of tourists will often gain a greater respect for the lifestyle of the people living in the area they are visiting.

CO 3. Increase tourism that leads to local communities improving their skills and improving their social status.

### **Unit – I Introduction:**

Concept of resource, attraction & product in tourism, meaning & characteristics, Typology & nature of tourism resources. Nature & Scope to tourist places in India.

### **Unit- II Natural Resources:**

Study of wild life Parks, Sanctuaries & Tiger Reserves in India with case studies of Raja Ji National Park, Jim Corbett, Bharatpur Bird Sanctuary, Valley of Flowers & Gir National Park, Kaziranga National Park.

### **Unit-III Pilgrimage Destinations:**

**Hindu-** Char Dham Yatra, Haridwar, Khajuraho, Mahabalipuram, Tirupati, Madurai, Konark.

**Buddhist:** Lumbini, Bodhgaya, Sarnath, Kushinagar, Sanchi, Ajanta.

**Jain:** Mount Abu, Sharavanbelgola.

**Islamic:** Delhi, Agra, Fatehpur Sikri.

**Sikh:** Patna, Nanded, Golden Temple (Amritsar) Hemkund Sahib (Uttarakhand).

### **Unit- IV Socio-Cultural Resource:**

Socio cultural resources - Important fairs and festivals with case studies of Kumbha Mela, Dussehra, Onam, Puri Rath Yatra- & Chhath.

### **Unit - V: Hill Station & Coastal Destination:**

**Hill Station:** Study of Hill Station attractions and their environs with case studies of Mussoorie, Nainital, Shimla, Manali and Ooty.

**Beaches:** Beaches and Islands: Beaches in Goa, Kerala, Andaman & Nicobar Islands.

**Suggested Readings:**

- Gupta, SP, Lal, K, Bhattacharya, M. Cultural Tourism in India (DK Print 2002)
- Dixit, M and Sheela, C. Tourism Products (New Royal Book, 2001)
- Oki Morihiro, Fairs and Festivals, World Friendship Association, Tokyo, 1988.
- Mitra, Devla, Buddhist Architecture, Calcutta.
- Michell, George, Monuments of India, Vol. 1. London.
- Tourists Resource of India- Ram Acharya.
- Tourists Resources of India- Ratandeep Singh.
- Tourists Resources of India-Jagmohan Negi.
- Himachal Pradesh, The Land, the people by S.S. Negi

## **Transport Management (MTTM-203)**

### **Course Objectives:**

1. Transport is a vital component of the travel and tourism industry.
2. It becomes imperative for the students of tourism to learn about different modes of transportation and modern world.
3. It is the most important accessibility in terms of exploring world.
4. Promotes social cohesion, accelerate economic prosperity and insure security and territorial integrity.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Demonstrate Transport helps people to move from tourist generating area to tourist destination area.
- CO 2. Elaborate different modes of transport like road transport, rail transport, water transport and air transport.
- CO 3. Get the knowledge about transport management in tourism.
- CO 4. Shape cities, promoting community and enhance quality of tourism

### **Unit-I: Transport and Tourism**

Transportation as dynamic & visual manifestation of tourism. History of different modes of transportation. Landmarks in the development of transport sector and factors affecting the development of different modes of transport.

### **Unit-II: Air Transport**

Airlines & tourism: history of airlines' in India. Role and contribution of air India, Indian Airlines, private airlines & helicopter services. Infrastructural basis of airlines in India. Role of airlines in tourism promotion: recent policies regarding airlines, problems of airlines business.

### **Unit-III: Surface Transport**

Surface transport & tourism: Growth and development of surface transport in India. Importance of surface transportation. Infrastructural basis for surface transport. Coaches & car rental system in India. Problems faced by surface transport sector. Role and contribution of NHAI.

### **Unit-IV: Railway Transport**

Railway & tourism: history & present status of Indian railway. Zonal distribution, infrastructural basis of Indian Railway. Role of Indian railway in tourism promotion. Special trains & packages for tourists. Problems faced by Indian railway.

### **Unit-V: Water Transport**

Water transport: history & present status of water transport, Waterways of India. Types of water transport: Ocean liners, Cruise liners, ferries, hovercraft, river and canal boats and fly cruise.

**References:**

1. Ahmad Aizaz: ' General Geography of India, NCERT, New Delhi.
2. National Atlas of India, Govt. of India, Publication Calcutta.
3. Atlas of World Oxford.
4. Singh, R.L.(ed) India: A Regional Geography National Geographical Society of India (Varanasi 1989)
5. India year book, Publication Division, Govt. of India, New Delhi.
6. Aggarwal Surinder : 'Travel Agency Management', communication India, New Delhi.
7. Hannel Christine, Robert Harshman and Grahan Draper- Travel and Tourism A world regional geography , john Wiley and Sons, New York
8. Hurst, Elist, 'Transporation Geography' McGraw Hill, New York
9. OAG Airlines time table
10. OAG Cruise lines time table
11. Indian Railway Time table

## Computer Applications in Tourism (MTTM-204)

### **Course Objectives:**

1. This module is to inform the students about the role of Computer Information systems in travel trade.
2. The prescribed unit enhance the skills of students especially when they will be attached for practical.
3. This course provides the knowledge of basics computers.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Demonstrate the term Application refers to Software which is a set of instructions or code written in a program for executing a task or an operation in a Computer.

CO 2. Extent applications play a vital role in a Computer as it is an end-user program that enables the users to do many things in a system.

CO 3. Explain the basic rules of computer science.

### **UNIT-I: Computer System**

Introduction to Computers, Characteristics of computers, Applications of computers, Different units of computer, Component of computers, Input / Output and auxiliary storage Devices. CD/DVD ROM, RAM, ROM, Computer application In Tourism.

### **UNIT-II : Windows & MS Office**

Introduction to windows MS –Office: MS Word, MS Excel, MS Power Point.

### **UNIT – III :Network and Communication**

Networking: Concept, User, Types, Devices Used, LAN, MAN, WAN.

Basic Communication Components: Modems, Routers, Client, Server, Communication processors, Host Computers, Types of Transmission.

### **UNIT – IV: Internet**

Internet: Concept, uses, components, browsing, Search Engines, E-mail: Opening Account. Internet and Tourism. Information and Communication Technology (ICT) ICT: need definition, uses for tourism, and future role. ICT in tourism sector, Strategic and tactical role of ICTs for Tourism.

### **UNIT – V: Hotel & Travel Software:**

What is CRS, How it functions. CRS for Rail Transport, Hotel Bookings, Airlines: Different packages used: Amadeus, Galileo, Sabre etc.

**REFERENCES:**

1. Leon Alexis and Mathews Leon: Introduction to Computers, Vikas Publishing House Pvt Ltd. New Delhi
2. Bhatnagar S C and Ramani K V: Computers and information management. A Primer for Practicing Managers, New Delhi, Prentice Hall of India Pvt. Ltd.
3. Bansundara, S: Computer Today.
4. Goel Ritender and D N Kakkar: Computer Application in Management, New Age International Publishers, New Delhi.
5. Jaggi V P and Jain Sushma: Computers for Every one, New Delhi, Academic India Publishers.
6. Simpson Alan: Your First Computers (2nd Edition) New Delhi-BPB Publications.
7. Saxena S: and Prabhpreet Chopra: Cumputer Applications in Management, Vikas Publishing house Pvt. Ltd. New Delhi.
8. Saxena S: MS Office2000 for Everyone Vikas Publishing house Pvt. Ltd. New Delhi.
9. Internet Sites and resources.

## **Educational Tour MTTM-205**

### **Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

### **COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

### **Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

## **Culture Heritage and Tourism (MTTM-301)**

### **Course objectives**

- 1.This module is important to study because India is rich in heritage properties and its maintenance is necessary.
- 2.This will help to understand the nature of heritage properties and conservation.
- 3.prevention and promotion of tribes and communities of the state.
- 4.It helps in studying traditional culture and preserve with modernity.

**Course Outcomes:** After studying this subject, students will able to

CO 1. Contrast of sustainable tourism is defined as “tourism that respects both local people and the travels.

CO 2. Translate the cultural heritage and the environment” It seeks to provide people with an exciting and knowledgeable fair.

CO 3. Supports culture and helps renewing tourism.

CO 4. Relate the strategies of many organizations regarding cultural heritage

### **Unit 1: Understanding Culture & Tourism**

Concept and Fundamentals of Indian Culture.

Culture – Tourism Relationship; Socio-Cultural Impacts of Tourism.

Spiritual basis of Indian culture

### **Unit-II: UNESCO Heritage Sites**

What is Heritage? Meaning and concept. Criteria for selection as heritage sites, monuments and zone by UNESCO (WHC). Types of heritage property. World famous heritage sites and monument in India and abroad.

### **Unit - III: Living Culture and Performing Art of India**

Major Fairs and festivals of India

Classical dances and Music of India

Indian handicrafts

### **Unit – IV: Heritage Management in India**

Heritage Management, objectives and strategies, Protection, Conservation and Preservation, Heritage Marketing, Destination development.

National and International Organisations engaged in Heritage Management (UNESCO, ICOMOS, ASI, INTACH and NGOs),

### **Unit – V: Museums**

Museums, Concept and classification. (National Museum, New Delhi; Bharat Kala Bhawan, Varanasi; Archaeological Museum, Sarnath, etc.), Heritage Hotels.

**Suggested Readings:**

- Allchin, B., Allchin, F.R. et al. (1989) Conservation of Indian Heritage, Cosmo Publishers, New Delhi.
- New Inskeep, Edward, Tourism Planning: An Integrated and Sustainable Development Approach (1991) VNR, New York.
- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- UNESCO-IUCN (1992) Eds. Masterworks of Man and Nature, Pantoga, Australia.
- IATA Special Mail Manual.

## Airlines Ticketing (MTTM-302)

### **Course Objectives:**

1. This module is intended to prepare the students to enter a travel agency where he will be required to be well-versed with the modalities of air ticketing and the study of air transportation industry.
2. Certificated air carriers, the freight and passenger business, general aviation.
3. Economic impact of aviation, understanding of competition and government regulations, Ownership of airlines.
4. The cyclical nature of the airline business. Distribution of world passenger traffic, etc

**Course Outcomes:** After studying this paper, students will able to

CO 1. Interpret the Airline tickets are important documents that confirm a passenger has a seat on a flight.

CO 2. Summarize the ticket includes important information about the passenger and the flight that they will take.

CO 3. Infer the ticket is exchanged for a boarding pass during the check-in process, and this gives the passengers permission to board the plane from studying this subject.

CO 4. Compare the global world class aircraft manufactures and airport providers.

**Unit-I** Aviation Geography: IATA areas, sub areas, sub regions, Longitude, Latitude, time calculation: GMT variation, concept of standard time and daylight saving time, calculator of elapsed time, flying time and ground time, Global Indicators, Aviation Organisation: IATA & ICAO.

**Unit II** Air Transportation: Concept of Airlines, Domestic and international airlines in India, Private sector and government airlines, types of aircraft, the hub and spoke system, interline agreements, role of DGCA, critical remarks on air transport industry of India, policies, practices.

**Unit III** Understanding of various codes: ABC codes, looking up schedules, flight connections, transfer connections, looking TIM:- Passport, visa, special permits, customs formalities and currency regulations, health regulations and Airport tax, passenger needing special attention. Minimum connecting time, general rules of currency conversion and rounding up of fare, different modes of payments e.g. cash, credit card etc.

**Unit IV** Introduction to fare construction:- Definition and understanding of published fares, various types, normal, child fare, one way, return, excursion etc; commissions, discounts, MCO, PTA, HIP, BHC, looking up MPM, calculating TPM, determining the fare breakup point, surcharges, excess mileage table. Ticketing-Insurance of tickets, Normal, one way, return, round the world, excursion, circle trip, child, etc. cancellation, reissue of tickets.

**Unit V** Documentation: Air way bill, charges correction advice, irregularity report, cargo manifesto, cargo transfer Manifesto, documents concerning postal mails and diplomatic mails. Shippers declaration for dangerous goods. Handling- Cargo capacity of Air and Ships. Cargo needing special attention, introduction to dangerous goods regulations. Some important Cargo companies.

**Suggested Readings:**

- Gupta S.K : International Airfare & Ticketing Methods & Technique UDH Publishers & Distributors (P) Ltd. New Delhi.
- Sinha P.C: Encyclopaedia of Tourism Management
- Jagmohan Negi: Travel Agency & Tour Operation Concepts & principle
- Galileo systems
- ABC World wide Airways Guide (Red & Blue)
- Air Tariff Book 1, Worldwide Fares.
- Air Tariff Book 1, Worldwide Rules, IT Fares etc.
- Air Tariff Book 1, World Wide Maximum Permitted Mileage
- Travel Information Manual ( TIM )
- IATA Ticketing Hand Book

## **Hotel & Resort Management (MTTM-303)**

### **Course Objectives:**

1. This Module is prescribed to appraise students about the important departments of classified hotel.
2. To teach various aspects related to accommodation Industry.
3. To determine various departments according to guests needs and safety.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend The Hotel and Resort Management course is designed for students with a career interest in the lodging and resort industries.
- CO 2. Outline these fields represent a wide range of businesses, from the small country inn or bed and breakfast to multinational chains of hotels and resorts.
- CO 3. Interpret the students regarding different accommodations with their functions.

**Unit – I    Origin and Expansion:** Conversion of Tavern; Inns, Chalets and places into hotels, creation of private, Public and multinational hotel chains in India. Regional, National and International Hotel Associations and their operation.

**Unit – II    Departments of hotel:** Front Office, House Keeping, Food and Beverage, Personnel and Accounts. Role and functions of different departments.

**Unit – III    Type and forms of Hotels:** Classification of hotel on basis of location, size, clientele and range of service, hotel plan, type of room etc.  
Star classification- Criteria and Procedure adopted in India.  
Resort Properties, Heritage Hotels- concept and emerging dimensions.

**Unit – IV    Major Hotel Chain in India:**

Taj Group of Hotels  
Oberoi Hotels & Resorts  
Lalit Group of Hotels  
Ashok Group of Hotels

**Unit – V    Resort Planning:** Preliminary Consideration in Resort Planning and Development and Phases of Resort Planning and Development. Trends and factors in Developed Tourist Markets leading to growth of Resort Concept. Factors affecting rate. Basic Elements of a Resort Complex: Lodging facilities, landscaping, Dining and drinking facilities, Family Oriented Services, shops and services, Entertainment; Use of Community Resources.

**Suggested Readings:**

- Selected case studies from sterling. Delmia, Toshali and R.C.I. International will be managed from concerned organisations.
- Andrews, Sudhir : 1985, Hotel Front Office, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : Hotel House Keeping, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : (1991),Food and Beverage Service,Tata M C Graw–Hill, New Delhi.

## Research Methodology (MTTM-304)

### Course Objectives:

1. The main objective of this course is to introduce the basic concepts in research methodology related to Management & Tourism.
2. This course addresses the issues inherent in selecting a research problem and discuss the techniques and tools to be employed in completing a research project.
3. This will also enable the students to prepare report writing and framing Research proposals.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. contrast and comprehend the basics in research methodology and applying them in research/ project work.

CO 2. take up and implement a research project/ study.

CO 3. develop skills in qualitative and quantitative data analysis and presentation used in Research activities.

**Unit-I: Research:** meaning, characteristics, types and relevance of research; trend and challenges with special reference to tourism and hotel business. Research process. Identification and formulation of research problem. **Research methodology:** meaning and procedural guidelines. **Literature review** – Meaning, Importance and sources of literature

**Unit-II: Research design-** Meaning of research design; need for research design; features of a good Research design; different research designs. **Sampling design:** the concept of sampling; Aims of sampling, census versus sample survey; steps in sampling design; characteristics of a good sample design; criteria for selecting a sampling procedure; sampling techniques/methods: probability sampling and non-probability sampling.

**Unit-III: Measurement and scaling techniques-** Measurement in research; sources of Error in measurement; test of sound measurement; technique of developing measurement tools; measurement scales; meaning of scaling; bases of scales- classification, importance; scaling techniques-rating and ranking; types of scales.

**Unit-IV: Collection of Data-** nature, sources of data; methods of data collection. **Processing of data:** Classification and Tabulation, Interpretation of data.

**Unit-V: Report writing-** meaning functions; types of research report; significance of report writing report.

### Suggested Reading:

1. Research Methodology (Pearson Publication) by Ranjit Kumar
2. Management Research Methodology (Pearson Publication) by Krishna swamy, Sivakumar & Mathirajan
3. Business Research Methods (Tata McGraw Hill Publication) by Cooper & Schindler
4. Research Methodology (New Age Publishers) by C.R. Kothari
5. Methods in Social Research (Surjeet Publications) by William J. Goode & Paul K. Hatt

## **Project Report & Presentation (MTTM-305)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will have to submit a Project Report for Via-Voce of several places of tourist interest in India.**

The students will go for Viva Voce Examination which shall be evaluated jointly by the internal & external examiner.

## **Major Destinations of World (MTTM-401)**

### **Course Objectives:**

1. Though there are so many tourist destinations in the world, there are few most famous among them. The primary objective is to explore the major popular destinations of the world.
2. It is worthwhile to know the tourist products in the lights of their main attractions, existing infrastructure facilities, linkages etc.
3. To study the destinations of whole world which is changing in to a global village and outbound tourism from India is growing at a very fast pace.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Illustrate the different tropical region, natural sites, historical heritage, and accommodation with cultural hospitality.

CO 2. Compare world that tells about major destination business around the world.

CO 3. studies about destination under UNESCO.

**Unit-I Main Destination of Asia and Pacific Region:** - Tokyo, Singapore, Dubai, Thailand, Malaysia.

**Unit-II Main Destination of Europe:** - London, Paris, Madrid, Athens.

**Unit-III Main Destinations of Africa:** - Cairo, Cape Town and Johannes berg, Mauritius, Nairobi.

**Unit -IV Main Destinations of Americas:** - New York, Los Angles, Montreal, Rio de Janeiro, San Francisco.

**Unit -V Other Destinations:** - Sydney, Fiji, Wellington, Buenos Aires.

### **References:**

- Ahmad, Aizaz: General Geography of India, NCERT, New Delhi
- Goh Cheong Long: An Economics Atlas of India, Oxford University.
- World Atlas , Oxford press.
- Singh, R.L. (ed) India: A Regional Geography National Geographical Society of India, Varanasi, 1989.
- □Manorama Year Book 2012
- □Indian Year Book 2012, Publication Division, Govt. of India, New Delhi
- Tourism Planner.
- Tour Brochures of related places.
- Lonely Planet-India and related destinations.
- Kumar Ravi Bhushan: Coastal Tourism and Environment, AOH Publishing Corporation, New Delhi.
- Websites of related destinations.

## **Tour Packaging Management (MTTM-402)**

### **Course Objectives:**

1. In this course tourism students are taught the details of tour packages, planning, framing itineraries and costing.
2. To gain knowledge about tours escorting and
3. To study and examine travel packages of known travel companies, so that the students can learn to prepare and run travel packages independently.
4. The students will set practical knowledge relating to travel and tour operation.

**Course Outcomes:** After studying this paper, students will able to

CO 1: Gain the operational knowledge of tour packaging business.

CO2 Acquire the skill of formulation of tour package.

CO3 Acquire the skill of tour costing and pricing techniques of various types of tour packages.

CO4 Apply the practical knowledge in making various real tour packages

**Unit 1** Meaning, definition, development, types components and significance of tour packages with relation to tourists, destinations and tour companies, role and input of public and private sector tourism organizations in promotion of tour packaging business.

**Unit II** Tour Formulation – Influencing factors, stages involved in tour formulation initial research (destination and market), itinerary development, negotiations, confidential tariff, costing & pricing marketing strategies. Brochure designing, Printing and distribution.

**Unit III** Itinerary preparation- meaning, types, do's and Don'ts of itinerary preparation. Limitations and constraints., Tour costing and pricing-cost concept, types of costs. Tour cost sheet. Procedure of costing; group tour, independent tours, and business tours pricing in tour operation Industry-Tour pricing strategies in India. Pricing of deferent tour packages.

**Unit IV** Detailed study of passport-definition, how to get the passport form, essential documents, photographs & fee for passport, type of passport. Visa- meaning, type of visa issued by India, necessary documents to get visa. Health regulations. Customs and currency regulations, baggage rules and insurance.

**Unit V** Tourists activities based on Mountains, Deserts, Forests and Wildlife, White Water, Marinas, Aero sport etc. and cultural and pilgrimage i.e. place of religions, historical archaeological, architectural and monumental significance, fairs and festivals, Conference and conventions and special events, Case studies of Tour Packages offered by government & private sectors and Thomas Cook and SITA etc.

**Suggested Readings**

1. Marketing of Travel & Tourism by Middleton.
2. International Encyclopaedia of Tourism Management by P.C. Sinha.
3. Dynamics of Tourism by R.N. Kaul.
4. Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

## Tourism Marketing (MTTM-403)

### Course Objectives:

1. The course includes the operation techniques of tourism marketing. The students are expected to attain a basic knowledge of marketing principals.
2. Study to suitability of alternative promotional approaches to and formulate marketing plans and promotional approaches to tourism and other related organizations.
3. It helps the learner to develop an understanding of the nature of different tourism products.
4. Provide insights into the process of developing and managing various tourism products enhance the knowledge of students about various tourism products of India.

**Course Outcomes:** By studying this course, students able to

CO 1. Demonstrate about tourism marketing is the collective name given to the various marketing strategies used by businesses within the tourism industry.

CO 2. Plan the hotels, understand and can identify tourism products that are associated with Marketing.

CO 3. Explain the central, peripheral services and public services in tourism product.

CO 4. Contrast the role of Indian architectural heritage in the tourism industry.

**Unit – I Marketing:** Core concepts in marketing; Needs, Wants, Demands, Products markets. Marketing management philosophies-Production, Product, Selling, Marketing and societal perspectives. Economic importance of marketing.

**Unit –II Analysis and selection of market:** Measuring and forecasting tourism demand; Forecasting methods, Managing capacity and demand. Market segmentation and positioning (STP)

**Unit– III Marketing Strategies:** Developing marketing environment, Consumer buying behaviour, Competitive differentiation and competitive marketing strategies. New product development. product life cycle, Customer satisfaction and related strategies in internal and' external marketing; Interactive and relationship marketing.

**Unit –IV Planning marketing programmes :** Product and product strategies; Product line, Product mix Branding and packaging. Pricing considerations. Approaches and strategies. Distribution channels and strategies.

**Unit –V Tourism Marketing :** Service characteristics of tourism. Unique features of tourist demand and tourism product, Tourism marketing mix. Marketing of Tourism. Services : Marketing of Airlines, Hotel, Resort, Travel Agencies and other tourism related services-Challenges and strategies..

**Suggested readings:**

- Kotler, Philip : Marketing Management & Hospitality and Tourism Marketing
- Sinha, P.C : Tourism marketing
- Vearne, Morrison Alison: Hospitality marketing.
- Crough, Marketing Research for Managers.
- Singh Raghbir, Marketing and Consumer Behaviour. Patel, S.G., Modern Market Research, Himalaya Publishing

## **Tourism Policy & Planning (MTTM-404)**

### **Course Objectives:**

- 1.The module will expose the students about the Tourism policy of India and of a few tourism states of the country.
- 2.To create jobs and entrepreneurial opportunities in the tourism sector and ensure the supply of a skilled labour pool.
- 3.To promote the destination trying to improve internal and external tourism demand.
4. To achieve international tourism growth and increase foreign currency income to support the balance of payments.

**Course Outcomes:** After studying this paper, students will able to

CO 1. To promote sustainable, responsible and inclusive tourism.

CO 2. Relate the policy and planning aims to promote sustainable tourism by minimizing the negative impact of tourism on social, environmental and economic aspects and maximizing the positive impact.

CO 3. outline the tourists to ensure about the propaganda tourism policy and planning.

**Unit – I Tourism Policy & Planning Framework:** Tourism Policy- meaning ,relevance & salient feature. Tourism Planning- meaning, levels & types of tourism planning.

**Unit – II Tourism Policy:** Study of National Tourism Policy 1982 and 2002, National Action Plan on Tourism, 1992: Special Tourism Area Development Programme. The concept of National Tourism Board, National Committee on Tourism, Case study of tourism policies of a few states (Uttar Pradesh, Rajasthan, Kerala, Madhya Pradesh,). Investment opportunities and government policy for investment in hotel/tourism industry. Sources of funding.

**Unit – III Destination Planning:** Destination Mix- concept and components. Step and stage in Destination Planning. Tourism Project Feasibility Study.

**Unit – IV Approaches to Tourism Planning:** Eco-centric or environment approach of tourism planning. Community approach of tourism planning. Concept of Tourism Complex Planning & its relevance in India context.

**Unit – V Tourism Policy & Planning:** Case Studies: Place of Tourism in India's Five Year Plan. Tourism Policy of india and contribution of NCT to this effect. Organizational structure of tourism in India at Central and State Level.

### **Suggested Readings:**

- New Inskeep, Edward, Tourism Planning : An Integrated and Sustainable Development Approach ( 1991) VNR, New York.

- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- Dept. of Tourism, GOI Investment Opportunities in Tourism (Brochure).
- Sharma, J. K. (2000), Tourism Development. Design for ecological sustainability, Kaniska Publication, New Delhi.

## **On-Job Training & Report (MTTM-405)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources from the industry experts based on primary and/or secondary analysis.
2. To collect the data available from outside sources such as stake holders and tourists can help the students in fulfilling the project's operations.
3. Connecting what the student has undergone till above semesters.
4. To build a harmony of theoretical and practical knowledge with actual work experience, in order to compliment field specific skills and learn new ones.

**Course Outcomes:** After undergone this training, students will able to

- CO 1. Analyse the current obstacles that are occurred in Tourism/Travel related business also they'll able to bring out certain solutions of the problem.
- CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.
- CO 3. Develop skills in the application of theory to practical work situations.
- CO 4. Develop skills and techniques directly applicable to their careers.
- CO 5. Internships will increase a student's sense of responsibility and good work habits.

### **Course Details:**

The Training is based upon the 45 days practical training with any recognised Travel Agency/Tour Operating Company/Hotel. The Department will circulate the placement brochure / letter to various organisations prior to the joining in the same. During the organisational work (training period), each student is required to prepare practical report of day to day activities to be submitted for evaluation.

The students will have to submit the Job Training Report after completion of their Job Training before Viva-voce examination.

### **Viva – Voce**

The Viva-Voce examination will be conducted on the basis of the Tour Package Prepared, Tour and Job Training Reports and other theory papers taught.

# **ORDINANCE AND COURSE CURRICULUM FOR**

**P.G. DIPLOMA YOGA HEALTH & CULTURAL TOURISM**

**ONE YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

[www.universityofpatanjali.com](http://www.universityofpatanjali.com)

**UNIVERSITY OF PATANJALI, HARIDWAR**  
**Course Syllabus**

**PGD (YH&CT) Semester-I**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-101	Fundamentals of Yoga	70	30	100
YH-102	Principles of Hath Yoga	70	30	100
YH-103	Tourism Theory and Practice	70	30	100
YH -104	Hospitality Management	70	30	100
YH-105	Yoga Practicum	70	30	100
YH -106	Project Report (Tourism)	100	-	100
YH CE 01	Communicative English (Non Credit)	70	30	100

**PGD (YH&CT) Semester-II**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-201	Patanjal Yoga Darshan	70	30	100
YH-202	Yoga Therapy	70	30	100
YH-203	Cultural Tourism Resources	70	30	100
YH -204	Itinerary Planning, Marketing, Tour Packaging and Costing	70	30	100
YH-205	Yoga Practicum	70	30	100
YH -206	Educational Tour	100	-	100
YH CE 02	Communicative English (Non Credit)	70	30	100

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-101)**  
**FUNDAMENTALS OF YOGA**

**Course Objectives:**

1. The main objective of this course is to attain higher level of consciousness and mental hygiene.
2. To possess emotional stability and integrate moral values.
3. To enable the student to have good physical and mental health.
4. To prepare students for spiritual journey and to become healthier.

**Course Outcomes:** After studying this course, students will be able to

CO 1. Demonstrate basic skills associated with yoga activities including strength and flexibility, balance and coordination.

CO 2. Demonstrate the ability to perform yoga movements in various combinations and forms.

CO 3. Explain and apply the knowledge of basic sequencing, and effective group management.

**Unit-1: General Introduction to Yoga**

Origin of Yoga, Psychological basis for origin of Yoga, History and development of Yoga (Vedic period, Darshan period, Commentary period, Bhakti Yoga and Hatha Yoga period, Modern period), Etymological meaning and definition of Yoga, Purpose of yoga, Current misconceptions regarding yoga, Major principles of yoga, Yoga practices for healthy life, Importance of yoga in present age.

**Unit - 2: Basis of Yoga and Tradition of Yoga**

General introduction of Vedas, Upanishads and Ayurveda in yogic context, General introduction of Samkhya, Yoga and Vedanta philosophy (in yogic context), General introduction of Bhagavadgita (in yogic context), General introduction of Puranas (in yogic context), Yoga in Yog Vashishtha and Narada Bhakti Sutra, Brief Introduction to Yoga in Jain Philosophy and Buddhist Philosophy, Bhakti Yoga of Medieval Saints (Kabir, Nanak and Sufism)

**Unit - 3: Basis of Yoga and Tradition of Yoga - II**

General introduction of Tantra and its currents (Shaiva, Shakta, Vaishnava, Buddhist Tantra), Concept of Shiva and Shakti, Yoga in Shaivite and Shakta Tantras, Concept of Nadi and Prana, Kundalini, Kundalini Shakti and Shatchakra Sadhana, Impact of Tantra in Hatha Yoga Tradition and Sadhana.

## **Unit - 4: Major Streams of Yoga**

Concepts of major streams of yoga and introduction of their limbs with the effects - Gyan Yoga, Bhakti Yoga, Karma Yoga, Ashtanga Yoga, Kriya Yoga, Hatha Yoga and Mantra Yoga

## **Unit - 5: Introduction to Renowned Yogis**

Introduction (life & works) of the great yogis of India - Maharishi Patanjali, Maharishi Vyas, Maharishi Kapil Muni, Adi Shankaracharya, Maharishi Dayanand Saraswati, Swami Vivekananda, Maharishi Arvind, Swami Kuvalayananda, Maharishi Raman, Yogarishi Swami Ramdev

### **Prescribed text book**

1. योगदर्शनम्- स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
2. दर्शनप्रवेश- दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
3. योगकेमूलभूतसिद्धांत - आचार्यबालकृष्णजी. दिव्यप्रकाशन, पतंजलियोगपीठ.हरिद्वार
4. गीतारहस्य (निर्धारितपाठ्यांश)- लोकमान्यतिलक
5. भारतकेमहानयोगी- विश्वनाथमुखर्जी
6. तंत्रदर्शन - स्वामीनिरंजनानंदपरमहंस - पंचदशनामअलखबाड़ा, देवघर, बिहार
7. Sharma, Chandradhar: A Critical Survey of Indian Philosophy. Motilal Banarasi Das, Delhi, 2013

### **BOOKS FOR REFERENCE:**

1. Agarwal MM: Six systems of Indian Philosophy, Chowkhambha Vidya Bhawan, Varanai, 2010
2. Swami Bhuteshananda: Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
3. Hiriyanna M.: Outlines of Indian Philosophy, Motilal Banarsidas, Delhi, 2009
4. Bhat, Krishnak.: The Power of Yoga: Suyoga Publications Mangalore, 2006
5. Swami Prabhavananda: Spiritual Heritage of India (English). Sri Ramkrishna Math, Madras, 2004
6. Swami Vivekananda: Jnana Yoga, Bhakti Yoga, Karma Yoga, Raja Yoga. Advaita Ashrama, Calcutta, 2000
7. Pandit, M.P.: Introduction to Upanishads: Theosophical Society of India, Adyar, Madras, 1976

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-102)**  
**Principles of Hath Yoga**

**Course Objectives:**

1. To Maintain a youthful body, develop physical and psychic powers, awakening the potential energy and finally attaining enlightenment.
2. To build asanas related Hatha yoga are practiced to bring health and energy to body and mind by opening the nadis.
3. It includes physical techniques to preserve and channel the vital force or energy.

**Course Outcomes:** After studying this course, students will able to

CO 1. Go through the mastery of the prana, or energy of the body, we can then easily master the control of the mind and obtain success.

CO 2. Gain self-control and self-discipline and an energetic body with the help of hath yoga.

CO 3. Get strengthen and purify physical body and cultivate prana and activate kundalini.

**Unit-1: General Introduction to Hatha Yoga**

Hatha Yoga - Meaning, Definition, Origin, Tradition and Purpose. Prevailing misconceptions regarding Hatha Yoga. Helping and obstructing elements of Hatha Yoga. The Hatha Yogic practice described in Hathayoga pradipika. Concept of Math, Manuals for the practitioner of Hatha Yoga, Concept of Mitahar, Pathya & Apathya. Tradition of Hatha Yoga. A brief introduction and contribution of the major yogis of the Nath Yoga tradition. Relations in Hatha Yoga and Raja Yoga.

**Unit-2: Practices of Hatha Yoga - Purification and Asanas**

Introduction to purification practices - Purification actions described in Hatha Yoga Pradipika and Gherand Samhita and their method, benefits and precautions. The role of purification practices in yoga sadhana and the importance of purification practices in modern life. Yogasana: Definition, characteristics and importance in yoga practice. Method, benefits, precautions and importance of asanas in Hatha Yoga Pradipika and Gherand Samhita.

**Unit-3: Practices of Hatha Yoga - Pranayama, Bandha and Mudras**

*Pranayama* : Introduction. Method of Proper Respiration, Yogic Deep Breathing. Concept of Inhale (*Purak*), Retention (*Kumbhak*) and Exhale (*Rechak*). Prana, types of prana and sub-

prana. Importance of Pranayama in *Hatha Yoga Sadhana*. Method and importance of *Nadishodhana* Pranayama. Preparation for Pranayama. Method, benefits and precautions of Pranayamas in *Hatha Yoga Pradipika* and *Gherand Samhita*. Signs of *Hatha siddhi* (success in hatha yoga). Bandha :introduction, the importance of bandha-triad in yoga sadhana. Main *mudras* in *Hatha Yoga Pradipika* and *Gherand Samhita* - their methods, benefits and precautions.

#### **Unit-4: Practices of Hatha Yoga - *Pratyahar, Nadanusandhana and Swarodaya Gyan***

*Pratyahara, Dharna and Dhyana* in *Gherand Samhita*, their methods, benefits and precautions. *Samadhi*, signs of *samadhi* in *Hatha Yoga Pradipika*. *Nāda*, the four stages of *Nadānusandhana* and their accomplishments (*siddhis*). Concept of *Swara*, the importance of *Swarodaya Gyan* in *Yoga Sadhana* (with special reference to *Gyan Swarodaya* and *Shiva Swarodaya*).

#### **Unit-5: Introduction and Importance of Major Texts of Hatha Yoga**

Introduction, Purpose and Importance of major texts of Hatha Yoga: *Siddha- Siddhantha Paddhati*, *Goraksha Samhita*, *Shiva Samhita*, *Hatha Yoga Pradipika*, *Gherand Samhita*. *Hatha Ratnavali*: Main applications of hatha yogic activities- preparation of *Raja Yoga Practice*, achieving holistic health, prevention of diseases, rejuvenation, healing and slow aging.

#### **Prescribed text book**

1. हठयोगप्रदीपिका - कैवल्यधाम, लोनावला
2. घेरंडसंहिता - कैवल्यधाम, लोनावला
3. गोरक्षसंहिता - डॉ. चमनलालगौतम (1985)
4. प्राणायामरहस्य - स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
5. Research Publication, P.R.I. Patanjali Yogpeeth

#### **BOOKS FOR REFERENCE:**

1. Woodroffe, Sir John: *The serpent power*, Ganesh & Company, Madras, 2000
2. Woods, J. H.: *The Yoga system of Patanjali*, M.L.B.D., Delhi, 1988
3. Swami Vivekananda: *Rajayoga*, Advaita Ashram, Culcutta, 2000
4. Burley, Mikel: *Hatha Yoga, its' Context Theory and Practice* (M.L.B.D. Delhi, 2000)
5. Burnier, Radha: *Hathayoga Pradipika of Svatmarama*, The Adyar Library publications, Chennai

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-103)**

**TOURISM THEORY AND PRACTICE**

**Course Objectives:**

1. To deal with various aspects of sustainable tourism, ecotourism and responsible tourism.
2. To deal with all the fundamental aspects of tourism that are to be learnt by students of tourism, air transport, travel and hospitality disciplines.
3. To give an insight into the concept of tourism from different perspectives.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Gather various types of tourism aspects such as sustainable tourism etc.
- CO 2. Explain fundamental aspects of tourism such as air transport, tourism disciplines etc.
- CO 3. Classify full understanding of the challenges, assumptions, solutions and indicators for tourism.

**Unit - I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product and concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components

**Unit - II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

**Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

**Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

**Unit- V Tourism Organization:-**

Origin, location, and functions of WTO / UNWTO, IATA, UFTAA, ASTA, PATA, TAAL, ITDC.

**Suggested Readings:**

Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.

Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.

Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.

Mill, R.C., (1990), Tourism: The International Business, Prentice Hall, New Jersey.

Bhatia, A.K., - International Tourism

Seth, P.N., (1999) Successful Tourism Management (Vol 1 &2)

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-104)**  
**HOSPITALITY MANAGEMENT**

**Course Objectives:**

1. To appraise students about the important departments of a hotel.
2. To teach various aspects related to accommodation Industry.
3. To provide training, skill development and education, hospitality, tourism and entertainment industries.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Analyze information and make decisions using critical thinking and problem solving skills.
- CO 2. Describe and apply the fundamental principles of leadership and effective communication skills.
- CO 3. Evaluate diversity and ethical considerations relevant to the hospitality industry.

**Unit-I: Hospitality: Meaning, Nature and Typologies**

Defining Hospitality: Nature and its Meaning.

Age old Institution of Hospitality with the Spirit of 'Atithi Devo Bhav' in India and its present status.

Typology of Accommodation, Origin and growth of Hostel industry with special Reference to India.

**Unit-II: Organization and Functions of Various Department in Hotels.**

Front Office, Food Production, F& B Service, House Keeping, Back office and other Ancillary Departments.

**Unit-III: Type and Forms of Hotels**

Classification of Hotel on Basis of Location, Size, Clientele and Range of Service etc

Star Classification - Criteria and Procedure Adopted in India.

Resort Properties, Heritage Hotel and Ecotels- Concept and Emerging Dimensions.

**Unit-IV: Hospitality Institutions & Manpower Requirements.**

Manpower Requirement in Hotel Sector: designations, qualifications & remunerations.

Role and Contribution of I.T.D.C. and State Tourism Corporations in Development of Hotel Sector in India, Hospitality Educations of India-Growth & Development, Hospitality Associations (HAI, FHRAI)

**Unit-V: Major Hotel Chains in India**

The Taj Group of Hotels

Oberai Hotel & Resorts

Lalit Hotels

The Ashok Group of Hotels

**Suggested books**

Introduction to Hospitality Industry-Bagri &Dahiya

Introduction to Hospitality- J. Walker

Managing Hosopitality- D. Rutherford

Hotel Front Office Mannual-Sudhir Andrew

Housekeeping Maual-Sudhir Andrew

Hotel and Lodging Management and Introduction: by Alan T. Stutis & James F. Wortman, John Willy & Sons.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-105)**  
**YOGA PRACTICUM**

**Course Objectives:**

1. To understand the benefits, contraindications and procedure of all practices.
2. To demonstrate each practice with confidence and skill.
3. To explain the procedure and subtle points involved.
4. To teach the yoga practices to any given group.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Rephrase the benefits, contradictions and procedure of all practices.  
CO 2. Demonstrate each practice with confidence and skill.  
CO 3. Explain the procedure and subtle points involved.  
CO 4. Teach the yoga practices to any given group.

**Shatkarma:** Jalneti, Rabarneti, Vamana Dhauti / Kunjar Kriya, Vat karma, Kapalbhathi. - 15marks  
**Asana** - 25 marks

SukshmaVyayam (Pawan mukta Asana) -1, Yogic Jogging, 12 Asanas (Mandukasana, Shashakasana, Gomukhasana, Vakrasana, Makarasana, Bhujangasana, Shalabhasana, Markatasana, Pawanmuktasana, Halasana, Padvrittasana, Dwi-Chakrikasana and Shavasana)

Siddhasana, Kati chakrasana, Ardhalasana, Padmasana, Vajrasana, Swastikasana, Veerasana, Udarakarsanasana, Bhadrasana, Janushirasana, Ardhamatsyendrasana, Gomukhasana, Ustrasana, Uttanapadasana, Naukasana, Sarvangasana, Halasana, Matsyasana, Suptavajrasana, Chakrasana, Tadasana, TiryakTadasana, Ek paadpranamasana, Vrikshasana, Garudasana, Hastotansana, Padahastasana, Trikonasana, Ardhadhanurasana, Marjari asana, Ardhashalabhasana, Bhujangasana, Makarasan, Shavasana, Samakonasana, Bakasana, Sarpasana, Hanumanasana, Sukhasana, Ardhpadmasana, Ek Pada Halasana, Setubandhasana, Markatasana, Shashankaran, Vipreetnaukasana, Dwikonasana, Parshvatanasana, Singhasana.

**Pranayama**-10 marks

Diaphragmatic Breathing, Pranayama: Kapalbhathi, Bhastrika, Bahya, Ujjayi, Anulom-Vilom, NadiShodhan, Bhramari and Udgith

**Mudra & Bandha:** Jnana Mudra, Chin Mudra, Vipreet Karni Mudra, Yoga Mudra, Jalandhar Bandh, Uddiyan Bandh, Moolbandha - 10 marks

**Viva:** Ishwar Stuti Prarthnopasana-10marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-106)**  
**PROJECT REPORT (TOURISM)**

**Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

**Course Detail**

**The students will have to submit a Project Report for Via-Voce of several places of tourist destinations in India.**

The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce Examination.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH- CE 01)**  
**Communicative English (Non Credit)**

**Course Objectives:**

1. To improve the English communication of the students.
2. To analyze and restate the meaning of a text in English.
3. To develop the ability to speak English language with right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Will be able to use literary techniques in literary texts.
- CO 2. Will be able to gain confidence by speaking English in real life aspects.
- CO 3. Gain the skill to write English without grammatical errors.

**Communication:**

Communication definition and concept, Process of Communication. Elements of Communication steps/phase of Communication. Means, Methods, Mode of Communication. Verbal-oral-written Communication. Nonverbal-sign language, Body Language. Flow of Communication: Formal/Informal. Barriers of Communication- Intrapersonal, interpersonal and organizational barriers.

Recapitulation Linguistic Communication Patter of Communication Group Discussion (GD), History of print Media in India.

**Grammar and usage:**

- i. Noun
- ii. Pronoun
- iii. Verb, modal, Tenses
- iv. Adjective
- v. Adverb
- vi. Preposition
- vii. Conjunction
- viii. Interjection
- ix. Rules of Translation
- x. Punctuation
- xi. Capitalization and Abbreviation
- xii. Subject Verb Agreement
- xiii. Sentences Correction Rules

- XIV. One word substitution
- XV. Active and Passive voice xvi.
- XVI. Direct and Indirect Speech
- XVII. Direct and Indirect Speech Suffixes and prefixes  
Antonyms and synonyms  
Homophones and Homonyms Letters  
Writing

Gift of the Magi-O Henry

ShrinivasaRamanujan

MuktaDhara-R.N.Tagore

### **Readings (References)**

Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead effectively, by Helio Fred Garcia, 2012

Pone Communicates, Few Connect: 'What the Most Effective People Do Differently, haC. Maxwell, 2010

Interviewing: A Programmed Approach to Effective Communication, by David Dans, Margaret T. Hearn, Max R. Uhlemann and Allen E. Ivey, 2010

Art and Science of Communication: Tools for Effective Communication in the place, by P. S. Perkins and Les Brown, 2008 Listening Effective Groups: The Art of Small Group Communication, by Randy Fujishin,

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-201)**  
**Patanjal Yoga Darshan**

**Course Objectives:**

1. To create yoga experts with in-depth knowledge based on yogic texts.
2. To establish holistic health, social harmony and world peace by training them to be good.
3. To teach citizens who can offer yogic way of right living.

**Course Outcomes:** After studying this paper, students will able to:

CO 1 Acquire and be equipped with skills in the application of theoretical & practical knowledge of Yoga.

CO 2. Practice for real life problem solving, in an increasing complex also for the corporate world.

CO 3. Maximize spiritual knowledge and various aspects of yoga with the help of yoga darshan.

**Unit 1: - Introduction of Yogasutra and Samadhi Pada**

Yoga Sutra :Introduction, Definition and Purpose of Yoga, Importance of Yoga Sutra as compared to other Yogic texts, Concept of *Chitta*, *Chitta Bhoomi*, *Chittavrittis* and their types, *Chitta Vritti Nidrodhopaya (Abhyas- Vairagya)*, *Chitta Vikshep (Antaraya)*, *Antarayabhava*, *Chitta Prasad* and its helpers, The metaphysics of Sankhyadarshana and its relation with Patanjali Yogadarshan.

**Unit-2: - Samadhi Pada-II and Sadhan Pada**

Ishwar: Swaroop, Pranava chanting and its results, Ashtanga Yoga - 1 (Bahirang Yoga- Yama, Niyam, Asana, Pranayama, Pratyahara), Importance and Relevance of Ashtanga Yoga and Kriya Yoga, Concept of Kriya Yoga, Describing *Klesha*, Measures of *Klesha* elimination, *Vivek Khyati*, *Chaturvyuhavaad*, the character of *Drishhta & Drishya*, , the form and types of samadhi - *samprajnata*, *asamprajnata*, *sabijand nirvij Samadhi*, *RitambharaPragya* and *Adhyatma Prasad*.

**Unit 3: - Vibhuti Pada**

Ashtanga Yoga - II (*Antaranga* Yoga - Dharna, Dhyana, Samadhi), Concept of *Sanyama - Sanyama* and its three consequences, Concept of *Vibhuti* and introduction of main vibhutis, Describing Ashtasiddhi.

## **Unit-4: - Kaivalya Pada**

Five types of Siddhis (birth, medicine, mantra, penance and samadhija), Nirmaanchitta.  
Types of Karma, *Vaasna*, *Vivek Gyan*, *Dharma Megha Samadhi*, *Kaivalya*

### **Prescribed text books**

योग दर्शनम् - स्वामी रामदेव, दिव्य प्रकाशन, पतंजलि योग पीठ, हरिद्वार

दर्शन प्रवेशदिव्य प्रकाशन-, पतंजलि योग पीठ, हरिद्वार

**सहायक पुस्तक -**

भोज वृत्ति

योगदर्शनम्-गीताप्रेस

### **BOOKS FOR REFERENCE**

BKS Iyengar: Introduction of Patanjali Yogasutra-s: MDNIY, New Delhi, 2011.

Swami Ved Bharti: Yogasutra of Patanjali (with the Exposition of Vyasa) M.L.B.D. New Delhi, 2004,  
Vol I & II.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-202)**  
**Yoga Therapy**

**Course Objectives:**

1. To promote positive awareness for the healthy body and healthy mind
2. To inculcate the teaching ability for conducting yoga sessions and offer various techniques.
3. To create yoga professionals of high caliber who know the concepts, techniques and can do the practical as well.
4. To create yoga experts with in-depth knowledge based on yogic texts.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Develop understanding of different yogic techniques.

CO 2. Attain perfection to perform different yogic practices and shat karmas.

CO3. Explain techniques of Pratyahara, Dharana, Dhyana and conduct practical sessions.

**Unit-1 Yoga Etiology, Diagnosis and Therapy**

Yogic Anatomy and Physiology: Concept of Psychic Centers, Pancha Kosha and three planes of human being; and effects of their activation and impairment over somatic, psychic and psycho-somatic levels of human existence. Yogic diagnostic techniques: Connections of SwarScience, Prana and Breathing Patterns over somatic, mental and psycho-somatic levels. Association of Psychic centers over nerve plexus and endocrine glands; Concept of health and wellness in terms of WHO, Ayurveda and Yoga; Concept of Yoga Therapy: Meaning, Definition, Aims, Principles, Factors Impacts and Limitations; Qualities of a yoga therapist.

**Unit-2: Musculo-Skeletal Disorders**

Back Pain: Classification of back pain: organic and functional: Lumbar Spondylosis, Intervertebral disc prolapse (IVDP), Spondylolisthesis, Spondylitis, Psychogenic- Lumbago, Medical and Yogic management; Neck pain: Classification- Cervical Spondylosis, radiculopathy, Functional neck pain; Medical and Yogic management, All forms of Arthritis: Rheumatoid Arthritis, Osteoarthritis, Medical and Yogic management.

**Unit- 3: Gastro Intestinal and Excretory Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Acid peptic disease - Indigestion Hyperacidity, Ulcer, Flatulence, Gastritis, Bowel problems - chronic Constipation and hemorrhoids, Irritable Bowel Syndrome, Ulcerative colitis or inflammatory bowel disease, Crohn's disease, gluten intolerance, food allergies; Excretory System: irritable bladder syndrome, stress incontinence, Chronic renal failure, Renal hypertension, Renal stones.

## **Unit- 4: Cardio-Pulmonary Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Hypertension and Hypotension, Ischemic heart diseases, Varicose veins, Peripheral vascular disease, Autoimmune Arteritis. Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management (rationale for the disease specific yoga protocol, scientific evidence if available, probable healing mechanisms, practices of choice and contra indications). Allergic, autoimmune respiratory conditions -Allergic Rhinitis & Sinusitis, Bronchial Asthma, COPD & Emphysema- Occupational pulmonary disease.

## **Unit-5: Neurological and Psychiatric Disorders**

Headaches: Migraine: Causes, Classification, clinical features, Medical and Yogic management, Tension headache: Causes and its symptoms and Medical and Yogic management; Cerebro vascular accidents: Causes, clinical features, Medical and Yogic management, Epilepsy, pain; Parkinson's disease: Causes, clinical features, Medical and Yogic management

Introduction to psychiatric disorders, classification - Neurosis, Psychosis: Neurosis: Anxiety disorders: Generalized anxiety disorder, Panic Anxiety, Obsessive Compulsive Disorder, Phobias: Medical and Yogic management: Depression: Dysthymia, Major depression, Medical and Yogic management; Psychosis: Schizophrenia, Bipolar affective disorder, Medical and Yogic management

### **TEXT BOOKS**

1. Nagarathna R and Nagendra HR, Yoga therapy for common ailments series, SVYPPublications, 2010
2. Swami Karmananda, Yoga therapy for common diseases, Yoga publication trust, Munger,2001
3. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers

### **REFERENCE BOOKS**

1. Shivanand Saraswati: Yoga Therapy (Hindi & English)
2. Rai, Lajpat: Discovering Human Potential energy: A Physiological Approach to Yoga (Anubhava Rai Publications, 1998)
3. Nagarathna, R and Nagendra, H.R.: Promotion of Positive Health, Swami Vivekananda Yoga Prakashana, Bangalore, 2002
4. Ramesh Bijlani: Back to Health through Yoga, Rupa Publications India Pvt. Ltd, 2011
5. MONIY publications: 10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi,2009
6. Swami SatyanandaSaraswati: Yoga and Cardio Vascular Management, Yoga PublicationTrust, Munger, 2005
7. Nagarathna R and Nagendra H R:Yoga for Arthritis, Back pain, Diabetes, Pregnancy Breathing Practices, Swami Vivekananda Yoga Prakashana, Bangalore, 2000

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-203)**  
**CULTURAL TOURISM RESOURCES**

**Course Objectives:**

1. To give information of countries Tourist places of India importance.
2. To help students to know the background elements of Cultural Tourism Resources.
3. To Discuss the importance of cultural and heritage tourism to national development.
4. To evaluate the culture and heritage of the Region.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Classify the concept of culture and its place in the tourism market.
- CO 2. Illustrate the impact of the cultures of visitors of the Caribbean cultures.
- CO 3. Identify the multiple cultures and its impact on its economic development.
- CO 4. Evaluate the study of folk dances, traditional music accessible in India.

**Unit - I**

Art Heritage of India- Indus valley architecture- Mauryan Architecture-Buddist Architecture, Temple Architecture through the ages-Islamic Architecture.

**Unit - II**

Pre historic paintings- Tribal and Folk-Indian manual painting-Ajanta, Ellora-Early western Chalukya-Pallava-Pandaya-early Chera-Rashtrakuta, Chola- Vijayanagar-Nayak School-Rajasthani- Mughal and Pahadi Schools-Modern paintings.

**Unit- III**

Classical dances and dances styles- (BharathaNatya, Kathakali, Mohiniattam. Kuchipudi, Oddisies, Manipuir) centers of learning and performances Indian folk dances.

**Unit- IV**

Music-Different types of Indian Music- Status of Vocal and instrumental music--various types- new experiments.

**Unit- V**

Handicrafts- Iconometry and Iconography- Metal works-stone ware wood carving-furniture-jewellery - dools- musical instrument

**Suggested Readings:**

- Banerjee, J.N.-The development of Hindu Iconography
- HamayanaKahan-Indian Heritage
- Percy Brawen-Indian Architecture
- Ragini Devi-Dance Dialects of India
- Sarswathi, S- Indian Sculpture
- Sivaramamoorthy –Indian painting
- Sunith V.A.- History of fine art in Indian and Cylon.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-204)**

**ITINERARY PLANNING, MARKETING, TOUR PACKAGING AND  
COSTING**

**Course Objectives:**

1. To develop an understanding of the creation of the inclusive tour product in the leisure travel market.
2. To develop interactive and communication skills.
3. To examine human behavior as it relation to the purchase of tours Learning outcomes upon completion of this course.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. offer wide exposure to the students to handle issues in tourism related businesses professionally.
- CO 2. develop knowledge to be an explorer he will set practical knowledge relating to travel and tour operation.
- CO 3. bridge the gap between theoretical and practical knowledge of the students by adopting tourism significance.
- CO 4. develop socially, ethically responsible business leaders and innovative teaching pedagogy.

**Unit - I**

What is marketing? Marketing Management, Marketing Management Philosophies, Marketing Mix, Marketing challenges into the next century.

**Unit - II**

Concept of Tour-Itinerary, Steps in preparation of tour Itinerary, Effective principles in making tour itinerary, steps in doing tour costing, FIT & GIT.

**Unit- III**

Some itinerary planning of north and west India: Example: Agra, Khjuraho and Varanasi circuit, Naintal, Deharadun, Shimla and Leh Circuit. Jaipur, Jodhpur and Udaipur Circuit.

Selected out bound package tour: Salient feature of outbound package tour, package tour of far east and South East Asian countries like Singapore, Hong Kong, Thailand and Malayasia, package tour of South Asia Countries like Nepal, Srilanka, Bhutan etc.

**Unit- IV**

Factors to consider when setting prices, General pricing approaches, Nature of distribution channels, Channel behavior & organization, Channel Management decisions.

**Unit- V**

The marketing communication mix, Communication process, Steps in developing effective communication, Setting total promotional budget and mix, Advertising, Sales promotion, Public relation, Personal selling.

**Suggested Readings:**

1. Navin Berry: Travel Planner
2. Eric Law: Managing Packaged Tourism
3. Philip Kotler & Gray Armstrong: Principles of Marketing
4. S. Neelamegham: Marketing in India-Cases & Readings
5. Rama Swamy & Mamakumari: Marketing Management- Planning Implementation & Control

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-205)**

**Yoga Practicum**

**Course Objectives:**

1. To Enable the student to have good health.
2. To Practice mental hygiene and possess emotional stability.
3. To Attain higher level of consciousness and integrate moral values.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. get to know more about physical and mental exercise.  
CO 2. witness many changes accordingly with flexibility.  
CO 3. attain higher moral ethics and learning about spiritual path.

**Shatakarma:**Danddhauti,Vastrdhauti, Nauli, Trataka. -5 marks

**Aasana:** -15marks

Dvipada Skandhasana, Purna Bhujangasana, Purna  
Matsyendrasana,Pakshee Aasan, Vrishchik Aasana, Padma  
Mayurasana,  
Purna Vrishchikasana, Takiya Aasana, Padma Sheershasana,  
Karnapidasana, PurnaDhanurasana, Gorakshasana,  
Purna Chakrasana, Purna Shalabhasana, Ek Pada Bakasana,  
Omkar Aasana, Purna Natarajasana  
And all the practices of previous semesters.

**Pranayama –**

10 marks

Udgeeth, Moorchha.

**Dhyana & Viva:** Vijnanamaya & Anandamaya Kosha - 20marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-206)**  
**EDUCATIONAL TOUR**

**Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

**COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

**Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH CE 02)**

**Communicative English (Non Credit)**

**Course Objectives:**

1. To analyze and restate the meaning of a text in English.
2. To demonstrate the skill to write in English without grammatical error.
3. To practice listening effectively to communication in English.
4. To develop the ability to speak English language with the right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Express the viewpoints with confidence in English with right pronunciation.
- CO 2. Outline values and skills gained through effective communication to other disciplines.
- CO 3. Compose articles and compositions in English and discuss about English effectively.

**Communication:**

- i. Recapitulation
- ii. Face to Face Communication
- iii. Telephonic Conversation
- iv. Reading Techniques
- v. Letter writing
- vi. Creative Writing
- vii. Accent
- viii. Stress
- ix. Rhythm
- X. Intonation
- Xi. Seeking Introduction/Introduce oneself
- Xii. Making Enquires
- xiii. Asking Questions and Discussion

## **Literature**

- i. The Kite Maker by Ruskin Bond
- ii. RabindraNath Tagore-Chandalika
- iii. Autumn by Kalidasa(Translated by Arthur W.Ryoler)
- iv. While the Auto Waits O Henry(Adapted for the stage by walter wykes)
- v. The Loss by Anjali Shukla.

## **Suggested Readings**

- The Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead Effectively, by Helio Fred Garcia, 2012
- Crucial Conversations Tools for Talking When Stakes Are High, by Kerry Patterson, Joseph Grenny, Ron McMillan and AlSwitzler, 2011
- Everyone Communicates, Few Connect: What the Most Effective People Do Differently, by John C. Maxwell, 2010
- Messages: The Communication Skills Book, by MatthewMcKay, Martha Davis and Patrick Fanning, 2009
- Communication: The Key to Effective Leadership, by Judith A.Pauley, 2009
- The Art and Science of Communication: Tools for EffectiveCommunication in the Workplace, by P.S. Perkins and Les Brown, 2008

पतञ्जलि विश्वविद्यालय, ( हरिद्वार )

पाठ्यक्रम - B.A. - दर्शन ( ऑनर्स )

वर्ष- 2020-21



# पतञ्जलि विश्वविद्यालय, हरिद्वार

## B.A. Darshan

2020 - 21

### Program Educational Objectives (PEOs)

- **PEO 1** – To inculcate human and moral life values in the student by learning the principles of Indian shaddarshan philosophies
- **PEO 2** – By imparting a proper sense of history, social science and political science to the student, by equipping the student with the glory of the past and the resolve of the golden future, to inculcate humanity in the family, social and political life.
- **PEO 3** – By giving understanding of Shrimadbhagwadgita and Upanishads, to equip the student with right devotion and right work.
- **PEO 4** – To awaken within the student the feeling of oneness, coexistence and universal brotherhood with self-realization by establishing individual and collective harmony by integrating the knowledge of body and universe with the understanding of Yoga science and Yajna science.
- **PEO 5** – To develop proficiency in English language along with national language and mother tongue.

### Program Specific Outcomes (PSOs)

After completing of the program, the students will be able to

- **PSO 1** – Build a divine personality and divine character by attaining the right understanding of the scriptures such as philosophy, political science, social science, Gita Upanishad, etc.
- **PSO 2** – Avoid (retire from) ignorance, mistrust and bad deeds, and gets engaged in good deeds and self-religion by being equipped with good knowledge and goodwill with the theoretical understanding of Vedic Philosophical schools.
- **PSO 3** – Become skilled and proficient in his overall physical, mental, intellectual and spiritual development while being equal in all dialectical situations with the knowledge and faith described in Shrimad Bhagvad Gita.
- **PSO 4** – Realise the Brahmavidya described in Upanishads and strong detachment from worldly attractions and complete loyalty and faith towards Guru and God.
- **PSO 5** – Destroy all the diseases and troubles present in himself and the society with the understanding of the science behind Yoga and Yagya.

**पाठ्यक्रम - B.A. - दर्शन**  
**प्रथम, द्वितीय एवं तृतीय वर्ष**  
**के कुछ सामान्य नियम**

- ❖ परीक्षा में 50% अंक प्राप्त करने वाले छात्र को ही उत्तीर्ण माना जायेगा।
- ❖ प्रस्तुत पाठ्यक्रम तीन वर्ष का होगा।
- ❖ प्रत्येक वर्ष 2 सत्र (Semester) में, 2 बार परीक्षाएं होंगी।
- ❖ प्रत्येक परीक्षा में छः प्रश्न-पत्र होंगे।
- ❖ दो प्रश्नपत्र दर्शनों से सम्बन्धित, तृतीय व चतुर्थ संस्कृत व्याकरण तथा पञ्चम पत्र संस्कृत साहित्य व छठा अंग्रेजी भाषा का होगा।
- ❖ अन्तिम सत्र में पर्यावरण विज्ञान विषय अनिवार्य होगा।
- ❖ सभी प्रश्न-पत्र 100-100 अंक के होंगे।
- ❖ प्रत्येक प्रश्न-पत्र में 30 अंकों की आन्तरिक परीक्षा एवं 70 अंकों की बाह्य परीक्षा होगी।
- ❖ कुल अंक प्रत्येक सत्र में 600, एक वर्ष में 1200 तथा तीनों वर्ष के मिलाकर - 3600 अंक होंगे।
- ❖ परीक्षा का माध्यम English Paper को छोड़कर शेष सभी पत्रों में हिन्दी या संस्कृत होगा।
- ❖ प्रत्येक परीक्षा का निर्धारित समय 3 घण्टे होगा।

**Subject: Modern Indian Language – English**

Note: The subject shall be taught in all the six semesters. In each semester the paper shall be of 100 marks – 70 marks for semester-end examination and 30 marks for sessional examination. The Paper is divided into five units. In semesters V and VI there shall not be any written examination for 70 marks in semester-end examination. There shall be a Practical examination in these semesters in place of theory papers.

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, प्रथम वर्ष**  
**Semester -I**

**Paper – 1 yogadarśana**

**Paper Code - BD-101**

(70+30=100)

**Course Objectives-**

- *samādhipāda-abhyāsa va vairāgya se prāpta hone vālī samādhi kā bodha*
- *sādhanaābhūta-aṣṭāṅgayoga kā jñāna* /
- *vibhūtipāda- dhāraṇā-dhyāna-samādhi evaṃ vibhinna siddhiyoṃ kā bodha* /
- *kaivalyapāda- dharmamedha samādhi tathā kaivalya kā jñāna* /

पातञ्जल योगसूत्र

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *samādhipāda:- abhyāsa evaṃ vairāgya pūrvaka samādhi kā paricaya* /
- *sādhana pāda:- aṣṭāṅga yoga kā paricaya* /
- *vibhūti pāda:- dhāraṇā - dhyāna - samādhi evaṃ vibhinna siddhiyoṃ kā paricaya* /
- *kaivalya pāda:- dharmamegha samādhi kā phala evaṃ kevalya svarūpa kā paricaya* /

**Paper - 2**

**sāṃkhyadarśana Paper Code - BD-102**

(70+30=100)

**Course Objectives-**

- *duḥkhatraya kā svarūpa evaṃ mukti kā jñāna* /
- *śṛṣṭi prakriyā evaṃ mahādādi ke svarūpa kā bodha* /
- *viśeṣoṃ kī utpatti evaṃ sūkṣma śarīra kā jñāna* /
- *buddhisarga evaṃ mukti kā bodha* /

सांख्यसूत्र-(1-3 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *duḥkhatraya kā svarūpa evaṃ mukti paricaya* /
- *suṣṭi prakriyā evaṃ mahadādi kā svarūpa* /
- *viśeṣoṃ kī utpatti evaṃ sūkṣma śarīra paricaya* /
- *buddhisarga evaṃ mukti kī yukti* /

निर्धारित पाठ्यपुस्तक- सांख्यदर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ- आचार्य आनन्दप्रकाश जी, विद्योदयभाष्य सहित, सांख्यदर्शन (आचार्य उदयवीर शास्त्री जी)

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 3**

**saṃskṛta vyākaraṇa- I Paper Code - BD-103**

(70+30=100)

### Course Objectives-

- varṇāṅ ke sthānoṃ kā bodha।
- saṃjñā-saṃjñī kā jñāna।
- sāmānya (ac-saṃdhi) kā bodha।
- śabdarūpa evaṃ dhātu-rūpa kā jñāna।

प्रथम इकाई- वर्णोच्चारण शिक्षासूत्राणि,	- 14 अंक
द्वितीय इकाई- संज्ञाप्रकरणम्,	- 14 अंक
तृतीय इकाई- सन्धिप्रकरणम्,	- 14 अंक
चतुर्थ इकाई- शब्दरूप, धातुरूप (1-15 अभ्यास पर्यन्त)	- 14 अंक
पञ्चम इकाई- अनुवाद, संख्याएँ (1-100)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

### Course Outcomes-

- varṇo ke sthānoṃ kā paricaya।
- saṃjñā - saṃjñī paricaya।
- sāmānya (aca-saṃdhi) paricaya।
- śabda rūpa - dhāturūpa paricaya।

निर्धारित पाठ्यपुस्तक- व्याकरण प्रवेश, प्रारम्भिक रचनानुवाद कौमुदी।

प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

### Paper - 4

### samskr̥ta vyākaraṇa – II Paper Code - BD-104

(70+30=100)

### Course Objectives-

- abhyāntara evaṃ bāhya prayatnoṃ kā bodha।
- viśiṣṭa saṃjñāoṃ kā jñāna।
- paribhāṣāoṃ kā sāmānya bodha।
- pūrva-para rūpa saṃdhi kā jñāna।

प्रथम इकाई- शिक्षा प्रकरणम्	- 14 अंक
द्वितीय इकाई- संज्ञाप्रकरणम्	- 14 अंक
तृतीय इकाई- 1-15 परिभाषायें	- 14 अंक
चतुर्थ इकाई- संहिता (सन्धि) प्रकरणम्- अच् सन्धि	- 14 अंक
पञ्चम इकाई- संहिता (सन्धि) प्रकरणम्- हल् सन्धि	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

### Course Outcomes-

- ābhyāntara evaṃ bāhyāntara prayatnoṃ kā paricaya।
- viśiṣṭa saṃjñāoṃ kā paricaya।
- paribhāṣāoṃ kā sāmānya jñāna।
- pūrva - para rūpa saṃdhi paricaya।

निर्धारित पाठ्यपुस्तक- व्याकरण चन्द्रोदय-पञ्चम खण्ड (श्री चारुदेव शास्त्री)  
प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

**Paper - 5**

**samṣkrta sāhitya Paper Code - BD-105**

(70+30=100)

**Course Objectives-**

- upaniṣadom kā sāmānya bodha।
- kenopaniṣad kā sāmānya bodha।
- kaṭhopeniṣad -naciketā ke dvārā pūche gaye tīna praśnom kī jānakārī।
- gītā-dvitīya adhyāya sāmkhya siddhāntom kā jñāna।

प्रथम इकाई- ईशोपनिषद्,	-15 अंक
द्वितीय इकाई- केनोपनिषद्,	-15 अंक
तृतीय इकाई- कठोपनिषद् प्रथम वल्ली	-15 अंक
चतुर्थ इकाई- गीता-द्वितीय अध्याय	-15 अंक
पञ्चम इकाई- गीता-तृतीय अध्याय	-10 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

**Course Outcomes-**

- upaniṣadom kā samānya paricaya।
- kenopaniṣad kā samānya paricaya।
- kaṭhopeniṣad (naciketā ke yama se pūche gae tīna praśno)
- gītā dvitīya adhyāya sāmkhya siddhāntom kā paricaya।

निर्धारित पाठ्य ग्रन्थ- उपनिषद्- एकादशोपनिषद् - डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
गीता- श्रीमद्भगवद्गीता गीतामृत- स्वामी रामदेव जी, दिव्य प्रकाश, पतंजलि योगपीठ, हरिद्वार  
सहायक ग्रन्थ - उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

**Paper - 6**  
**ENGLISH LITERATURE -1**  
**Paper Code - BD-106**

(70+30=100)

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

**1. Reading and Communication Skills:**

- 1.1 An Introduction to the International Phonetic Alphabet for English  
(Phonetic Symbols, Phonemes, Monophthongs, Diphthongs, Accent, Intonation, Stress etc.)
- 1.2 Use of Punctuations in Reading
- 1.3 Theory of Communication
- 1.4 Types and Modes of Communication

**Suggested Reading & Resources for Practice:**

- Dictionaries—
  - Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
  - Oxford English-Hindi Dictionary (Oxford University Press)
  - Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)
- Communication Skills —Sanjay Kumar & Pushpa Lata (Oxford University Press, New Delhi)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055, ISBN: 81-219-0009-3)
- Useful You Tube Channels and Other Helpful Mobile Applications

**2. Listening Skills :**

- 2.1 To Listen to the Good Speakers of English Language Having Good Contents

**Resources for Practice:**

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru
  - BK Shivani

**3. Grammar Skills:**

- 3.1 Parts of Speech
- 3.2 Articles
- 3.3 Vocabulary (Synonyms & Antonyms)
- 3.4 The Sentence—Parts, Types, Forms, Question Tags and Sentence Chart (Based on Structures)
- 3.6 Punctuations
- 3.5 Simple Present, Past and Future Tenses (Without Main Verbs—SHO i.e. *is, am, are, was, were, will/shall be; has/have/had/will/shall have* Type Sentences), Imperative Sentences

### 3.6 Simple Translation (Hindi to English and Vice-Versa)

#### **Suggested Reading & Resources for Practice:**

- Aao Saral Angrezi Seekhein Volume-1—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055)
- How to Write Correct English (Anglo-Hindi) —R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002)
- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **4. Writing Skills:**

##### 4.1 Short and Simple Messages

#### **Suggested Reading & Resources for Practice:**

- Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **5. Speaking Skills:**

##### 5.1 General Conversation & Expressions used in Day-to-Day Life

#### **Suggested Reading & Resources for Practice:**

- Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **Course Outcomes-**

- Course Specific Outcomes
- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

#### **वैकल्पिक प्रश्न-पत्र**

**विषय :** मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, प्रथम वर्ष**  
**Semester -II**

**Paper - 1**

***sāṃkhyakārikā* Paper Code - BD-201**

(70+30=100)

**Course Objectives-**

- duḥkhatraya kī ātyantika nivṛtti kā bodha।
- vyakta-avyakta evaṃ puruṣa ke paraspara meṃ sādharma -vaidharma kā bodha।
- 50 prakāra ke buddhisarga kā jñāna।
- jīvanamukti ke bāda bhī prārabdha karmāśaya ke bhoga kā jñāna।

सम्पूर्ण सांख्यकारिका

(कण्ठस्थीकरण, कारिकार्थ एवं विषय परिचय)

**Course Outcomes-**

- duḥkha traya kī ātyāntika nivṛtti kā upāya।
- vyakta avyakta evaṃ puruṣa ke paraspara meṃ sādharma - vaidharma kā paricaya।
- 50 prakāra ke baddhi sarga kā paraciya।
- jīvanamukta bhī śarīra dhāraṇa kaise rakhate hai? kā paricaya।

निर्धारित पाठ्यपुस्तक - सांख्यकारिका- गौडपादभाष्य सहित - आचार्य जगन्नाथशास्त्री।

प्रकाशक- 41 यू.ए. बंगलो रोड, जवाहर नगर, दिल्ली-110007

**Paper - 2**

***sāṃkhyadarśana* Paper Code - BD-202**

(70+30=100)

**Course Objectives-**

- vivekajñāna hetu vibhinna ākhyāpikāṃ kā bodha।
- dehātirikta caitanyavāda kā jñāna।
- dharmādharma kī siddhi kā bodha।
- prakṛti kī pravṛtti va puruṣa kī mukti kā jñāna।

सांख्यसूत्र (4-6 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- viveka-jñāna ke sādhana hetu vibhinna ākhyāmāyikāṃ।
- dehātirikta caitanyavāda kā paricaya।
- dharmādharma kī siddhi kā paricaya।
- prakṛti kī pravṛtti evaṃ puruṣa kī nivṛti kā kāraṇa।

निर्धारित पाठ्य ग्रन्थ - सांख्यदर्शनम्, दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - सांख्यदर्शन- आचार्य उदयवीर शास्त्री जी।

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 3**

***saṃskṛta vyākaraṇa - I* Paper Code - BD-203**

(70+30=100)

### Course Objectives-

- vākyaracanā kā jñāna।
- ac-hala va visarga saṁdhi kā bodha।
- anuvāda kā jñāna।
- kāraka kā sāmānya evaṁ viśeṣa bodha।

प्रथम इकाई- रचनानुवादकौमुदी (अध्याय 1-30 अभ्यास),	- 14 अंक
द्वितीय इकाई- सन्धि प्रकरण,	- 14 अंक
तृतीय इकाई- अनुवाद,	- 14 अंक
चतुर्थ इकाई- शब्दरूप, धातुरूप (1-30 अभ्यास पर्यन्त),	- 14 अंक
पञ्चम इकाई- कारक परिचय,	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक
<b>निर्धारित पाठ्यपुस्तक</b> - रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)	
प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001	

### Course Outcomes-

- vākya racanā kā paricaya।
- ac - hal - visarga saṁdhi kā paricaya।
- anuvāda kā svarūpa।
- kāraka kā sāmānya evaṁ viśeṣa paricaya।

### Paper - 4

#### samśkr̥ta vyākaraṇa – II Paper Code - BD-204

(70+30=100)

### Course Objectives-

- prathamā evaṁ dvitīyā vibhakti kā bodha।
- tṛtīyā, caturthī evaṁ pacamī vibhakti kā jñāna।
- ṣaṣṭhī, saptamī tathā upapada kā bodha।
- samāsa kā sāmānya jñāna।

प्रथम इकाई- विभक्ति प्रकरण (पृष्ठ 1-26 पर्यन्त),	- 14 अंक
द्वितीय इकाई- विभक्ति प्रकरण (पृष्ठ 27-53 पर्यन्त),	- 14 अंक
तृतीय इकाई- विभक्ति प्रकरण (पृष्ठ 54-78 पर्यन्त),	- 14 अंक
चतुर्थ इकाई- समास प्रकरण (अव्ययीभाव समास, तत्पुरुष समास)	- 14 अंक
पञ्चम इकाई- समास प्रकरण (बहुब्रीहि समास, द्वन्द्व समास)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

### Course Outcomes-

- prathamā, dvitīya, vibhakti paricaya।
- tṛtīyā caturthī, pacamī vibhakti paricaya।
- ṣaṣṭhī, saptamī, upapada vibhakti paricaya।
- samāsa kā sāmānya paricaya।

निर्धारित पाठ्यपुस्तक - व्याकरण चन्द्रोदय-प्रथम खण्ड (श्री चारुदेव शास्त्री)

प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

**Paper - 5**

**samskr̥ta s̥ahitya Paper Code - BD-205**

(70+30=100)

**Course Objectives-**

- śreya-preya tathā vidyā-avidyā kā bodha।
- ratha evaṃ rathī ke rūpaka se paramātmā kī prāpti kā jñāna।
- iṃdriyoṃ kī bahimukhatā kā bodha tathā yogī iṃdriyoṃ ko rokakara ātmajñāna prāpta karānā hai।
- jīvamukti evaṃ videhamukti kā jñāna ।

प्रथम इकाई- उपनिषद् - कठोपनिषद् (2-3 वल्ली)	-14 अंक
द्वितीय इकाई- उपनिषद् - कठोपनिषद् (तृतीय वल्ली)	-14 अंक
तृतीय इकाई- कठोपनिषद् (चतुर्थ वल्ली)	-14 अंक
चतुर्थ इकाई- कठोपनिषद् (पञ्चम, षष्ठ वल्ली)	-14 अंक
पञ्चम इकाई- गीता - चतुर्थ अध्याय (ज्ञानकर्मसंन्यासयोग), पञ्चम अध्याय (कर्मसंन्यासयोग)	-14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	-30 अंक

**Course Outcomes-**

- śreya-preya, vidyā-avidyā kā jñāna।
- ratha evaṃ rathī ke rūpaka se paramātmā prāpti upāya kathana।
- iṃdriyoṃ kī bahimukhatā kā vivaraṇa।
- jīvanamukti evaṃ videhamukti nirūpaṇa।

**निर्धारित पाठ्य ग्रन्थ - उपनिषद्- एकादशोपनिषद् - डॉ. सत्यव्रत सिद्धान्तालंकार जी,**

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48

गीता- श्रीमद्भगवद्गीता गीतामृत - स्वामी रामदेव जी, दिव्य प्रकाश, पतंजलि योगपीठ, हरिद्वार

**सहायक ग्रन्थ- उपनिषद् रहस्य- पण्डित भीमसेन शर्मा**

## Paper - 6

### ENGLISH LITERATURE -2 Paper Code - BD-206

(70+30=100)

#### Course Objectives-

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### 1. Reading and Comprehension Skills :

1.1 Transliteration

1.2 Word Formation by Adding Prefixes & Suffixes with their Correct Pronunciation

1.3 Reading Strategies & Abilities (Intensive, Extensive, Skimming and Scanning etc.)

1.4 Comprehension

#### Suggested Reading & Resources for Practice:

- Glossaries—
  - The Practical Approach to Divinity—Pujya Chandra Swami Udasin ji (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
  - Bhagavad-gita As It Is (The Bhaktivedanta Book Trust, Hare Krishna Land, Juhu, Mumbai 400049, India)
- Dictionaries—
  - Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
  - Oxford English-Hindi Dictionary (Oxford University Press)
- Communication Skills —Sanjay Kumar & Pushpa Lata (Oxford University Press, New Delhi)
- Effective Strategies for Teaching Reading—Allyn and Bacon
- Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, 1st Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)
- Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)

#### 2. Listening Skills:

2.1 To Listen to the Good Speakers of English Language Having Good Contents

#### Resources for Practice:

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru
  - BK Shivani

#### 3. Grammar Skills:

- 3.1 Non-finites (Infinitives, Gerunds & Participles)
- 3.2 Modals (will, shall, can, could, may, must, might, would, ought to, should, dare, need)—Active Voice
- 3.3 Tenses—Active Voice
- 3.4 Passive Voice of Tenses & Modals
- 3.5 Vocabulary (Synonyms & Antonyms)
- 3.6 One Word Substitution
- 3.7 Translation (Hindi to English and Vice-Versa)

**Suggested Reading & Resources for Practice:**

- Aao Saral Angrezi Seekhein Volume-I & II—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125, ISBN: 978-81-89764-25-8)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055, ISBN: 81-219-0009-3)
- How to Write Correct English (Anglo-Hindi) —R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002, ISBN: 978-81-7709-107-6)
- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

**4. Writing Skills:**

- 4.1 Short Paragraph/Story Writing
- 4.2 E-mail Writing
- 4.3 Letter & Application Writing
- 4.4 Notice Writing

**Suggested Reading & Resources for Practice:**

- Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)
- Useful You Tube Channels and Other Helpful Mobile Applications

**5. Speaking Skills:**

- 5.1 Conversations in Various Situations (e.g. Conversation between saint and his disciple, Conversation at Railway Station, Bank, Post Office etc.)
- 5.2 Telephonic Conversation

**Suggested Reading & Resources for Practice:**

- Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)
- Useful You Tube Channels and Other Helpful Mobile Applications

**6. Literature:**

**(Prose)**

- 6.1 The Last Lesson—*Alphonse Daudet*
- 6.2 A Truly Beautiful Mind—*Albert Einstein*

**(Rishis, Mystics and Heroes of Ancient Bharat)**

- 6.3 Maharishi Patanjali
- 6.4 Aryabhata

**(Poetry)**

- 6.5 Mercy—*William Shakespeare*
- 6.6 Where the Mind is Without Fear—*Rabindra Nath Tagore.*

**Suggested Reading & Resources for Practice:**

- Rishis, Mystics and Heroes of India, Volume I—Sadhu Mukundcharandas ( Swaminarayan Asharpith, Shahibaug, Amdavad-4, India)
  - Selected Works of William Shakespeare (Mundus Media, ISBN 978-1587260179, 1587260174)
  - Rabindra Nath Tagore Selected Poems (Penguin India, ISBN 0140183663, 978-0140183665)
  - Collected Works of Alphonse Daudet (Scholar's Choice, ISBN 1297056477, 978-1297056475)
- Albert Einstein—the story of a genius (Viva Books, ISBN 9789386243973, 978-9386243973)

#### Course Outcomes-

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

#### वैकल्पिक प्रश्न-पत्र

विषय : मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, द्वितीय वर्ष**  
**Semester 3**

**Paper – 1 *nyāya darśana-1***

**Paper Code - BD-301**

(70+30=100)

**Course Objectives-**

- pramānādi ṣoḍśa padārthoṃ kā jñāna।
- saṃśaya evaṃ śabda śakti kā bodha।
- śabda parimāṇa prakaraṇa kā jñāna।
- jāti evaṃ nigraha sthāna kā bodha।

न्याय सूत्र (प्रथम व द्वितीय अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- pramāṇa - prameyādi ṣoḍśa padārtha vivaraṇa।
- saṃśaya evaṃ śabda śakti parīkṣā।
- śabda pariṇāma prakaraṇa।
- jāti evaṃ nigraha sthāna ke svarūpa evaṃ prabheda।

निर्धारित पाठ्यपुस्तक - न्यायदर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - विद्योदय भाष्य सहित न्यायदर्शन (आचार्य उदयवीर शास्त्री जी)

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 2**

***vaiśeṣika darśana-1* Paper Code - BD-302**

(70+30=100)

**Course Objectives-**

- niḥśreyasa ke sādhanom kā bodha।
- pañcamahābhūtoṃ kā jñāna।
- ātmā evaṃ mana kā bodha।
- nitya evaṃ anitya padārthoṃ kā jñāna।

वैशेषिक सूत्र- (1-5 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- niḥśreyas ke sādhanom kā vivaraṇa।
- pañcamahābhūtoṃ kī parīkṣā।
- ātmā evaṃ mana kā paricaya।
- nitya evaṃ anitya padārtha svarūpa

निर्धारित पाठ्य ग्रन्थ - वैशेषिक दर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - वैशेषिक दर्शन - आचार्य उदयवीर शास्त्री।

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 3**

***saṃskṛta vyākaraṇa-1* Paper Code - BD-303**

(70+30=100)

**Course Objectives-**

- viśeṣa vākya racanā kā bodha।
- samāsa kā viśiṣṭa kā jñāna।
- śabdarūpa evaṃ dhāturūpa kā bodha।
- jaṭila anuvāda kā jñāna।
- प्रथम इकाई- रचनानुवादकौमुदी (अध्याय 31-60 अभ्यास), - 20 अंक
- द्वितीय इकाई- समास परिचय, - 20 अंक
- तृतीय इकाई- शब्दरूप (31-64 अभ्यास), धातुरूप (36-60 अभ्यास) - 20 अंक
- चतुर्थ इकाई- अनुवाद, - 10 अंक
- पञ्चम इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

#### Course Outcomes-

- viśeṣa vākya racanā paricaya।
- samāsa kā viśiṣṭa vivaraṇa।
- śabdarūpa evaṃ dhātu kā viśeṣa vivaraṇa।
- jaṭila anuvāda kā paricaya।

निर्धारित पाठ्यपुस्तक- रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)  
प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

#### Paper - 4

#### samskr̥ta vyākaraṇa- II Paper Code - BD-304

#### Course Objectives-

- pāṇinīya liṃgānuśāsana meṃ strīliṃga sūtreṃ kā bodha।
- pāṇinīya liṃgānuśāsana meṃ pulligādhikāra kā jñāna।
- pāṇinīya liṃgānuśāsana meṃ napuṃsakaliṃgādhikāra kā bodha।
- strīpuṃsādhikāra evaṃ puṃnapuṃsādhikāra kā jñāna।

- प्रथम इकाई- पाणिनीय लिङ्गानुशासनं स्त्रीलिङ्गाधिकारः - 14 अंक
- द्वितीय इकाई- पाणिनीय लिङ्गानुशासनं पुल्लिङ्गाधिकारः - 14 अंक
- तृतीय इकाई- पाणिनीय लिङ्गानुशासनं नपुंसकलिङ्गाधिकारः - 14 अंक
- चतुर्थ इकाई- स्त्रीपुंसाधिकारः एवं पुंनपुंसकाधिकारः - 14 अंक
- पञ्चम इकाई- रामो हरिःकरी भूभृद् भानुःकर्ता च चन्द्रमाः। - 14 अंक
- तस्थिवान् भगवानात्मा दशैते पुंसि नायकाः॥ (शब्दरूप) - 14 अंक
- षष्ठ इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

निर्धारित पाठ्यपुस्तक- व्याकरण चन्द्रोदय-पञ्चम खण्ड (श्री चारुदेव शास्त्री)  
प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

#### Course Outcomes-

- pāṇinīya liṃgānuśāsana meṃ strīliṃga sūtra paricaya।
- pāṇinīya liṃgānuśāsana meṃ pulliṃgādhikāra sūtra paricaya।
- pāṇinīya liṃgānuśāsana meṃ napuṃsakaliṃgādhikāra sūtra paricaya।
- strīpuṃsādhikāra evaṃ puṃnapuṃsādhikāra vivaraṇa।

Paper - 5

*saṃskṛta sāhitya* Paper Code - BD-305

(70+30=100)

**Course Objectives-**

- kabandhī ādi ṭṭaṣiyom ke chaḥ praśnoṃ kā bodha।
- parā evaṃ aparā vidyā kā jñāna।
- ātmasaṃyamayoga kā bodha।
- bhaktiyoga kā jñāna।

प्रथम इकाई- प्रश्नोपनिषद्	- 20 अंक
द्वितीय इकाई- मुण्डकोपनिषद्	- 20 अंक
तृतीय इकाई- गीता - षष्ठोऽध्याय (आत्मसंयमयोग)	- 20 अंक
चतुर्थ इकाई- द्वादश अध्याय (भक्तियोग)	- 10 अंक
पञ्चम इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

**Course Outcomes-**

- kabandhī ādi ṛṣiyom ke chaḥ praśnoṃ kā vivaraṇa।
- parā-aparā vidyā kā upadeśa।
- ātmasaṃyamayoga kā paricaya।
- bhaktiyoga kā paricaya।

**निर्धारित पाठ्यपुस्तक-** उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48

गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।

**सहायक ग्रन्थ-** उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

**1. Reading and Comprehension Skills:**

1.1 Words Which Commonly Confuse (Homophones, Homonyms)

1.2 Words that are Pronounced Differently than Spelled (e.g. bouquet, lieutenant, knife, knowledge, doubt, tough etc.)

1.3 Comprehension

**Suggested Reading & Resources for Practice:**

➤ Dictionaries—

- Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
- Oxford English-Hindi Dictionary (Oxford University Press)
- Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)

➤ General English for All Classes—U.R. Mediratta (Jiwan Publishing House Pvt Ltd India, F-227, Mansarover Garden, Main Market, New Delhi-110015)

➤ Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, 1st Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)

➤ Useful You Tube Channels and Other Helpful Mobile Applications

**2. Listening Skills:**

2.1 To Listen to the Good Speakers of English Language Having Good Contents

**Resources for Practice:**

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru

• BK Shivani

### 3. Grammar Skills:

- 3.1 Modals Perfect—Active Voice & Passive Voice
- 3.2 Clauses
- 3.3 Narration
- 3.4 Syntax
- 3.5 Synthesis
- 3.6 Vocabulary (Synonyms & Antonyms)
- 3.7 One Word Substitution
- 3.8 Translation (Hindi to English and Vice-Versa)

#### **Suggested Reading & Resources for Practice:**

- Aao Saral Angrezi Seekhein Volume-II—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
- High School English Grammar and Composition—P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055)
- How to Write Correct English (Anglo-Hindi)—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002)
- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

### 4. Writing Skills:

- 4.1 Advertisements
- 4.2 Reports
- 4.3 Articles
- 4.4 Posters

#### **Suggested Reading & Resources for Practice:**

- Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)
- Useful You Tube Channels and Other Helpful Mobile Applications

### 5. Speaking Skills:

- 5.1 Monologue/Extempore
- 5.2 Group Discussion
- 5.3 Public Speech

#### **Suggested Reading & Resources for Practice:**

- Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)
- Useful You Tube Channels and Other Helpful Mobile Applications

## 6. Literature:

### (Prose)

5.1 The Last Leaf—O. Henry

5.2 The Blue Umbrella—Ruskin Bond

### (Rishis, Mystics and Heroes of Ancient Bharat)

5.3 Panini

5.4 Sushrut

### (Poetry)

5.5 Brahma—*R.W. Emerson*

5.6

### Suggested Reading & Resources for Practice:

- Rishis, Mystics and Heroes of India, Volume I—Sadhu Mukundcharandas ( Swaminarayan Asharpith, Shahibaug, Amdavad-4, India)
- Selected Works of O. Henry
- Selected Works of R.W. Emerson
- Selected Short Stories by Ruskin Bond
- Albert Einstein—the story of a genius (Viva Books, ISBN 9789386243973, 978-9386243973)

### Course Outcomes-

- Course Specific Outcomes
- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

### वैकल्पिक प्रश्न-पत्र

विषय : मनोविज्ञान,

भारतीय ज्ञान परम्परा,

धर्मशास्त्र,

प्राचीन भारतीय इतिहास,

अर्थशास्त्र,

राजनीतिशास्त्र।

### परिणाम-

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, द्वितीय वर्ष**  
**Semester -IV**

**Paper – 1 *nyāya darśana-2***

**Paper Code - BD-401**

(70+30=100)

**Course Objectives-**

- śarīrādi vyatirikta ātmavāda kā bodha।
- śūnyavāda ādi matom kī jānakārī।
- phala, duḥkha evaṃ apavarga kī parīkṣā se unake svarūpa kā bodha।
- tatvajñāna kī prāpti ke sādhanom kā jñāna।

न्याय सूत्र- तृतीय, चतुर्थ एवं पञ्चम अध्याय-

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

निर्धारित पाठ्य ग्रन्थ - न्यायदर्शनम्- दिव्य प्रकाशन, दिव्ययोग मंदिर (ट्रस्ट)

सहायक ग्रन्थ - विद्योदयभाष्य सहित न्यायदर्शन (आचार्य आनन्दप्रकाश जी)

**Course Outcomes-**

- śarīravvyatirikta ātmavāda kā paricaya।
- śūnyavāda ādi matom kā nirākaraṇa।
- phala-duḥkha apavarga kī parīkṣā।
- tattvajñāna prāpti ke sādhanā।

**Paper - 2**

***vaiśeṣika darśana-2* Paper Code - BD-402**

(70+30=100)

**Course Objectives-**

- veda kī pauruṣeyatā kā bodha।
- 24 guṇom kī jānakārī।
- abhāva ke svarūpa evaṃ usake bhedom kā jñāna।
- samavāyikāraṇa, asamvāyī evaṃ nimitta kāraṇa kā bodha।

वैशेषिक सूत्र -(6-10 अध्याय)-

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- veda kī pauruṣeyatā kā paricaya।
- 24 guṇom kī parīkṣā।
- abhāva ke svarūpa evaṃ bheda vivaraṇa।
- samavāyī-asamvāyī nimitta kāraṇa paricaya।

निर्धारित पाठ्य ग्रन्थ - वैशेषिक दर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - वैशेषिक दर्शन- आचार्य उदयवीर शास्त्री।

**Paper - 3**

***saṃskṛta vyākaraṇa-1* Paper Code - BD-403**

(70+30=100)

**Course Objectives-**

- śatādi pratyaayom kā bodha।

- 65 dhātuṃ kā jñāna।
- nibaṃdha ke rūpṃ kā jñāna।
- alaṃkāra ke rūpāṃ kā jñāna।

प्रथम इकाई- प्रत्यय परिचय	- 14 अंक
द्वितीय इकाई- 65 धातुं	- 14 अंक
तृतीय इकाई- पत्रलेखन	- 14 अंक
चतुर्थ इकाई- निबन्धलेखन	- 14 अंक
पञ्चम इकाई- काव्यदीपिका, अष्टमशिखा-I (अलंकार स्वरूपम्-व्यतिरेक अलंकार पर्यन्त)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- sanādi pratyayṃ kā vivaraṇa।
- 65 dhātuṃ kā paricaya।
- nibandha lekhaṇa paricaya।
- alaṃkāra svarūpa paricaya।

निर्धारित पाठ्यपुस्तक - रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)

प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)-

प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,

पो. बाक्स नं.- 1129, वाराणसी-221001

#### Paper - 4

#### samskṛta vyākaraṇa- II Paper Code - BD-404

(70+30=100)

#### Course Objectives-

- kāraṇa saṃbandha kā sāmānya jñāna।
  - kāraṇa saṃbandha viśeṣa bodha।
  - kāraṇa saṃbandha kī vākya racanā kā jñāna।
  - kāraṇa saṃbandha kā sampūrṇa jñāna।
- |   |          |
|---|----------|
| प्रथम इकाई- कारकसम्बन्धोद्घोतःकारिका - (1-3)    | - 14 अंक |
| द्वितीय इकाई- कारकसम्बन्धोद्घोतःकारिका - (4-6)  | - 14 अंक |
| तृतीय इकाई- कारकसम्बन्धोद्घोतःकारिका - (7-9)    | - 14 अंक |
| चतुर्थ इकाई- कारकसम्बन्धोद्घोतःकारिका - (10-12) | - 14 अंक |
| पञ्चम इकाई- कारकसम्बन्धोद्घोतःकारिका - (13-15)  | - 14 अंक |
| षष्ठ इकाई- शास्त्र स्मरण एवं लेखन               | - 30 अंक |

#### Course Outcomes-

- kāraṇa sambandha sāmānya paricaya।
- kāraṇa sambandha viśeṣa paricaya।
- kāraṇa sambandha vākya racanā paricaya।
- kāraṇa sambandha sūtra paricaya।

निर्धारित पाठ्यपुस्तक- कारकसम्बन्धोद्घोतःकारिका (रभसनन्दि)  
प्रकाशक- राजस्थानी ग्रन्थागार, सोजती गेट, जोधपुर (राजस्थान)।

**Paper - 5**  
**samskr̥ta s̥ahitya Paper Code - BD-405**

(70+30=100)

**Course Objectives-**

- śikṣāvallī kā bodha।
- sṛṣṭi racanā krama kā jñāna।
- guṇatraya vibhāga yoga kā bodha।
- puruṣottama yoga kā jñāna।

प्रथम इकाई	- तैत्तिरीयोपनिषद्,	- 20 अंक
द्वितीय इकाई	- ऐतरेय उपनिषद्	- 20 अंक
तृतीय इकाई	- गीता- चतुर्दशोऽध्याय (गुणत्रयविभागयोगः)	- 20 अंक
चतुर्थ इकाई	- गीता- पञ्चदशोऽध्याय (पुरुषोत्तमयोग)	- 10 अंक
पञ्चम इकाई	- शास्त्र स्मरण एवं लेखन	- 30 अंक

**Course Outcomes-**

- śikṣā vallī kā paricaya।
- sṛṣṭi racanā krama kā vivaraṇa।
- guṇatrayavibhāga yoga kā paricaya।
- puruṣottama yoga kā paricaya।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
सहायक ग्रन्थ- उपनिषद् रहस्य - पण्डित भीमसेन शर्मा

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

**1. Reading and Communication Skills:**

- 1.1 Words Which Commonly Confuse (Homographs, Heteronyms)
- 1.2 Word Formation by Adding Prefixes & Suffixes with their Correct Pronunciation
- 1.3 Newspaper and Magazine Reading
- 1.4 Comprehension

**Suggested Reading & Resources for Practice:**

- Dictionaries—
  - Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
  - Oxford English-Hindi Dictionary (Oxford University Press)
  - Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)
- General English for All Classes—U.R. Mediratta (Jiwan Publishing House Pvt Ltd India, F-227, Mansarover Garden, Main Market, New Delhi-110015)
- Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, Ist Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)
- Useful You Tube Channels and Other Helpful Mobile Applications

**2. Listening Skills:**

- 2.1 To Listen to the Good Speakers of English Language Having Good Contents

**Resources for Practice:**

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru
  - BK Shivani

### 3. Grammar Skills:

- 3.1 Transformation
- 3.2 Idioms & Phrasal Verbs
- 3.3 Figures of Speech
- 3.4 Proverbs/Sayings/Famous Quotes
- 3.5 Vocabulary (Synonyms & Antonyms)
- 3.6 One Word Substitution
- 3.7 Translation (Hindi to English and Vice-Versa)

### 4. Speaking Skills:

- 4.1 Anchoring
- 4.2 Telling Good Jokes
- 4.3 Telling Recipes
- 4.4 Singing English Songs

### Course Outcomes-

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

### वैकल्पिक प्रश्न-पत्र

विषय : मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, तृतीय वर्ष**  
**Semester -V**

**Paper - 1**

**vedānta darśana-1 Paper Code - BD-501**

(70+30=100)

**Course Objectives-**

- brahma ke nimitta kāraṇatva kā jñāna।
- jagat-utpatti meṃ prakṛti kā upādāna kāraṇatva kā bodha।
- smṛti-gran̥thoṃ meṃ ubhayakāraṇavāda kā jñāna।
- prāṇoṃ kī utpatti evaṃ svarūpa kā bodha।

वेदान्त सूत्र (प्रथम व द्वितीय अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- brahma ke nimitta kāraṇatva kā vivaraṇa।
- jagattotpatti ke prakṛti kā upādāna kāraṇatva vivaraṇa।
- smṛti gran̥thoṃ meṃ pratipādita ubhayakāraṇavāda kā samanvaya।
- prāṇoṃ kī utpatti evaṃ svarūpa paricaya।

निर्धारित पाठ्यपुस्तक - ब्रह्मसूत्रम्- दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ- वैदिक मुनिभाष्य

**Paper - 2**

**mīmāṃsā darśana-1 Paper Code - BD-502**

(70+30=100)

**Course Objectives-**

- tarkavāda evaṃ arthavāda prakaraṇa kā bodha।
- dharma ke svarūpa kā jñāna।
- dharma ke sād̥haka pramāṇoṃ kā bodha।
- veda apauruṣeya evaṃ arthavāda prakaraṇa kā jñāna।

मीमांसा सूत्र-

चतुस्सूत्री + 46 सूत्र, (कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- tarkavāda evaṃ arthavāda prakaraṇa paricaya।
- dharma svarūpa kā vivaraṇa।
- dharma ke sād̥haka pramāṇoṃ kā paricaya।
- veda apauruṣeya evaṃ arthavāda prakaraṇa paricaya।

निर्धारित पाठ्यपुस्तक - मीमांसा दर्शन (शाबरभाष्य)

प्रकाशक- युधिष्ठिर मीमांसक, बहालगढ़, जिला- सोनीपत, हरियाणा।

**Paper - 3**

**saṃskṛta vyākaraṇa- I Paper Code - BD-503**

(70+30=100)

**Course Objectives-**

- akārānta śabdarūparūpa kī siddhi kā bodha।
- ikārānta ukārānta rūpa kī siddhi kā jñāna।
- ṭṭakārānta śabdarūpa kī siddhi kā bodha।
- halanta śabdarūpa kī siddhi kā jñāna।

प्रथम इकाई- नामिक-I (अजन्त शब्दरूप) - 35 अंक

द्वितीय इकाई- काव्यदीपिका, अष्टमशिखा-II, - 35 अंक

(प्रतिवस्तूपमा अलंकार से व्याजस्तुति अलंकार पर्यन्त)

तृतीय इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

**Course Outcomes-**

- akāranta śabdarūpa siddhi vivaraṇa।
- ikāranta-ukāranta ādi vivaraṇa।
- ṛkārānta- ukāranta ādi vivaraṇa।
- halanta- ukāranta ādi vivaraṇa।

**निर्धारित पाठ्यपुस्तक** - नामिकम् (महर्षि दयानन्द सरस्वतीकृत)

प्रकाशक- वैदिक पुस्तकालय, केसरगंज, अजमेर-305001, राजस्थान।

काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)

प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,

पो. बाक्स नं.- 1129, वाराणसी-221001

**Paper - 4**

**saṃskṛta vyākaraṇa - II Paper Code - BD-504**

(70+30=100)

**Course Objectives-**

- kṛdanta sāmānya kā bodha।
- kṛdanta siddhi kā jñāna।
- kṛta pratyaayoṃ kī jānakārī।
- kṛdanta śabdōṃ kī siddhi kā bodha।

**व्याकरण चन्द्रोदय**

प्रथम इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-1-30) - 14 अंक

द्वितीय इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-31-60) - 14 अंक

तृतीय इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-61-90) - 14 अंक

चतुर्थ इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-91-120) - 14 अंक

पञ्चम इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-215-249) - 14 अंक

षष्ठ इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

### Course Outcomes-

- kṛdanta sāmānya kā paricaya।
- kṛdanta siddhi vivaraṇa।
- kṛta pratyayom kā paricaya।
- kṛt pratyayom se banane vāle śabdom kī siddhi।

निर्धारित पाठ्यपुस्तक - व्याकरण चन्द्रोदय-द्वितीय खण्ड (श्री चारुदेव शास्त्री)  
प्रकाशक

### Paper - 5

*samskr̥ta sāhitya* Paper Code - BD-505

(70+30=100)

### Course Objectives-

- omkāra upāsana kā bodha।
- raikvaṭṭaṣi evaṃ rājā jānaśruti saṃvāda kā jñāna।
- jābāli ṭṭaṣise śvetaketu ke 5 praśnom kā jñāna।
- nārada-sanatkumāra saṃvāda kā bodha।

प्रथम इकाई- छान्दोग्योपनिषद्- प्रथम प्रपाठक (1-5 खण्ड), तृतीय प्रपाठक (खण्ड-13,16) - 15 अंक  
द्वितीय इकाई- तृतीय प्रपाठक (खण्ड-18,19), चतुर्थ प्रपाठक (खण्ड-1-9, 16,17), - 15 अंक  
तृतीय इकाई- पञ्चम प्रपाठक (खण्ड-1, 11-14), षष्ठ प्रपाठक (1-16 खण्ड) - 15 अंक  
चतुर्थ इकाई- सप्तम प्रपाठक (1-26 खण्ड), अष्टम प्रपाठक (1-2 खण्ड) - 15 अंक  
पञ्चम इकाई- गीता- षोडश अध्याय (दैवासुरसम्पद् विभागयोग)सप्तदश अध्याय (श्रद्धात्रयविभागयोग) - 10 अंक  
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

### Course Outcomes-

- omkāra upāsana vivaraṇa।
- rekva ṛṣi evaṃ rājā janaśruti saṃvāda।
- śvetaketu ke jābāli se 5 praśnom kā vivaraṇa।
- nārada ko sanatkumāra kā upadeśa।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48

गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ- उपनिषद् रहस्य - पण्डित भीमसेन शर्मा।

**ENGLISH LITERATURE-5****Paper Code - BD-506**

(70+30=100)

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

S.NO.	Story Name	English Literature	Page No.
1	My Mother	Prose	1-3
2	PP Acharya Balkrishan ji	Prose	4-20
3	The Doctors Word	Prose	21-24
4	The Spell	Prose	25-32
5	Helen Keller	Prose	33-35
6	Major Dhyan Chand	Prose	36-38
7	Aryabhatt	Prose	39-42
8	The Last Lesson	Prose	43-47

**Course Outcomes-**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**वैकल्पिक प्रश्न-पत्र**

विषय : मनोविज्ञान, भारतीय ज्ञान परम्परा,  
धर्मशास्त्र, प्राचीन भारतीय इतिहास,  
अर्थशास्त्र, राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, तृतीय वर्ष**  
**Semester -VI**

**Paper - 1**

**vedānta darśana-2 Paper Code - BD-601**

(70+30=100)

**Course Objectives-**

- jīvātmā kā sūkṣmaśarīra dvārā gamanāgamana kā jñāna।
- jīvātmā evaṃ paramātmā ke saṃbaṃdha kā bodha।
- pratikopāsanā ke pratiśedha kā jñāna।
- devayāna mārگا kī jānakārī।

वेदान्त सूत्र- (तृतीय व चतुर्थ अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- jīvātmā kā sūkṣma śarīra dvārā gamana-āgamana paricaya।
- jīvātmā evaṃ paramātmā ke madhya saṃbaṃdha vivaraṇa
- pratikopāsanā kā pratiśedha।
- devayāna mārگا paricaya।

निर्धारित पाठ्यपुस्तक- ब्रह्मसूत्रम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - वैदिक मुनि भाष्य

**Paper - 2**

**nighaṇṭu Paper Code - BD-602**

(70+30=100)

**Course Objectives-**

- ācārya vāvyayiṇī ke ṣaḍbhāva vikāroṃ kā bodha।
- audumbarāmaṇa ke śabda anityatva ke mata ko bodha।
- kutsa ācārya mantra anarthakatva khaṇḍana kā jñāna।
- ācārya gārgya ke upasargoṃ kī sārthakatā kā bodha।

प्रथम इकाई - निघण्टु- प्रथम व द्वितीय अध्याय (कण्ठस्थीकरण)

- 70 अंक

द्वितीय इकाई - निरुक्त-यास्क-भूमिका

- 30 अंक

**Course Outcomes-**

- ācārya vārsyāyaṇī ke ṣaḍ bhāva vikāra kā paricaya।
- audumbarāyaṇa kā śabda anityatva mata khaṇḍana।
- kutsa ācārya kā mantra anarthakatva khaṇḍana।
- ācārya gārgya kā upasargoṃ kā sārthaka batānā।

निर्धारित पाठ्य ग्रन्थ- निरुक्त (चन्द्रमणि-व्याख्यायुक्त संस्करण)

प्रकाशक-हरयाणा साहित्य संस्थान, गुरुकुल झज्जर (हरयाणा)

**Paper - 3**  
**saṃskṛta vyākaraṇa- I Paper Code - BD-603**

(70+30=100)

**Course Objectives-**

- halanta śabda rūpa kā bodha।
- halanta śabdarūpa siddhi kā jñāna।
- arthāpatti ādi alaṃkāroṃ kā bodha।
- vācana evaṃ lekhaṇa kā jñāna।

प्रथम इकाई- नामिक-II (हलन्त शब्दरूप)	- 35 अंक
द्वितीय इकाई- काव्यदीपिका, अष्टमशिखा-III, (प्रतिपमलंकार अलंकार से अर्थापत्ति अलंकार पर्यन्त)	- 35 अंक
तृतीय इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

**Course Outcomes-**

- halanta śabdarūpa paricaya।
- halanta śabdarūpa gūḍ siddhi।
- pratipamalaṃkāra se arthāpatti alaṃkāra paryanta paricaya।
- vācana evaṃ lekhaṇa paricaya।

**निर्धारित पाठ्यपुस्तक-** नामिकम् (महर्षि दयानन्द सरस्वतीकृत)

प्रकाशक- वैदिक पुस्तकालय, केसरगंज, अजमेर-305001, राजस्थान।

काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)

प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,

पो. बाक्स नं.- 1129, वाराणसी-221001

## Paper - 4

### samṣkṛta vyākaraṇa- II Paper Code - BD-604

(70+30=100)

#### Course Objectives-

- apatyā prakaraṇa kā bodha।
- cāturārthika pratyayom kā jñāna।
- samāsānta pratyayom kā bodha।
- matvarthāya prakaraṇa kā jñāna।

#### व्याकरण चन्द्रोदय- तद्धित प्रकरण

प्रथम इकाई- (पृष्ठ संख्या-251 से 273)	- 14 अंक
द्वितीय इकाई- (पृष्ठ संख्या-274 से 295)	- 14 अंक
तृतीय इकाई- (पृष्ठ संख्या-296 से 317)	- 14 अंक
चतुर्थ इकाई- (पृष्ठ संख्या-318 से 339)	- 14 अंक
पञ्चम इकाई- (पृष्ठ संख्या-340 से 364)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- apatyā prakaraṇa bodha kā vivaraṇa।
- cāturārthika pratyaya paricaya।
- samāsānta paricaya।
- matvarthīya prakaraṇa।

निर्धारित पाठ्यपुस्तक- व्याकरण चन्द्रोदय-द्वितीय खण्ड (श्री चारुदेव शास्त्री)

प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

## Paper - 5

### samskrta sāhitya Paper Code - BD-605

(70+30=100)

#### Course Objectives-

- prāṇa saṃbandhī devāsura kathā kā bodha।
- ahaṃ brahmāsmi' mahā vākya kā bodha।
- yājñayavalkya- maitreyī saṃvāda kā bodha।
- jagata karaṇatva evaṃ traitavāda tathā śarīra rūpī nagarī kā bodha।

- उद्देश्य- 1. प्राण संबंधी देवासुर कथा का बोध।  
2. 'अहं ब्रह्मास्मि' महा वाक्य का बोध।  
3. याज्ञवल्क्य- मैत्रेयी संवाद का बोध।  
4. जगत करणत्व एवं त्रैतवाद तथा शरीर रूपी नगरी का बोध।

#### बृहदारण्यकोपनिषद्

प्रथम इकाई-	प्रथम अध्याय- प्राण सम्बन्धी देवासुर कथा, अहं ब्रह्मास्मि	- 14 अंक
द्वितीय इकाई-	द्वितीय अध्याय- याज्ञवल्क्य-मैत्रेयी संवाद	- 14 अंक
तृतीय इकाई-	पञ्चम अध्याय- सम्पूर्ण	- 14 अंक
चतुर्थ इकाई-	श्वेताश्वतर- 1-4 अध्याय	- 14 अंक
पञ्चम इकाई-	गीता- अष्टदशोऽध्याय (मोक्षसंन्यासयोग)	- 14 अंक
षष्ठ इकाई-	शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- prāṇa saṃvadhi devāsura kathā vivaraṇa।
- ahaṃ brahmāsmi, vākya svarūpa jñāna।
- yājñavalkya maitreyī saṃvāda।
- nau dvāra rūpī śarīra kā varṇana।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
सहायक ग्रन्थ- उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

## Paper - 6

### ENGLISH LITERATURE-6 Paper Code - BD-606

(70+30=100)

#### Course Objectives-

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

S.NO.	Story Name	English Literature	Page No.
1	The Solitary Reaper	Poetry	1-3
2	Mercy (Poem)	Poetry	4-20
3	Sardar Ballabh-Bhai Patel	Prose	21-24
4	The Last Leaf	Poetry	25-32
5	P.P.Swami RamDev Ji	Prose	33-35
6	The Exemplary Characters of Mahabharat	Need to Added	36-38
7	The Exemplary Characters of Ramayan	Need to Added	39-42

#### Course Outcomes-

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**प्रश्नपत्र- ( 7 ) पर्यावरण विज्ञान**

**Paper Code - BD-607**

(100)

**वैकल्पिक प्रश्न-पत्र**

**विषय :** मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

# B.Sc. (Honours) Biological Science CBCS Structure under the Faculty of APPLIED & ALLIED SCIENCE

	CORE COURSES (14)	ABILITY ENHANCEMENT (2)	SKILL ENHANCEMENT (4)	DISCIPLINE SPECIFIC (4)	GENERIC ELECTIVE (4)
SEMESTER -I	BSHB-CC-101 (Chemistry)  BSHB-CC-102 (Cell Biology)	BSHB-AE-101 English	BSHB-SE-101 (Biostatistics)		BSHB-GE-101 Fundamentals of Yoga & Ayurveda <hr/> Or BSHB-GE-102 Foundation of Physical Education
SEMESTER -II	BSHB-CC-201 (Biodiversity)  BSHB-CC-202 (Biophysics)	BSHB-AE-201 Environmental Science	BSHB-SE-201 (Recombinant DNA Technology)		BSHB-GE-201 Indian Culture or <hr/> BSHB-GE-202 Introduction to Srimad Bhagawad Gita
SEMESTER -III	BSHB-CC-301 (Biochemistry)  BSHB-CC-302 (Ecology)  BSHB-CC-303 (Microbiology)		BSHB-SE-301 (Computer Programming)	BSHB-DS-301 (Drug Discovery & Development)	
SEMESTER -IV	BSHB-CC-401 (Metabolism)  BSHB-CC-402 (Mol Biology)  BSHB-CC-403 (Physiology)		BSHB-SE-401 (Analytical Chemistry)	BSHB-DS-401 (Biomaterials)	
SEMESTER -V	BSHB-CC-501 (Genetics)  BSHB-CC-502 (Neurobiology)			BSHB-DS-501 (Economic Botany)	BSHB-GE-501 Research Methodology or BSHB-GE-502 Fundamentals of Organic Chemistry
SEMESTER -VI	BSHB-CC-601 (Evolution)  BSHB-CC-602 (Endocrinology)			BSHB-DS-601 (Dissertation)	BSHB-GE-601 Biochemical Instrumentation or BSHB-GE-602 Structural Bioinformatics
TOTAL	14 PAPERS  THEORY 14X4CREDITS=56  PRACTICAL 14X2CREDITS=28	2 PAPERS  2X4 CREDITS=8	4 PAPERS  4X4 CREDITS=16	4 PAPERS  4X6 CREDITS=24	4 PAPERS  4X4 CREDITS=16
OVERALL CREDITS	148				

University of Patanjali, Haridwar

Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: CHEMISTRY (THEORY)

SUBJECT CODE: - BSHB-CC101

SEMESTER – I

Course Objectives:

The chemistry course objectives are

- 1) Helping learners to describe chemical bonding and structural aspect of molecules.
- 2) Basic idea of inorganic, Physical and organic aspectt of the molecules.
- 3) Help to understand the atomic structure, Kinetics, bonding & bio-molecules.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Chemical Bonding and Molecular Structure Ionic Bonding [15 hrs]**

Ionic Bonding, Lattice energy and solvation energy. Born-Haber cycle and its applications, Covalent Bonding: VB Approach, Lewis theory, VSEPR theory to explain the shapes of molecules, concept of hybridization, MO Approach: limitations of the VB approach, salient features of the MO theory. Rules for the LCAO method, bonding and anti-bonding MOs and their characteristics for s-s-, s-p and p-p combinations of atomic orbitals, MO treatment of homonuclear diatomic molecules and heteronuclear diatomic molecules such as CO, HF.

**Unit 2 Chemical Thermodynamics [15 hrs]**

First Law of Thermodynamics: Calculation of work (w), heat (q), changes in internal energy ( $\Delta E$ ) and enthalpy ( $\Delta H$ ) for expansion or compression of ideal gases under isothermal and adiabatic conditions for both reversible and irreversible processes. Calculation of w,q,  $\Delta E$ , and  $\Delta H$  for processes involving changes in physical states. Important principles and definitions of thermochemistry. Concept of standard state and standard enthalpies of formation, Variation of enthalpy of a reaction with temperature Kirchoff's equation. Second law of thermodynamics,

concept of entropy, Gibbs free energy and Helmholtz free energy. Calculations of entropy change and free energy change for reversible and irreversible processes under isothermal and adiabatic conditions. Criteria of spontaneity, Gibbs Helmholtz equation.

### **Unit 3 Chemical Kinetics [10 hrs]**

The concept of reaction rates, effect of temperature, pressure, catalyst and other factors on reaction rates. Order and molecularity of a reaction, derivation of integrated rate equations for zero, first and second order reactions, half-life of a reaction, general methods for determination of order of a reaction, Concept of activation energy and its calculation from Arrhenius equation.

### **Unit 4 Atomic Structure [15 hrs]**

Review of: Bohr's theory and its limitations, Heisenberg uncertainty principle, Dual behaviour of matter and radiation, De-Broglie's relation, Hydrogen atom spectra, need of a new approach to atomic structure. What is Quantum mechanics? Time independent Schrodinger equation and meaning of various terms in it. Significance of  $\psi$  and  $\psi^2$ , Schrödinger equation for hydrogen atom, radial and angular parts of the hydrogenic wave functions (atomic orbitals) and their variations for 1s, 2s, 2p, 3s, 3p and 3d orbitals (Only graphical representation), radial and angular nodes and their significance, radial distribution functions and the concept of the most probable distance with special reference to 1s and 2s atomic orbitals. Significance of quantum numbers, orbital angular momentum and quantum numbers. Shapes of s, p and d atomic orbitals

### **Unit 5 Bio-molecules & Medicinal chemistry [5 hrs]**

Bio-molecules: Carbohydrates, proteins, medicines and vitamins.

### **Course Outcomes**

Upon completion of the course the student should be able to:

1. Get a knowledge of the theoretical principles of chemistry of molecular structure, bonding and properties of chemical substances and structure and function of bio-inorganic molecules
2. Get an acquaintance with chemical concepts and apply the concepts of thermodynamics like heat, temperature, calorie, degree Celsius, application in photosynthesis and digestion, food industry, role of entropy on global warming, enthalpy of a reaction
3. Apply the concepts related to rate of chemical reaction, role of enzyme catalyst etc

### **SUGGESTED READINGS**

1. J. D. Lee: A New Concise Inorganic Chemistry, E.L.B.S.
2. P.W. Atkins: Physical Chemistry, Oxford University Press
3. R.T. Morrison & R. N. Boyd: Organic Chemistry, Prentice Hall
4. James E. Huheey *et al.*: Inorganic Chemistry: Principles of Structure and reactivity,

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC101-P CHEMISTRY (PRACTICALS) SEMESTER - I**

**TOTAL HOURS: 30 CREDIT: 2**

1. Simple Acid Base titrations for determining strengths.
2. Estimation of oxalic acid by titrating it with  $\text{KMnO}_4$ .
3. Surface tension measurement (use of organic solvents excluded) Determination of the surface tension of a liquid or a dilute solution using a stalagmometer.
4. Determination of the relative and absolute viscosity of a liquid or dilute solution using an Ostwald's viscometer
5. Determination of melting and boiling points of organic compounds
6. Separation of mixtures by Chromatography; Measure the  $R_f$  value in each case (combination of two compounds to be given) Identify and separate the components of a given mixture of 2 amino acids (glycine, aspartic acid, glutamic acid, tyrosine or any other amino acid) by paper chromatography.
7. Determination of Functional groups present in an organic compound.
8. Identification of anions and cations in an inorganic compound

**Suggested Reading Materials:**

1. A.I. Vogel, Vogel's Qualitative Inorganic Analysis, Prentice Hall, 7th Edition
2. A.I. Vogel, Vogel's Quantitative Chemical Analysis, Prentice Hall, 6th Edition
3. B.D. Khosla, Senior Practical Physical Chemistry, R.Chand & Co.

University of Patanjali, Haridwar

Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: CELL BIOLOGY (THEORY)

SUBJECT CODE: - BSHB-CC102

SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

The cell biology course objectives are

1. Helping learners to describe cytological, biochemical, physiological aspect of cell.
2. Relate normal cellular structures to their functions.
3. Apply modern cellular techniques to solve aspects of scientific problems.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit I: The Cell [10 hrs]**

Historical background, significant landmarks, cell theory, structure of prokaryotic and eukaryotic cells, Types of prokaryotic Cells- Domain archaea & domain bacteria, Prokaryotic diversity, mycoplasma, viruses, viroids, prions. Cell Organelles: Structure and functions of various organelles.

The nature of biological molecules, Carbohydrates, Lipids, Proteins, Nucleic acids

**Unit III: Cell Fractionation [10 hrs]**

Centrifugation: types of centrifuges, principle and different types of centrifugation- differential, density gradient and equilibrium.

**Unit IV: Cell Membrane and Transport [15 hrs]**

Functions, different models of membrane structure, types of membrane lipids, membrane proteins and carbohydrate. Transport of small molecules: Passive transport (simple diffusion and facilitated diffusion) and active transport and their types (P, V, F and ABC transporter) with

example of Na<sup>+</sup> /K<sup>+</sup> pump. Transport of macromolecules: Endocytosis (pinocytosis, phagocytosis), exocytosis.

### **Unit V: Cell Junctions [05 hrs]**

Basics concepts of anchoring junctions, tight junctions, communication junctions (gap junction and plasmodesmata).

### **Unit VI: Cytoskeletal Elements [05 hrs]**

Structure assembly and functions of microtubules, Microfilaments and Intermediate filaments.

### **Unit VII: Cell Cycle [05 hrs]**

Different phases of cell cycle and their significance. Checkpoints and regulation of cell cycle.

### **Unit VIII Principles of Microcopy [10 hrs]**

Principles and Applications of Microscopy including Light Microscopy, Phase Contrast Microscopy, Confocal microscopy and Electron Microscopy.

### **Course outcomes**

1. At the end of the course, the student has a strong foundation on the functions of the cell. Understand the genetic changes that give rise to cancer and the mechanisms by which those changes occur, as well as how genes are abnormally regulated.
2. The student grasps how cellular processes—such as cancer cell metabolism, stress responses, and cell cycle regulation—contribute to cancer development and progression. He/ She knows the biological processes underlying cancer initiation, progression, and metastasis and identify how tumors evolve and respond to/ or resist treatment
3. He masters the basic principles of signal transduction mechanisms, in particular the concepts of response specificity, signal amplitude and duration, signal integration and intracellular location give examples of different types of extracellular signals and receptors, and explain their functional significance describe the mechanisms by which different receptors may be activated by their respective ligands, describe and give examples of the structure and properties of the major components of signal transduction pathways.

### **SUGGESTED READINGS**

1. Karp, G. 2010. Cell and Molecular Biology: Concepts and Experiments. 6th Edition, John Wiley & Sons. Inc.
2. De Robertis, E. D. P. and De Robertis R. E. 2009. Cell and Molecular Biology, 8th edition. Lippincott Williams and Wilkins, Philadelphia.
3. Cooper G. M. Hausman R. E. 2009. The Cell: A Molecular Approach. 5th edition. ASM Press and Sunderland, Washington D. C.; Sinauer Academic Press.
4. Becker W. M., Kleinsmith L.J. and Bertni G. P. 2009. The World of the Cell. 7th edition. Pearson Benjamin Cummings Publishing, San francisco.

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### Structure of B.Sc. (Hons) Biological Science under CBCS

#### BSHB-CC-102-P Cell Biology (PRACTICALS) SEMESTER - I

**TOTAL HOURS: 30 CREDIT: 2**

(Wherever wet lab experiments are not possible the principles and concepts can be demonstrated through any other material or medium including videos/virtual labs etc.)

1. Microscopy- Theoretical knowledge of Light and Electron microscope.
2. To study the following techniques through photomicrographs: fluorescence microscopy, autoradiography, positive staining, negative staining, endocytosis and phagocytosis.
3. To explain mitosis and meiosis using permanent slides.
4. To cytochemically demonstrate the structure of cell using onion peel.
5. To cytochemically demonstrate presence of carbohydrates in cheek cells or onion peel using periodic acid Schiff's reagent.
6. To cytochemically demonstrate presence of DNA in cheek cells or onion peel using Feulgen reagent.
7. To study the effect of isotonic, hypotonic and hypertonic solutions on cells.
8. To study and comment upon different organelles of a typical cell using specimens/photographs.
9. To study the process of osmosis using potato osmometer.

#### SUGGESTED READINGS

1. Cell Biology-Practical Manual- Dr. Renu Gupta, Dr. Seema Makhija and Dr. Ravi Toteja, Prestige Publishers.
2. Cell and Molecular Biology- A Lab Manual-K.V. Chaitanya, PHI Learning Pvt. Limited, New Delhi
3. A Manual of Practical Zoology-Biodiversity, Cell Biology, Genetics & Developmental Biology Part 1- M.M Trigunayat and Kritika Trigunayat, Scientific Publishers, India

**University of Patanjali, Haridwar**

**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: BIOPHYSICS (THEORY)**

**SUBJECT CODE: - BSHB-CC-202**

**SEMESTER – II, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

**The biophysics course objectives are**

- 1. It Helps learner to understand the laws of physics to biological problems.**
- 2. Biophysics helps to understand the various laws & principles used for biological system.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit1: General Physics: [15 Hrs]**

Conservation of momentum and energy, work energy theorem. Conservation of angular momentum, torque, Physiological effects of acceleration and angular motion. Simple harmonic motion, damped and driven harmonic oscillator, Wave equation, superposition principle, pulses, Doppler effect, effects of vibrations in humans,

**Unit 2: Protein Structure & Stability [15 Hrs]**

Predicting properties of proteins from amino acid composition, Primary structure sequencing of polypeptide, hemoglobin, homologies in proteins, Secondary structure alpha and beta conformation, collagen structure, stability of alpha helix, Ramchandran plot, Tertiary structure, structure of myoglobin and hemoglobin, Quaternary structure, Analysis of subunits and chain arrangement of subunits, stability of globular quaternary structure. Protein folding rules

### **Unit 3: Biophysics of Various Organs [30 Hrs]**

(i) Structure of the eye, Optics of Vision, retinal pigments, rods and cones, Photochemistry of vision, structure of ear, physics of audition (amplitude, frequency, pitch), unit of measurement of sound, intensity, Audiometry, deafness, hearing aids. Taste & Smells: taste receptors & their role,

(ii) Electrocardiogram (ECG) and its characteristics, structure of lungs, diffusion, exchange and transport of gases, Effect of altitude changes on body, high altitude- mountain sickness. Biophysics of nerves, generation and propagation of nerve impulse, synapse, synaptic transmission, Brain Waves (EEG): origin of alpha, beta, delta & theta

#### **Course Outcome**

1. Examine biophysical scenarios using a conceptual understanding of the core concepts of biology, chemistry, and physics
2. Effectively communicate biophysics content through both written reports and oral presentation
3. Apply their physics and biophysics experience and knowledge to analyze new biophysical situations and to develop and refine experimental methods

#### **SUGGESTED READINGS**

1. Physical Biochemistry, David Freifelder, Applications to Biochemistry and Molecular Biology, 2nd Edition, W.H. freeman and Company, 2005.
2. Hoppe et. al., Biophysics, Translation of 2nd German Edition, Springer Verlag, 1983.
3. Keith Wilson and John Walker, Principles and Techniques of Biochemistry and Molecular Biology, 6th Edition, Cambridge University Press, 2005

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course BSHB-CC-202-P BIOPHYSICS (PRACTICALS)**

**SEMESTER - II TOTAL HOURS: 30 CREDIT: 2**

1. Determination of the acceleration due to gravity using bar pendulum
2. Determination of the coefficient of Viscosity of water by capillary flow method (Poiseuille's method)
3. Verification of Beer Law
4. Effect of different solvents on UV-Vis absorption spectra of proteins.

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course (C-3)**

**COURSE DETAILS**

**SUBJECT TITLE: BIODIVERSITY (THEORY)**

**SUBJECT CODE: - BSHB-CC201**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. Identify and describe the structural features of plants.**
- 2. Describe major evolutionary lineages of plants and their defining characteristics.**
- 3. Describe the cultural uses of plants for food, fiber, medicine, biotechnology etc.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Defining Biodiversity [15 hrs]**

Components of Biodiversity. Biodiversity crisis and biodiversity loss. Importance of biodiversity in daily life. Biodiversity and climate change. Threats to biodiversity, threatened criteria, Types of Ecosystems: India as mega biodiversity Nation. Hot spots and biodiversity in India. Biodiversity and Ecosystem functioning. Plant and Animal systematic. Species concept in biodiversity studies. Indian Wildlife protection act, 1972

**Unit 2 Modern Tools in the study of Biodiversity [15 hrs]**

Endemism, endemic plants and animals; Assessment of mapping of biodiversity; GIS/Remote sensing; Biotechnology and Conservation, IUCN; Protected areas networks, reserve forests, biosphere reserve forest, wetlands, Biodiversity park, Germplasm banks, National Parks, Botanical and Zoological Gardens; Wildlife Sanctuaries, Bioresources, rescue centers, captive breeding centres, zoo. Biological diversity act, 2002.

### **Unit 3 Crop Diversity [15 hrs]**

Wild relatives of cultivated plant; BM Crops, Domesticated diversity; Spice diversity; Forest diversity and wild life. Men biosphere program 1988

### **Unit 4 Bio-prospecting [10 hrs]**

Bio-prospecting - Micro organisms as a source of novel enzymes, antibiotics, antiviral agents; Immunosuppressive agents and other therapeutic agents.

### **Unit5: Different Projects for conserving wild animals [5 hrs]**

Project Tiger, Project Asiatic lion and elephant, Project Crocodile, Project Vultures

#### **Learning Outcomes:**

1. Students will realize that people are dependent on intact habitats that sustain the various organisms we need to produce food, medicines, clothing, and other materials. Students will learn about certain species' roles in an ecosystem.
2. Students will discover that life can be found almost everywhere on earth.
3. Students will identify floral and faunal species in its surrounding with their status.
4. Inputs of conservation steps according to the status of degradation in surrounding.
5. Actively participate in planned, sustained, and collaborative ecological Projects.

#### **SUGGESTED READINGS**

1. Aber, J.D.and Melillo J.M., Terrestrial Ecosystems: 1991, W.B.Saunders
2. Ingrowille, M Diversity and Evolution of land plants 1992 chapman and Hall

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-201-P BIODIVERSITY (PRACTICALS)**

**SEMESTER - II TOTAL HOURS: 30 CREDIT: 2**

1. Study of a few endangered species of amphibians, reptiles, birds and mammals of India
2. Report on visit to National Park/Wild life sanctuary/Botanical garden.
3. Study through specimens/photographs/slides of a. Key stones species (b) Ecads, Ecotypes, Ecophenes (c) Sacred flora (havan materials etc.)
4. Study of the characteristic features of any flower for each family a. Malvaceae/Fabaceae/Cruciferae/Ranunculaceae (any one family), (b) Compositae b. Euphorbiaceae, (d) Poaceae/Liliaceae (any one family)

**SUGGESTED READING**

1. A Manual of Practical Zoology-Biodiversity, Cell Biology, Genetics & Developmental Biology Part 1- M.M Trigunayat and Kritika Trigunayat, Scientific Publishers, India
2. Dinesh Biodiversity (Microbes, Algae, Fungi & Archegoniatas)-Dr. Anil K. Thakur , Dr. Susheel K. Bassi, Dr. S.K. Sood- Dinesh & Co.

## University of Patanjali, Haridwar

### Structure of B.Sc. (Hons) Biological Science under CBCS

#### Core Course

#### COURSE DETAILS

**SUBJECT TITLE: MICROBIOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC303**

**SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4**

#### Course Objectives:

2. Describe disease causing microorganisms and microbial agents at organismal, cellular or molecular levels.
3. Relate normal cellular and molecular structures their functions.
4. Apply modern biological techniques to identify potential pathogens and solve aspects of scientific problems.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

#### Unit 1 [15Hrs]

Early history of Microbiology and Microbial Diversity constituting structure of bacteria: cocci/bacilli and its organelles, Discovery of microorganisms, contributions of scientists, spontaneous generation v/s Biogenesis, discovery of antibiotics. Physiological diversity, microbial classification ( prokaryotes: Bacteria and Archaea, eukaryotes: Fungi, Algae, Protozoa, Helminthes) Binomial nomenclature, General characteristics of viruses, Lytic and lysogenic cycle of T4 and Lambda bacteriophages.

#### Unit 2 [15Hrs]

Microbial Nutrition, Growth and Control Nutritional requirements (macro and micronutrients), Temperature, pH, osmotic pressure, Types of culture media, uptake of nutrients, Maintenance of pure cultures. Bacterial division, growth curve, generation time, measurement of growth. Asepsis, sterilization with physical and chemical agents.

### **Unit 3 [15Hrs]**

Harmful and beneficial microbes Normal microflora of human body, host-pathogen interaction, bacterial, viral, protozoan and fungal diseases of plants and animals. Phytotoxins, antimicrobial agents, drug resistance, interferons. Microorganisms and fermentation; Bioremediation; Bio-indicators.

### **Unit 4 [15Hrs]**

Microbial Biotechnology Types of restriction enzymes, cloning vectors (plasmids, phage-based etc), selection of recombinants. Application of recombinant DNA technology – Therapeutic proteins (human disease) transgenics-herbicide, resistance, metabolic engineering, production of vaccines

#### **Course Outcomes:**

1. Students will gain knowledge about the different cell organelles of microorganisms and their detailed functions
2. Students will also study the growth and control of microbes as well as different bacteriological techniques involved in microbiology.

#### **SUGGESTED READINGS**

1. Willey, J.M., Sherwood, L.M. and Woolverton, C.J.(2008). Prescott, Harley and Klein's Microbiology.7th edition. McGraw Hill Higher Education.
2. Tortora, G.J., Funke, B.R. and Case, C.L.(2008) Microbiology: An Introduction. 9th edition. Pearson Education.
3. Primrose and Twymann, Principles of Gene Manipulation and Genomics. 7th edition(2008), Blackwell Publishing.
4. Microbiology, Prescott, Harley and Kleins, McGraw Hill International.
5. Microbiology, Pelczar, Chan and Krieg. McGraw Hill International .
6. Biology of Microorganisms, T. D. Brock and M.T. Madigan, Pearsons, Benjamin Cumming

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-303-P MICROBIOLOGY (PRACTICALS)**

**SEMESTER – III, TOTAL HOURS: 30 CREDITS : 2**

1. To study disinfectants and sterilization techniques.
2. To study types of Media and perform media preparation.
3. To perform subculturing- streaking techniques (T streaking). .
4. To study Growth Curve of bacteria.
5. To study the effect of pH/temperature/UV light on bacterial growth.
6. To perform Gram's staining
7. Milk quality testing by Methylene Blue dye reductase test.

**SUGGESTED READINGS**

1. **Practical Microbiology Paperback –D.K. Maheshwari & R.C. Dubey, S. Chand & Company Limited.**
2. **Introductory Practical Microbiology- J. Mudili, Narosa Publishing House**
3. **Practical Manual for Undergraduates Microbiology- Mukesh Kumar 3<sup>rd</sup> Edition, Jain Brothers**



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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: BIOCHEMISTRY (THEORY)

SUBJECT CODE: - BSHB-CC301

SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. To give students a solid foundation in biology and chemistry.
2. To develop analytical and critical-thinking skills that allows independent exploration of biological phenomena through the scientific method.
3. To introduce students to modern methods of biochemical experimentation within the disciplines of biology and chemistry.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>		<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 150</b>				
<b>Theory:100</b>		<b>Practical:50</b>		
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>	

**Unit - 1: [15 hrs]**

Introduction to Bio-chemistry; chief intracellular components; Introduction to chemical receptors/co-receptors, cell to cell communication, channels & transportation; Definition and classification of Vitamins and their Clinical importance; Basics of Molecular mechanism of O<sub>2</sub> transport and storage; Fundamentals of Bio-Energetics: Biological Oxidation, General Concept of oxidation, features of cellular Oxidation-respiratory chain oxidative phosphorylations, Structure and analysis of water.

**Unit – 2: [15 hrs]**

Carbohydrates: Definition, classification with examples and general functions; Concept of isomerism, types & mode of action; Introduction to metabolism, Integration of metabolism and catabolism.

**Unit-3: [15 hrs]**

lipids and proteins Lipids: definition, classifications and general functions; Introduction to essential fatty acids, cholesterol, Blood lipids, brief review of lipoproteins and fatty liver; Proteins: definition, classification and Biomedical Importance, Plasma Proteins and functions;

Definition, classification and nomenclature of Enzymes, basic introduction to Enzymology and regulation of Enzymatic activity. Structure of DNA, RNA, nucleic acid metabolism and diseases associated with it.

#### **Unit- 4: [15 hrs]**

Functional Bio-chemistry Introduction to hormones, molecular basis of hormonal action; Introduction to common metabolic disorders; Basic techniques for estimation of different Bio-chemical markers i.e., diffusion, Osmosis, Electrophoresis

#### **Learning Outcomes:**

1. Disciplinary grasp and understanding of biochemistry, structure and function of biological molecules.
2. Explain biological mechanisms, such as the processes and control of bioenergetics and metabolism.
3. Explain the biochemical processes that underlie the relationship between genotype and phenotype.
4. Demonstrate an experiential learning and critical thinking of the structure and function of both prokaryotic and eukaryotic cells (including the molecular basis and role of sub-cellular compartmentalization).
5. Fundamental properties of elements, their role in formation of biomolecules and in chemical reactions within living organisms.
6. Understanding of the concepts of mole, mole fraction, molarity, etc. and to apply them in preparations of solutions of desired strengths.
7. Demonstrate an understanding of the principles, and have practical experience of, a wide range of biochemical techniques (e.g. basic molecular biology, cell biology and microbiology methods, spectro-photometry, the use of standards for quantification, enzyme kinetics; macromolecular purification, chromatography, electrophoresis, etc.).
8. Analyse biochemical data (e.g. in enzyme kinetics, molecular structure analysis and biological databases).

#### **SUGGESTED READING**

1. Campbell, MK (2012) Biochemistry, 7th ed., Published by Cengage Learning
2. Campbell, PN and Smith AD (2011) Biochemistry Illustrated, 4th ed., Published by Churchill Livingstone
3. Tymoczko JL, Berg JM and Stryer L (2012) Biochemistry: A short course, 2nd ed., W.H. Freeman
4. Berg JM, Tymoczko JL and Stryer L (2011) Biochemistry, W.H. Freeman and Company
5. Nelson DL and Cox MM (2008) Lehninger Principles of Biochemistry, 5th Edition., W.H. Freeman and Company,
6. Willey MJ, Sherwood, LM & Woolverton C J (2013) Prescott, Harley and Klein's Microbiology by. 9th Ed., McGrawHill
7. Voet, D. and Voet J.G (2004) Biochemistry 3rd edition, John Wiley and Sons,

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**BSHB-CC-302-P Biochemistry (Practicals)**

1. Properties of water, Concept of pH and buffers, preparation of buffers and Numerical problems to explain the concepts
2. Qualitative/Quantitative tests for carbohydrates, reducing sugars, non reducing sugars
3. Qualitative/Quantitative tests for lipids and proteins
4. Study of protein secondary and tertiary structures with the help of models

**SUGGESTED READING**

1. **Introductory Practical Biochemistry, S.K. Sawhney, Narosa Publishing House**

University of Patanjali, Haridwar

Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: ECOLOGY (THEORY)

SUBJECT CODE: - BSHB-CC 302

SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Describe plant and animal distribution patterns in relation to abiotic and biotic factors.
2. Define the essential characteristics underlying natural ecosystems.
3. Identify global environmental problems

Total Number of Hrs. : 60	Theory	Practical	Tutorial
Credits	4	2	-
Hrs/Week	4	2	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Ecology [15 Hrs]**

History, definition, ecological factors (abiotic and biotic factor), ecological range (Eury , Steno) Stress and adaptation (Morphological, physiological, anatomical and biochemical), Biotic interaction, phenotypic and genotypic plasticity, canalization, Ecological Succession, Ecological Services.

**Unit 2: Ecosystem [15 Hrs]**

Concept, components, (e.g., aquatic, marine, forest, grassland, desert, energy flow, food web, niche , different trophic levels, ecological pyramids, Autecology

**Unit 3 Pollution [15 Hrs]**

Pollution: Pollution of Soil, water, air (types of pollutants and sources), noise pollution, radiation pollution, eutrophication, remedial measures, biomagnifications, Disaster management : Types of disasters & Management strategy, Environmental Impact Assessment analysis

## **Unit 4 Behavioral ecology [15 Hrs]**

Social, reproductive & territorial behavior, evolution of optimal life history, reproductive structure and mating system, microbial ecology.

### **Learning Outcomes:**

1. Master the concepts and principles of Ecology
2. Master the structural and functional aspects of biodiversity and the need for its conservation
3. Be aware of the suitable use of field techniques, data collection, mapping, analysis and interpretation.
4. Be able to take up interdisciplinary research and teaching in Ecology
5. The student should have understanding of the ecology and the role of human beings in shaping the ecosystem.
6. Knowing various components of the ecology and interfaces.
7. Ability to understand the ecosystem and its various component and functions.
8. Knowledge on ecology, and ecological dynamics.
9. Ability to understand the various ecosystem services and their role in sustaining the environment.
10. Be familiar with modern tools and techniques and their appropriate use to conduct research.

### **SUGGESTED READINGS**

1. Wilkenson DM - 2007 - Fundamental Processes in Ecology
2. Aber J.D. & Melillo J M 1991- Terrestrial Ecosystems
3. Smith R.L. Elements of ecology
4. Ricklefs Economy of nature
5. Odum, E.P., (2008). Fundamentals of Ecology. Indian Edition. Brooks/Cole

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-302-P Ecology Practicals**

**SEMESTER – III, TOTAL HOURS: 30 CREDITS: 2**

1. Study through specimens/photographs/slides Parasitic angiosperms, Saprophytic angiosperms, VAM fungi, Root nodules, Coralloid roots, Mycorrhizal roots, Velamen roots, Lichen as pollution indicators,
2. Principle and function of Sechi disc, Atmometer, Anemometer, Hygrometer, Hair hygrometer, Luxmeter, Rain guage, Soil thermometer, Min-Max thermometer
3. Minimal quadrat method
4. To determine density/frequency/abundance of the vegetation by quadrat method.
5. To determine soil texture
6. To determine soil density, bulk density, particle density and pore space.
7. To determine water holding capacity and percolation rate of soil.
8. To determine pH, Cl, SO<sub>4</sub>, NO<sub>3</sub> in the soil.

**SUGGESTED READINGS**

1. Wilkenson DM - 2007 - Fundamental Processes in Ecology
2. Aber J.D. & Melillo J M 1991- Terrestrial Ecosystems
3. Smith R.L. Elements of ecology
4. Ricklefs Economy of nature
5. Odum, E.P., (2008). Fundamentals of Ecology. Indian Edition. Brooks/Cole

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: MICROBIOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC303**

**SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. Describe disease causing microorganisms and microbial agents at organismal, cellular or molecular levels.**
- 2. Relate normal cellular and molecular structures their functions.**
- 3. Apply modern biological techniques to identify potential pathogens and solve aspects of scientific problems.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 [15Hrs]**

Early history of Microbiology and Microbial Diversity constituting structure of bacteria: cocci/bacilli and its organelles, Discovery of microorganisms, contributions of scientists, spontaneous generation v/s Biogenesis, discovery of antibiotics. Physiological diversity, microbial classification ( prokaryotes: Bacteria and Archaea, eukaryotes: Fungi, Algae, Protozoa, Helminthes) Binomial nomenclature, General characteristics of viruses, Lytic and lysogenic cycle of T4 and Lambda bacteriophages.

**Unit 2 [15Hrs]**

Microbial Nutrition, Growth and Control Nutritional requirements (macro and micronutrients), Temperature, pH, osmotic pressure, Types of culture media, uptake of nutrients, Maintenance of pure cultures. Bacterial division, growth curve, generation time, measurement of growth. Asepsis, sterilization with physical and chemical agents.

### **Unit 3 [15Hrs]**

Harmful and beneficial microbes Normal microflora of human body, host-pathogen interaction, bacterial, viral, protozoan and fungal diseases of plants and animals. Phytotoxins, antimicrobial agents, drug resistance, interferons. Microorganisms and fermentation; Bioremediation; Bio-indicators.

### **Unit 4 [15Hrs]**

Microbial Biotechnology Types of restriction enzymes, cloning vectors (plasmids, phage-based etc), selection of recombinants. Application of recombinant DNA technology – Therapeutic proteins (human disease) transgenics-herbicide, resistance, metabolic engineering, production of vaccines

#### **Learning Outcomes:**

1. Apply the knowledge to understand the microbial physiology and to identify the microorganisms.
2. Define basic concepts and definitions of microbiology
3. Familiarize basic concepts in microscopy and sterilization procedures
4. Explain general characters of different groups of microbes and culturing media.
5. Discuss the ultrastructure of bacterial cell. Differentiate prokaryotic and eukaryotic microbes
6. Explain classification of microbes and Examine different methods for bacterial identification
7. Master the regulation of biochemical pathway and possible processmodifications for improved control over microorganisms for microbialproduct synthesis.

#### **SUGGESTED READINGS**

1. Willey, J.M., Sherwood, L.M. and Woolverton, C.J.(2008). Prescott, Harley and Klein's Microbiology.7th edition. McGraw Hill Higher Education.
2. Tortora, G.J., Funke, B.R. and Case, C.L.(2008) Microbiology: An Introduction. 9th edition. Pearson Education.
3. Primrose and Twymann, Principles of Gene Manipulation and Genomics. 7th edition(2008), Blackwell Publishing.
4. Microbiology, Prescott, Harley and Kleins, McGraw Hill International.
5. Microbiology, Pelczar, Chan and Krieg. McGraw Hill International .
6. Biology of Microorganisms, T. D. Brock and M.T. Madigan, Pearsons, Benjamin Cumming

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CC-303-P MICROBIOLOGY (PRACTICALS)**

**SEMESTER – III, TOTAL HOURS: 30 CREDITS : 2**

1. To study disinfectants and sterilization techniques.
2. To study types of Media and perform media preparation.
3. To perform subculturing- streaking techniques (T streaking). .
4. To study Growth Curve of bacteria.
5. To study the effect of pH/temperature/UV light on bacterial growth.
6. To perform Gram's staining
7. Milk quality testing by Methylene Blue dye reductase test.

**SUGGESTED READINGS**

4. **Practical Microbiology Paperback –D.K. Maheshwari & R.C. Dubey, S. Chand & Company Limited.**
5. **Introductory Practical Microbiology-** J. Mudili, Narosa Publishing House
6. **Practical Manual for Undergraduates Microbiology-** Mukesh Kumar 3<sup>rd</sup> Edition, Jain Brothers

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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: METABOLISM (THEORY)

SUBJECT CODE: - BSHB-CC401

SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Knowledge of the historical background for metabolism.
2. Explain the basic elements of the integration of metabolism
3. Compare and contrast the basic differences between carbohydrate, lipid and protein metabolism.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Concept of Metabolism [10HRS]**

Experimental approaches to study metabolism; Primary and secondary metabolism

**Unit 2 Major metabolic pathways [20HRS]**

Basics of Carbohydrate Metabolism (I) - Glycolysis; Aerobic and Anerobic, metabolism of glycogens; glycogenesis, glycogenolysis, glyconeogenesis, Regulation of glycogen metabolism; Basics of Carbohydrate Metabolism (II) - Kreb's Cycle (T.C.A), Regulation of Blood glucose, Hexose Mono Phosphate (HMP Shunt); Basics of Lipid Metabolism - Oxidation of fatty acids, cholesterol synthesis. Correlation between carbohydrate, amino acids and fatty acid degradation.

**Unit 3 Special aspects of metabolic regulation, Tissue specialization [15HRS]**

Function. Intracellular communications and signal transduction mechanisms; developmental adaptations – eg: rat, C3, C4 plants; Metabolic basis of health and disorders – Jaundice – diabetes mellitus, exercise, alcohol abuse

#### **Unit 4 Use of microbes for specific metabolic tasks [15HRS]**

Alternate metabolic cycles, Carbon metabolism of intracellular bacterial pathogens; Environmental cleaning, Metabolic handling of xenobiotics and drug resistance; Photo and lithotrophic metabolic capabilities; myporia

#### **Course Outcome:**

1. It helps the students in appreciating the integrated approach of interrelated pathways of catabolism and anabolism.
2. It also emphasizes on metabolic disorders at molecular level.
3. It features the regulatory aspects of metabolism for better understanding of physiology and therapeutic applications.

**BSHB CC401-P METABOLISM : INTEGRATION AND ADAPTATION –  
LABORATORY**

**Credit:2**

1. Estimation of blood glucose – Glucose Oxidase method
2. Estimation of Cholesterol – Hyper Cholesteremia samples
3. Estimation of SGPT and SGOT 4.

Identification of organelles by marker enzymes – SDH, LDH and acid phosphatase

**SUGGESTED READINGS**

1. H.G. Sehlegal, General Microbiology 2003, Cambridge University Press Cambridge
2. Sterier, R.Y.et AL, General Microbiology 1986, Macmillan London
3. Thomas M.Devlin, Text Book of Biochemistry with Clinical Correlations, 6th edition, 2006, Wiley-Liss 4. Peter W. Hochachka, George. N. Somero, Biochemical adaptation, Amazon Publishers BISP 302 :

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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: MOLECULAR BIOLOGY (THEORY)

SUBJECT CODE: - BSHB-CC402

SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4

Course Objectives

1. Outline the structure of the biomolecules found in all living organisms.
2. To describe how RNA, DNA and Proteins are synthesized.
3. To explain the process of cell division in both somatic and germ cells.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Molecular Biology [15 Hrs]**

General principles - bidirectional replication, Semi-conservative, discontinuous. RNA priming, Various models of DNA replication. Enzyme involved in DNA replication – DNA polymerases, DNA ligase, primase, telomerase and other accessory proteins. Denaturation and renaturation of DNA, Cot curves.

**Unit 2 The mutability and Repair of DNA [10 Hrs]**

Replication Errors (Transitions, transversion and thymine dimer), DNA Damage (deamination, depurination and dimerization) and their repair: mismatch repair, SOS response (recombination), Excision Repair, Photoreactivation.

**Unit 3 Information Transfer –I: Mechanism of Transcription [10Hrs]**

Basic transcription apparatus, Initiation, elongation and termination of transcription, Eukaryotic transcription of mRNA, tRNA and rRNA, types of RNA polymerases, transcription factors, Inhibitors of transcription- rifampicin and  $\alpha$ -amanitin. Reverse Transcription in virus.

#### **Unit 4 Post-Transcriptional Modifications [10 Hrs]**

Split Genes, Concept of introns and exons, RNA splicing, Spliceosomes and Self splicing introns, alternative splicing and exon shuffling, mRNA transport.

**Unit 5 Information Transfer-II: Mechanism of Translation [15 Hrs]** Features of genetic code and exceptions in some systems, Ribosome structure- rRNA and proteins, Charging of tRNA, aminoacyl tRNA synthetases, Proteins involved in initiation (in prokaryotes and eukaryotes), elongation and termination of polypeptides, Fidelity of translation, Inhibitors of protein synthesis – tetracyclins, aminoglycosides, chloramphenicol and aminoglycosides.

#### **Learning Outcomes:**

1. Graduates will gain fundamental knowledge in Molecular Biology.
2. Graduates will be familiarizing with the contemporary research in the field of Molecular Biology.
3. Exhibit an advanced knowledge base in genetics, cell and molecular biology, and anatomy and physiology.
4. Graduates gain the applied knowledge of molecular biology for research and development.
5. Graduates will gain knowledge in molecular biology for academic and Biotech industry placement
6. Graduates will gain basic and applied knowledge to enable them for start-ups/bio entrepreneurship.

#### **SUGGESTED READINGS**

1. Molecular Biology of the Gene, 6th edition (2007), Watson, J. D., Baker T. A., Bell, S. P., Gann, A., Levine, M., and Losick, R; Benjamin Cummings Publishers, ISBN-13: 978-0805395921.
2. Cell and Molecular Biology: Concepts and Experiments, 7th edition (2013), Gerald Karp. ; Wiley Publishers ISBN-13: 978-1118206737.
3. Molecular Cloning: A Laboratory Manual, 4th edition (2012), Michael R. Green and Joseph Sambrook; Cold Spring Harbor Laboratory Press, ISBN-13: 978-1936113422.
4. The World of the Cell, 7th edition (2008), Becker, Kleinsmith, Hardin and Bertoni. Benjamin Cummings, ISBN-13: 978-0805393934.
5. The Cell: A Molecular Approach, 6th edition (2013), Cooper and Hausman; Sinauer Associates, Inc. ISBN-13: 978-1605351551.
6. DNA Replication, 2nd edition (2005), Arthur Kornberg; University Science Books ISBN-13: 978-1891389443.

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**BSHB-CP-402-P Molecular Biology**

**TOTAL HOURS: 30 CREDITS: 2**

(Wherever wet lab experiments are not possible the principles and concepts can be demonstrated through any other material or medium including videos/virtual labs etc.)

1. Preparation of various stock solutions required for Molecular Biology Laboratory.
2. Preparation of culture medium (LB) for E. coli (both solid and liquid) and raise culture of E. coli.
3. Isolation of chromosomal DNA from bacterial cultures and visualization on Agarose Gel Electrophoresis.
4. Quantitative estimation of salmon sperm/ calf thymus DNA using colorimeter (Diphenylamine reagent) and Spectrophotometer (A260 measurement).
5. Isolation of genomic DNA from blood/ tissue.
6. Demonstration of Polymerase Chain Reaction (PCR) technique
7. Demonstration of AMES test or reverse mutation for carcinogenicity

**SUGGESTED READINGS**

1. Molecular Biology of the Gene, 6th edition (2007), Watson, J. D., Baker T. A., Bell, S. P., Gann, A., Levine, M., and Losick, R; Benjamin Cummings Publishers, ISBN-13: 978-0805395921.
2. Cell and Molecular Biology: Concepts and Experiments, 7th edition (2013), Gerald Karp. ; Wiley Publishers ISBN-13: 978-1118206737.
3. Molecular Cloning: A Laboratory Manual, 4th edition (2012), Michael R. Green and Joseph Sambrook; Cold Spring Harbor Laboratory Press, ISBN-13: 978-1936113422.
4. The World of the Cell, 7th edition (2008), Becker, Kleinsmith, Hardin and Bertoni. Benjamin Cummings, ISBN-13: 978-0805393934.
5. The Cell: A Molecular Approach, 6th edition (2013), Cooper and Hausman; Sinauer Associates, Inc. ISBN-13: 978-1605351551.
6. DNA Replication, 2nd edition (2005), Arthur Kornberg; University Science Books ISBN-13: 978-1891389443.

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Structure of B.Sc. (Hons) Biological Science under CBCS

Core Course

COURSE DETAILS

SUBJECT TITLE: SYSTEMS PHYSIOLOGY (THEORY)

SUBJECT CODE: - BSHB-CC403

SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Describe metabolic reactions which occur in cells.
2. Compare the structure and function of organ systems in a variety of animal phyla.
3. Outline the steps involved in transmission of nerve impulses.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Movements and Bulk Transport [12HRS]**

Cellular movements, ciliary and flagellar structure and function; Introduction to musculo skeletal system; Terrestrial, aquatic and aerial locomotion; Locomotory cost; Long distance transport of water and nutrients in plants (xylem and phloem transport) ; General plan and physiology of circulatory system in vertebrates and invertebrates

**Unit 2 Gas exchange in organism; Generation and utilization of energy[15HRS]**

Exchange in unicellular organisms and plants; Respiratory organs in aquatic and terrestrial systems ; Physiology of aquatic breathing and aerial breathing; Feeding patterns, digestive tract systems; Digestion of food

**Unit 3 Regulatory Physiology[15HRS]**

Mechanism of opening and closing of stomata. Regulation of water and solutes in aquatic and terrestrial animals; Osmoregulatory organs. Transpiration in plants; Excretion of nitrogenous wastes in animals; Patterns of Thermoregulation : Ectotherms and Endotherms; Structural and functional adaptation to stress

## **Unit 4 Integrative Physiology[18HRS]**

An overview of neuronal structure and function; Sensory physiology -mechano, chemo, thermo, photo and electro receptors; Endocrine systems in animals and their physiological effects; Plant hormones and their physiological effects; Regulation of metabolism and response to environmental cues.

### **Learning Outcomes:**

1. Have an enhanced knowledge and appreciation of human physiology;
2. Grasp the functions of important physiological systems including the cardio-respiratory, renal, reproductive, metabolic systems, endocrine system, skeletal system, nervous system and sense organs etc.
3. Grasp how these separate systems interact to yield integrated physiological responses to challenges such as exercise, fasting and ascent to high altitude, and how they can sometimes fail;
4. Be able to perform, analyse and report on experiments and observations in physiology;
5. Be able to recognise and identify principal tissue structures.
6. Describe the structure of major human organs and explain their role in the maintenance of healthy individuals.
7. Explain the interplay between different organ systems and how organs and cells interact to maintain biological equilibria in the face of a variable and changing environment.

## **SYSTEMS PHYSIOLOGY BSHB CC-403-P (PRACTICALS)**

**TOTAL HOURS: 30 CREDITS: 2**

1. Effect of isotonic, hypotonic and hypertonic salines on erythrocytes
2. Enumeration of RBC using haemocytometer
3. Estimation of total count of WBC using haemocytometer
4. Study of the effect of various environmental factors on transpiration in an excised twig/leaf
5. Calculation of the stomatal index, stomatal frequency and percentage of leaf area open through stomata in a mesophyte and a xerophytes
6. Study of the mechanism of stomatal opening and closing

### **SUGGESTED READINGS**

1. Knut Schmidt-Nielsen , Animal Physiology , Cambridge University Press
2. David Randall, Eckert's Animal Physiology, W.H.Freeman and Co.
3. Philips Withers; Comparative Animal Physiology. Books Cole Publishers

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Core Course

COURSE DETAILS

SUBJECT TITLE: METABOLISM (THEORY)

SUBJECT CODE: - BSHB-CC401

SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Knowledge of the historical background for metabolism.
2. Explain the basic elements of the integration of metabolism
3. Compare and contrast the basic differences between carbohydrate, lipid and protein metabolism.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 Concept of Metabolism [10HRS]**

Experimental approaches to study metabolism; Primary and secondary metabolism

**Unit 2 Major metabolic pathways [20HRS]**

Basics of Carbohydrate Metabolism (I) - Glycolysis; Aerobic and Anerobic, metabolism of glycogens; glycogenesis, glycogenolysis, glyconeogenesis, Regulation of glycogen metabolism; Basics of Carbohydrate Metabolism (II) - Kreb's Cycle (T.C.A), Regulation of Blood glucose, Hexose Mono Phosphate (HMP Shunt); Basics of Lipid Metabolism - Oxidation of fatty acids, cholesterol synthesis. Correlation between carbohydrate, amino acids and fatty acid degradation.

**Unit 3 Special aspects of metabolic regulation, Tissue specialization [15HRS]**

Function. Intracellular communications and signal transduction mechanisms; developmental adaptations – eg: rat, C3, C4 plants; Metabolic basis of health and disorders – Jaundice – diabetes mellitus, exercise, alcohol abuse

## **Unit 4 Use of microbes for specific metabolic tasks [15HRS]**

Alternate metabolic cycles, Carbon metabolism of intracellular bacterial pathogens; Environmental cleaning, Metabolic handling of xenobiotics and drug resistance; Photo and lithotrophic metabolic capabilities; myporia

### **Course Outcome:**

1. Master the concepts of metabolism and Illustrate the metabolism of carbohydrates through various anabolic and catabolic pathways like glycolysis, Kreb's cycle, Glycogen metabolism, glucuronic acid cycle etc.
2. Grasp the regulation of glycolysis and TCA cycle.

### **SUGGESTED READINGS**

1. H.G. Sehlegal, General Microbiology 2003, Cambridge University Press Cambridge
2. Sterier, R.Y.et AL, General Microbiology 1986, Macmillan London
3. Thomas M.Devlin, Text Book of Biochemistry with Clinical Correlations, 6th edition, 2006, Wiley-Liss
4. Peter W. Hochachka, George. N. Somero, Biochemical adaptation, Amazon Publishers BISP 302 :

**BSHB CC401-P METABOLISM : INTEGRATION AND ADAPTATION –  
LABORATORY**

1. Estimation of blood glucose – Glucose Oxidase method
2. Estimation of Cholesterol – Hyper Cholesteremia samples
3. Estimation of SGPT and SGOT 4.

Identification of organelles by marker enzymes – SDH, LDH and acid phosphatase

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Core Course

COURSE DETAILS

SUBJECT TITLE: GENETICS (THEORY)

SUBJECT CODE: - BSHB-CC501

SEMESTER – V, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Apply Quantitative problem solving Skills to genetics problems and issues.
2. Demonstrate their ability to reason both inductively and deductively with experimental information and data.
3. Select and apply experimental procedures to solve genetic problems.
4. To make the students to understand the gene expression and regulation

Total Number of Hrs. : 60	Theory	Practical	Tutorial
Credits	4	2	-
Hrs/Week	4	2	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1 : Mendelian Genetics and Extensions [10HRS]**

Mendel's work on transmission of traits, Genetic Variation, Molecular basis of Genetic Information. Principles of Inheritance, Chromosome theory of inheritance, Laws of probability, Pedigree analysis, Incomplete dominance and co-dominance, Multiple alleles, Lethal alleles, Epistasis, Pleiotropy

**Unit 2: Linkage, Crossing over and Chromosomal Mapping [05 HRS]**

Linkage and Crossing over, cytological basis of crossing over, Molecular mechanism of crossing over. Recombination frequency as a measure of linkage intensity, two factor and three factor crosses, Interference and Coincidence

**Unit 3: Mutations[10 HRS]**

Chromosomal mutations, Deletion, Duplication, Inversion, Translocation, Aneuploidy and Polyploidy; Gene mutations: Induced v/s Spontaneous, Back v/s Suppressor mutations.

Molecular basis of mutations in relation to UV light and chemical mutagens, Detection of mutations: ClB method, Attached X-method, DNA repair mechanisms

#### **Unit 4: Extra chromosomal Inheritance [05 HRS]**

Chloroplast mutation/Variation in four 'o clock plant and Chlamydomonas, Mitochondrial mutations in Neurospora and yeast, Maternal effects, Infective heredity-Kappa particles in Paramecium

#### **Unit 5: Genome Dynamics-Transposable Genetic Elements[10 HRS]**

Prokaryotic transposable elements-IS elements, Composite transposons, Tn-3 elements; Eukaryotic transposable elements- Ac-Ds system in maize and P-elements in drosophila; Uses of transposons

#### **Unit: 6 Genomics, Bioinformatics and Proteomics[10HRS]**

Genomes of bacteria, Drosophila and Humans; Human genome project; Introduction to Bioinformatics, Gene and Protein databases, sequence similarity and alignment, Gene feature identification. Gene Annotation and analysis of transcription and translation; Posttranslational analysis-Protein interaction

#### **Unit: 7 Population and Evolutionary Genetics [10HRS]**

Allele frequencies, Genotype frequencies, Hardy-Weinberg Law, role of natural selection, Genetic drift. Speciation

#### **Course Outcome:**

1. Revising the Mendelian Genetics and molecular basis of heredity
2. Applying the gene transformation in recombination
3. Analyzing the types gene mutation and causes on genetic disorders
4. Revising the Mendelian Genetics and molecular basis of heredity

#### **SUGGESTED READINGS**

1. Genetics (2012) 6th ed., Snustad, D.P. and Simmons, M.J., John Wiley & Sons. (Singapore), ISBN: 978-1-118-09242-2.
2. 2. Genetics - A Conceptual Approach (2012), 4th ed., Pierce, B.A., W.H. Freeman & Co. (New York), ISBN:13:978-1-4292-7606-1 / ISBN:10:1-4292-7606-1.
3. 3. An Introduction to Genetic Analysis (2010), 10th ed., Griffiths, A.J.F, Wessler, S. R, Carroll, S. B. and Doebley, J., W.H. Freeman & Company (New York), ISBN:10: 1-4292-2943-8.

**BSHB-CC501-P GENETICS (PRACTICALS)****Credit:2**

1. Study of Linkage, recombination, gene mapping using marker based data from *Drosophila*.
2. Study of Phlox/ *Allium* Karyotype (normal and abnormal).
3. PTC testing in a population and calculation of allele and genotype frequencies.
4. Study of abnormal human karyotype and pedigrees (dry lab)
5. Isolation of plasmid DNA from *E.coli*. and restriction
6. Restriction enzyme digestion plasmid DNA.
7. Estimation of size of a DNA fragment after electrophoresis using DNA markers.
8. Construction of Restriction digestion maps from data provided.
9. Demonstration of DNA fingerprinting.

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**Structure of B.Sc. (Hons) Biological Science under CBCS**

**COURSE DETAILS**

**SUBJECT TITLE: FUNDAMENTALS OF NEUROBIOLOGY (THEORY)**

**SUBJECT CODE: - BSHB-CC502**

**SEMESTER – V, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

1. Describe the structure and function of cells that comprise the nervous system.
2. Outline sensory and motor systems.
3. Generate a hypothesis from a set of observations and then suggest experiments to test the hypothesis.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit-1 [12HRS]**

**Introduction** to neurons, glia and muscle, **Membrane Potentials:** Basic concept of resting membrane potential: equilibrium potentials, Nernst equation, Action potential: generation and propagation.

**Unit-2 [12HRS]**

**Ion Channels and Ion Pumps:** Ion channels, ion pumps, Ohm's law, sodium channels, potassium channels, calcium channels, acetylcholine receptor channels, NMDA receptor channels, diversity of potassium channels.

**Unit -3 [12HRS]**

**Drugs and toxins as tools in neuroscience research, Muscle Contraction:** Mechanism of muscle contraction, **Synapse:** Electrical synapses, chemical synapses, molecular and cellular mechanisms of synaptic transmission, neuropharmacology of synaptic transmission, calcium regulation of synaptic transmission.

**Unit-4 [12HRS]**

**Neural System and Behavior:** Functional neuroanatomy of human central nervous system. Neurotransmitter systems, G protein-coupled receptors and effectors. Biology of sleep-wakefulness cycle. **Chemical senses:** Vision. Auditory. Sensation of touch. Thermoreception. Pain and the placebo effects.

**Unit -5 [12HRS]**

**Homeostasis in the Nervous System:**

**Diseases of Nervous System:** Neurobiology of affective disorders or mood disorders; dopamine and addiction; current research on Alzheimer's disease, Parkinson's disease, Huntington's disease, autism spectrum disorders (ASD) and Japanese encephalitis,

**SUGGESTED READINGS**

1. M.Bear, B.Connors, M. Paradiso, Neuroscience :exploring the brain, Lippincott Williams & Wilkins, 3<sup>rd</sup> edition, 2006.

**BSHB-CC 502-P NEUROBIOLOGY (PRACTICALS)**

1. The vertebrate nervous system and its organization chart.
2. Demonstration of tissue sectioning techniques.
3. Introduction to behavioral measurements and statistical analysis

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Core Course

COURSE DETAILS

SUBJECT TITLE: BIOLOGY OF EVOLUTION (THEORY)

SUBJECT CODE: - BSHB-CC601

SEMESTER –VI, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. Describe the theory of natural selection.
2. Explain how new species arise.
3. Construct a phylogenetic tree.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>		<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 150</b>				
<b>Theory:100</b>		<b>Practical:50</b>		
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>	

**Unit 1: Historical Review of Evolutionary Concept [10HRS]**

Pre-Darwinian ideas – List of contributors influencing Darwin indicated as a timeline. Lamarckism – Merits and demerits. Darwinism – Merits and demerits, Post-Darwinian era – Modern synthetic theory; biomathematics and the theory of population genetics leading to Neo-Darwinism

**Unit 2: Life's Beginnings[15HRS]**

Chemogeny – An overview of pre-biotic conditions and events; experimental proofs to abiotic origin of micro- and macro-molecules. Current concept of chemogeny – RNA first hypothesis. Biogeny – Cellular evolution based on proto-cell models (coacervates and proteinoid microspheres). Origin of photosynthesis – Evolution of oxygen and ozone buildup. Endosymbiotic theory – Evolution of Eukaryotes from Prokaryotes

### **Unit 3: Evidences of Evolution [20HRS]**

Paleobiological – Concept of Stratigraphy and geological timescale; fossil study (types, formation and dating methods). Anatomical – Vestigial organs; Homologous and Analogous organs (concept of parallelism and convergence in evolution). Taxonomic – Transitional forms/evolutionary intermediates; living fossils. Phylogenetic – a) Fossil based – Phylogeny of horse as a model. b) Molecule based – Protein model (Cytochrome C); gene model (Globin gene family)

### **Unit 4: Sources of Evolution – Variations as Raw Materials of Change [15HRS]**

**Types of variations**– Continuous and discontinuous; heritable and non-heritable. Causes, classification and contribution to evolution – Gene mutation; chromosomal aberrations; recombination and random assortment (basis of sexual reproduction); gene regulation . Concept of micro- and macro-evolution – A brief comparison

#### **Course Outcome:**

1. Gain conceptual understanding of evidences, theories and mechanisms of evolution
2. Explain the evolutionary history of man
3. Obtain comprehensive knowledge of comparative anatomy of chordates and to recognize their evolutionary trends

#### **SUGGESTED READINGS**

1. Ridley, M. (2004) Evolution. III Edn. Blackwell
2. Hall, B. K. and Hallgrimson, B. (2008) Strickberger's Evolution. IV Edn. Jones and Barlett
3. Zimmer, C. and Emlen, D. J. (2013) Evolution: Making Sense of Life. Roberts & Co.
4. Futuyma, D. (1998) Evolutionary Biology. III Edn. Sinauer Assoc. Inc.
5. Barton, Briggs, Eisen, Goldstein and Patel. (2007) Evolution. Cold Spring Harbor Laboratory Press

**BSHB-CP 601-P BIOLOGY OF EVOLUTION (PRACTICALS)      Credit 2**

(A) Evidences of fossils (using pictures/slides)

1. Study of types of fossils ( e.g. trails, casts and moulds and others) and Index fossils of Palaeozoic era
2. Connecting links/transitional forms - Eg. Euglena, Neopilina, Balanoglossus, Chimaera, Tiktaalik, Archaeopteryx, Ornithorhynchus
3. Living fossils - Eg. Limulus, Peripatus ,Latimeria, Sphaenodon
4. Vestigial, Analogous and Homologous organs using photographs, models or specimen

(B) Variations

1. Sampling of human height, weight and BMI for continuous variation

(C) Selection Exemplifying Adaptive strategies (Colouration, Mimetic form, Co-adaptation and co-evolution; Adaptations to aquatic, fossorial and arboreal modes of life) using Specimens

(D) Phylogeny

1. Digit reduction in horse phylogeny (study from chart),

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Core Course

COURSE DETAILS

SUBJECT TITLE: ENDOCRINOLOGY (THEORY)

SUBJECT CODE: - BSHB-CC-602

SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4

Course objectives

1. To explain the roles of the endocrine system in maintaining homeostasis, integrating growth and development.
2. To differentiate among endocrine, paracrine and autocrine systems.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Introduction [3HRS]**

History of endocrinology, characteristic of Hormones, Classification –Local and circulating hormones, chemical classification, Neurosecretions and Neurohormones

**Unit 2: Hypothalamic-Pituitary system [12HRS]**

Hypothalamus; structure of hypothalamus, names and functions of important hypothalamic nuclei, neuroendocrine regulation of endocrine glands and feedback mechanisms. Pituitary Gland, structure of pituitary, its hormones, their secretion, transportation, storage, functions and hypothalamic regulation; disorders of pituitary gland. Pineal gland, secretions and their functions in biological rhythms and reproduction.

**Unit 3: Thyroid-Parathyroid system [8HRS]**

Thyroid gland; structure of thyroid gland, synthesis and functions of thyroid hormones, regulation of thyroid hormone secretion; thyrocalcitonin. Disorders of thyroid gland. Parathyroid Glands: Secretion Action of parathyroid Hormones, role of parathyroid hormone and calcitonin in calcium metabolism, disorders of parathyroid gland

#### **Unit 4: Adrenal gland and its hormones [12HRS]**

Structural of Adrenal Gland – Synthesis and structure of hormones of the adrenal cortex and medulla; Biological Action of glucocorticoids, mineralocorticoids, adrenaline and noradrenaline on carbohydrate and protein metabolism; and cardiovascular system, osmoregulation, Stress and diseases related to adrenal cortex and medulla.

#### **Unit 5: Pancreas and its hormones [10HRS]**

Structure of Pancreatic Islets of Langerhans and hormones secreted by it; insulin secretion (proinsulin) its activation, Glucagon secretion, mechanism of action of both hormones in controlling the blood glucose level. Diabetes mellitus.

#### **Unit 6: Reproductive endocrinology [10HRS]**

Male Reproductive system; hormonal control of testes; chemistry and biosynthesis of testosterone, functions of testosterone. Female Reproductive system, role of hormones in Female Sexual cycle, placental hormones; parturition and lactation, Reproductive Health

Unit 7: **Gastrointestinal hormones** No. of Hours: 5

#### **Course Outcome:**

After the course the student should be able to comprehend:-

1. Biosynthesis & Receptor mechanism of Hormones and its Disorders
2. Reproductive cycle of Vertebrate, Menstruation cycle, Lactation, Pregnancy, and mechanism of Parturition.
3. Hormonal regulation of gametogenesis
4. Hormone & Behavior

#### **SUGGESTED READINGS**

1. J. Larry Jameson, editor. (2010). Harrison's Endocrinology. 2nd Edition. McGraw-Hill Press: New York.
2. Turner, D.C. and Bagnara, J.T. (Editor) (1976). General Endocrinology. W. B. Saunders Company, Philadelphia, Pennsylvania.
3. Hall, J.E. (2011). Guyton and Hall Textbook of Medical Physiology (Guyton Physiology).

**BSHB-CC606-P ENDOCRINOLOGY (PRACTICALS)      Credit:2**

**TOTAL HOURS: 30 CREDITS: 2**

1. Study of the permanent slides of all the endocrine glands
2. Estrous cycle of rat.- Vaginal smear
3. Compensatory ovarian hypertrophy or adrenal hypertrophy
4. Castration/ ovariectomy

## Ability Enhancement compulsory Course

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### COURSE DETAILS

**SUBJECT TITLE:** Communicative English

**CREDITS:** 4

**SUBJECT CODE:** - BSHB-AE101

### Course Objectives

1. To improve the fluency and confidence of the student when speaking English
2. To use English effectively for study purpose across the curriculum.

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	-	-
<b>Hrs/Week</b>	<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	-	-

### SEMESTER – I, TOTAL HOURS: 30 CREDITS: 2

Unit 1: Reading and communication Skills

An introduction to the International Phonetic Alphabet for English (Phonetic Symbols, Phonemes, Monophthongs, Diphthongs, Accent, Intonation, Stress etc)

Use of punctuations in Reading

Theory of communication

Type and modes of communication

### Suggested reading & Resources for practice:

1. Oxford Advanced learner's Dictionary of Current English (Oxford University Press)
2. Oxford English-Hindi Dictionary (Oxford University Press)
3. Some Useful Mobile Dictionaries Application (Can be downloaded from Google Play Store)
4. Communication Skills – Sanjay Kumar & Pushpa Lata (Oxford University Press, new Delhi)

5. High School English Grammar and Composition – P. C. Wren & H. Martin (S. Chand & Company Ltd. Ran Nagar, New Delhi- 110055, ISBN: 81-219-0009-3)
6. Useful You Tube Channels and Other Helpful Mobile Applications

## Unit 2

### **Listening Skills:**

To listen to the Good Speakers of English language Having Good Contents.

### **Resources for practices:**

Useful You Tube Channels and Other Helpful Mobile Applications-

Sadhguru

BK Shivani

## Unit 3

### **Grammar Skills**

Parts of Speech

Article

Vocabulary (Synonyms & Antonyms)

The Sentence – parts, Types, Forms, Question Tag and Sentence part (Based on Structures)

5. Simple Present, past and Future Tenses (Without main Verbs-SHO i.e is, am, are, was, were, will/shall be: has/have /had/will/shall have Type. Sentences imperative Sentences, Simple Translation (Hindi to English and Vice-Versa)

Suggested Reading

Aao Saral Angrezi Seekhein Volume-1- Swami Prem Vivekanand ji. (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand – 248125)

High School English Grammar and composition – P.C.Wren & H. Martin (S. Chand & Company Ltd. Ram Nagar, new Delhi -110055)

How to write correct English (Anglo-Hindi) – R. P. Sinha (Bharti Bhawan Publication. Ansari Road, Daryaganj, new Delhi 110002)

How to Translate into English –R. P. Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002 – ISBN: 9788177091083, 8177091085)

## Unit 4

### **Writing Skills**

Short and Simple Messages

Suggested Reading

Advance writing Skills – D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)

Useful You Tube Channels and other Helpful Mobile Applications

Unit 5

Speaking Skills

General Conversation & Expressions used in Day-to-Day Life

Suggested reading

Conversation Skills – S.C. Gupta Arihant Publications pvt Ltd, Meerut, ISBN:978-81-8348-135-9)

Useful You Tube Channels and Other helpful Mobile Applications.

### **Course Outcome**

It seeks to develop the students' abilities in grammar, oral skills, reading, writing and study skills

- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles

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### Structure of B.Sc. (Hons) Biological Science under CBCS

#### COURSE DETAILS

**SUBJECT TITLE:** Environmental Science

**SUBJECT CODE:** - BSHB-AE201

**SEMESTER – II, TOTAL HOURS: 30 CREDITS: 4**

#### Course Objectives

1. To understand how science and the scientific method work to address environmental problems.
2. The student will become familiar with environmental pollution such as Air, Water, Noise and soil and understand about global warming etc.
3. Students will learn about the environmental assessment, management and legislation.

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

#### Unit 1 Introduction to Environmental Science (7hrs)

Definitions, Principles and Scope of Environmental Science, Structure and composition of Atmosphere, Hydrosphere, lithosphere, Biosphere. Energy and environment: Fossil fuels, wind power, geothermal energy, and solar energy(solar collectors, photovoltaic modules, solar ponds). Nuclear energy, bio-energy, environmental implications of energy use: energy use pattern in india and world

#### Unit 2 Environmental pollution (8hrs)

Air, Water, Noise and soil Pollutants: Causes, Effects and prevention Global Warming: Impact, adaptation, vulnerability and mitigation. Kyoto protocol, World Metereological organizations (UNEP, IPCC and UNFCCC). Solid and Hazardous Waste management: Solid Waste-type and sources, Solid waste characteristics, generation rates, solid waste components, hazardous waste-Types, characteristics and health impacts, hazardous waste management.

### **Unit 3 Environmental Assessment, management and legislation (8hrs)**

Aims and objectives of Environmental impact assessment (EIA), Environment policy (1986), Overview of Environmental laws in India, Environmental protection act (1986), national Forest Policy (1988), The plastic Waste management rule (2016), Biodiversity and climate change, national missions on climate change.

### **Unit 4 Current Environmental Issues in India (7hrs)**

Environmental issues related to water resource project – narmada dam, Tehri dam, Almatti dam, Cauvery and Mahanadi, Carbon sequestration and carbon credits. Waste management-Swachh Bharat Abhiyan, Environmental Disasters: Minamata Disaster, Bhopal Gas Disaster (1984), Chernobyl Disaster (1986), Fukushima Daiichi nuclear disaster (2011).

#### **Learning Outcomes:**

**After completing the major in Environmental Studies, students will be able to:**

- Articulate the interconnected and interdisciplinary nature of environmental studies;
- Demonstrate an integrative approach to environmental issues with a focus on sustainability;
- Use critical thinking, problem-solving, and the methodological approaches of the social sciences, natural sciences, and humanities in environmental problem solving;
- Communicate complex environmental information to both technical and non-technical audiences;
- Understand and evaluate the global scale of environmental issues & problems; and
- Reflect critically on their roles, responsibilities, and identities as citizens, consumers and environmental actors in a complex, interconnected world.

#### **Suggested Reading**

1. Textbook of Environmental Studies (Universities Press India Pvt. Ltd.) Erach Bharucha.
2. Environmental Science: A global concern (McGraw-Hill Education) William P Cunningham, Mary Ann Cunningham.

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**SKILL ENHANCEMENT COURSE**

**COURSE DETAILS**

**SUBJECT TITLE: Biostatistics**

**SUBJECT CODE: - BSHB-SE-101**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

The Biostatistics course objectives are

1. It helps learners to analyzing data from various biological experimental problems.
2. It helps to determine the appropriate sampling techniques and coordinate data collection procedures.
3. It helps to conduct statistical analyses to answer scientific questions.

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**Unit-1 Biostatistics (8hrs)**

Definition –statistical methods – basic principles, Variables-measurements, functions, limitations and uses of statistics.

**Unit-2 Collection of data primary and secondary (7hrs)**

Types and methods of data collection procedures-merits and demerits. Classification-tabulation and presentation of data-sampling methods.

**Unit-3 Measures of central tendency (8hrs)**

Mean, median, mode, geometric mean – merits & demerits. Measures of dispersion-range, standards deviation, mean deviation, quartile deviation-merits and demerits; Co-efficient of variations.

#### **Unit 4 Correlation (12 hrs)**

Correlation: Types and methods of correlation, regression, simple regression equation, fitting prediction, similarities and dissimilarities of correlation and regression. Statistical inference: Hypothesis- simple hypothesis – student ‘t’ test –chi square test.

#### **Unit 5 Population and Sample (15 hrs)**

Population and sample, Sampling, Type of sampling, Simple Random Sampling and Stratified Random sampling (description without mathematical details). Analysis of Variance, one way and two way classified data, Design of experiment (DOE), principle of DOE, CRD, RBD, LSD (Description without mathematic details)

#### **Unit 6 Vital events (10 hrs)**

Vital events, Vital statistics, Rates and Ratios, Measures of fertility and mortality, Gross and Net reproduction rates, Life tables, complete and abridged life tables, description of life table, uses of life tables, population projection, population projection models.

#### **Course Outcome:**

1. This course imparts the knowledge of basic statistical methods to solve problems and students are taught to operate various statistical software packages
2. By the end of the course, the students are able to appreciate the importance of statistics in research and prepares them for a career in research

#### **SUGGESTED READINGS**

1. Danniell, W.W. (1987), Biostatistics, New York, John Wiley Sons.
2. Banerjee, P. (2001), Introduction to Biostatistics, S. Chand Publication, Delhi.
3. Goon, Gupta & das Gupta: Fundamentals of Statistics Vol II, Calcutta: The world press.

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**SKILL ENHANCEMENT COURSE**

**COURSE DETAILS**

**SUBJECT TITLE: RECOMBINANT DNA TECHNOLOGY**

**SUBJECT CODE: - BSHB-SE-201**

**SEMESTER – II, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. To understand the basic concept of recombinant DNA technology.**
- 2. To understand various aspects of Cloning vectors for prokaryotes and eukaryotes.**
- 3. To understand the applications of recombinant DNA technology in medicine, production of recombinant pharmaceuticals and in agriculture.**

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**Unit 1 Introduction to recombinant DNA technology (10 hrs)**

Overview of recombinant DNA technology. Restriction and modification systems, restriction endonucleases and other enzymes used in manipulating DNA molecules, separation of DNA by gel electrophoresis. Extraction and purification of plasmid DNA.

**Unit 2 Cloning vectors for prokaryotes and eukaryotes (10 hrs)**

Plasmids and bacteriophages as vectors for gene cloning. Cloning vectors based on E. coli plasmids, pBR322, pUC8, pGEM3Z. Joining of DNA fragments: ligation of DNA molecules. DNA ligases, sticky ends, blunt ends, linkers and adapters.

### **Unit 3 Introduction of DNA into cells (20 hrs)**

Uptake of DNA by cells, preparation of competent cells. Selection for transformed cells. Identification for recombinants - insertional inactivation, blue-white selection. Introduction of phage DNA into bacterial cells. Identification of recombinant phages. Methods for clone identification: The problem of selection, direct selection, marker rescue. Gene libraries, identification of a clone from gene library, colony and plaque hybridization probing, methods based on detection of the translation product of the cloned gene.

### **Unit 4 Applications of RDT (20 hrs)**

Applications in medicine, production of recombinant pharmaceuticals such as insulin, human growth hormone, factor VIII. Recombinant vaccines. Gene therapy. Applications in agriculture - plant genetic engineering, herbicide resistant crops, problems with genetically modified plants, safety concerns. Introduction to DNA sequencing, polymerase chain reaction, expression vectors.

#### **Course Outcome:**

- 1.This course teaches RDNA techniques and their application in the field of genetic engineering
- 2.They learn about plasmids,vectors and gain knowledge on the construction of cDNA libraries
- 3.Student of this course have knowledge on gene manipulation, gene expression, etc which prepares them for further studies in the area of genetic engineering

#### **SUGGESTED READINGS**

- 1.Gene Cloning and DNA Analysis (2010) 6th ed., Brown, T.A., Wiley-Blackwell publishing (Oxford, UK).
- 2.Principles of Gene Manipulation and Genomics (2006) 7th ed., Primrose, S.B., and Twyman, R. M., Blackwell publishing (Oxford, UK).
- 3.Molecular Biotechnology: Principles and Applications of Recombinant DNA (2010) 4th ed., Glick B.R., Pasternak, J.J. and Patten, C.L., ASM Press (Washington DC).

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**SKILL ENHANCEMENT COURSE**

**SUBJECT TITLE: COMPUTER PROGRAMMING**

**SUBJECT CODE: - BSHB-SE301**

**SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. To understand the basic concept of Computer Programming.**
- 2. To understand various aspects of Biology and Computer Programming techniques.**

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**COMPUTER PROGRAMMING FOR BIOLOGISTS**

Fundamentals of computers, algorithms, computer basics, Constants, variables, bits, bytes, binary and ASCII formats, arithmetic expressions, hierarchy of operations, inbuilt functions. Elements of the BASIC language. BASIC keywords and commands. Logical and relative operators. Strings and graphics. Compiled versus interpreted languages. Debugging. Simple programs using these concepts.

**Simple programming in Python : Getting started with Python program**

Variables, keywords and Operators, Control flow statements, Numbers and Functions, Strings, Lists, Tuples, Dictionary and Sets, More of Python functions, Object oriented programming with Python, Exception Handling in Python, File handing, Regular expression, Multithreading, Database, Python Debugging and Automation, Usage of standard module and web-scraping.

**Course Outcome:**

1. This is a skill based paper that introduces the students to the basics of computer operations
2. The student is imparted with knowledge on both hardware and software.
3. The student has a better understanding on the use of computers for various applications

**Books Recommended:**

1. Venit, S.M. Programming in BASIC: Problem solving with structure and style. Jaico Publishing House: Delhi (1996).
2. Let us Python by Kanetkar, BPB Publication, Noida.

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**SKILL ENHANCEMENT COURSE**

**SUBJECT TITLE: ANALYTICAL CHEMISTRY**

**SUBJECT CODE: - BSHB-SE401**

**SEMESTER – IV, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- 1. To understand the basic concept of Chemical Analysis.**
- 2. To understand titrations and salt analysis**

<b>Total Number of Hrs. : 30</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**ANALYTICAL CHEMISTRY**

Acid-base titrations, Simple & Double

Qualitative analysis of cations & anions, Dry and Wet tests, Confirmatory tests

Organic Compounds analysis (C, N, S and halides), Functional group analysis

Electrochemistry: Faraday's Law of electrolysis and its applications

**Course Outcome:**

1. Get knowledge about various topics of analytical chemistry such as Volumetric analysis, Gravimetric analysis and Separation techniques of various cations and anions in a mixture
2. Grasp about the Farady's laws of electrolysis and its application

Books recommended:

1. Christian, Gary D; Analytical Chemistry, 6<sup>th</sup> Ed. John Wiley & Sons, New York, 2004.
2. Harris, Daniel C: Exploring Chemical Analysis, Ed. New York, W.H. Freeman, 2001.
3. Khopkar, S.M. Basic Concepts of Analytical Chemistry. New Age, International Publisher, 2009.

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DISCIPLINE SPECIFIC SUBJECT

COURSE DETAILS

SUBJECT TITLE: BIOMATERIALS (THEORY)

SUBJECT CODE: - BSHB-DS 401

SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4

Course objectives:

1. To understand the basics of nanoscience and technology.
2. To understand the various process techniques available for bio- materials.
3. The application of nanotechnology in various fields such as biomedicine, Tissue Replacement Implants and Acute Wound Healing etc.

Total Number of Hrs. : 60	Theory	Practical	Tutorial
Credits	4	2	-
Hrs/Week	4	2	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit 1: Introduction to biomaterials [20HRS]**

Classification, Chemistry and characterization of biomaterials. The state of the art of biomaterials and the challenges. Disciplines involved in biomaterials science and the path from a need to a manufactured medical device. Material selection requirements for biomaterials – metals, composites, ceramics and polymers. Tissue environment of the implanted biomaterial: unit cell processes. Tissue responses to implants. Nanomaterials: fullerenes, carbon nanotubes, nanomembranes. Synthesis of bio-materials, Characterization of chemical, physical, mechanical properties, visco elasticity, end group analysis, determination of molecular weight of a polymer.

**Unit 2: Biocompatibility [10HRS]**

Biocompatibility of Bio-materials, wound-healing process, body response to implants, blood compatibility. Tests to assess biocompatibility of a polymer, modifications to improve biocompatibility. Reactions of biomaterials with cellular and extra cellular components

### **Unit 3: Modified biomaterials [10HRS]**

Biodegradable biomaterials, Bioactive polymers and biosynthetic polymers, inert biomaterials, genetically engineered biomaterials

### **Unit 4: Applications of Biomaterials [20HRS]**

Tissue Replacement Implants, Acute Wound Healing, Blood Clotting, Chronic Wound Healing and Foreign Body Response. Soft-tissue replacements, sutures, surgical tapes, adhesive, percutaneous and skin implants, maxillofacial augmentation, blood interfacing implants, hard tissue replacement implants, internal Fractures fixation devices, joint replacements. Artificial Organs Artificial Heart, Prosthetic cardiac Valves, Limb prosthesis, Externally Powered limb, prosthesis, Dental Implants, Other applications. Liposomes, hydrogels and Nanomaterials in drug delivery. Biomaterials in diagnostics and bioanalytical techniques.

### **SUGGESTED READINGS**

1. Sujata V. Bhat, Biomaterials , 2nd edition, Narosa Publishing House, New Delhi, 2006.
2. Buddy D. Ratner, B. D. Ratner, Allan S. Hoffman, Biomaterials Science: An Introduction To Materials In Medicine, 2nd Edition(2004) Publisher: Academic Press.
3. Fred W. Billmeyer, Text book of Polymer Science. 3 rd edition John Wiley and sons publications.
4. Basic & Clinical Pharmacology, 10th ed B.G. Kat sung, McGraw-Hill 2007

## **BSHB-DS-401-P BIOMATERIALS (PRACTICALS)**

**TOTAL HOURS: 30 CREDITS: 2**

1. Understand and follow guidelines regarding biological safety and maintain a laboratory notebook that follows the guidelines given in class. Prepare a laboratory report
2. Demonstrate aseptic cell culture techniques
3. Perform transformation into a bacterial cell
4. Describe and demonstrate basic concepts and examples of biomedical signal and image processing, biomaterials, biomechanics, and cellular and molecular biotechnology
5. Perform literature search
6. Prepare a scientific poster
7. Collect, analyze, and interpret physiological measurements
8. Visit to a R&D section of a leading Pharmaceutical company/ surgical theatre of Hospital. Prepare a laboratory report

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DISCIPLINE SPECIFIC SUBJECT

COURSE DETAILS

SUBJECT TITLE: DRUG DISCOVERY & DEVELOPMENT (THEORY)

SUBJECT CODE: - BSHB-DS-301

SEMESTER – III, TOTAL HOURS: 60 CREDITS: 4

Course Objectives:

1. To make the students understand about the basic concept of drug and its targets.
2. To understand the **Fundamentals of Physicochemical principles of drug action.**
3. To understand the **role of pharma-informatics in drug discovery.**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Unit-1 General Introduction [20HRS]**

Definition and scope of drug design; **Drug target classification:** Proteins as drug targets: Receptors - receptor role, ion channels, membrane bound enzyme activation, agonist and antagonists, concept of inverse agonist, desensitization and sensitization of receptors, affinity, efficacy and potency. Enzymes - Enzyme inhibitors (competitive, noncompetitive, suicide inhibitors), medicinal use of enzyme inhibitors. Nucleic acids as drug targets: Classes of drugs that interact with DNA: DNA intercalators and DNA alkylators.

**Unit-2 Physicochemical principles of drug action [05HRS]**

Partition coefficient, drug dissolution, acid-base properties, surface activity, bioavailability, stereochemical aspects of drug action.

**Unit-3 Drug receptor interactions [05HRS]**

Kinetic analysis of ligand receptor interactions using scatchard plot, double reciprocal plot, Hill plot, forces involved, relationship between dose and effect (graded and quantal response).

#### **Unit-4 Principles of drug design [10HRS]**

Introduction to SAR, strategies in the search for new lead compounds, analogue synthesis versus rational drug design, concept of prodrugs.

#### **Unit-5 Drug discovery and pharmainformatics [20HRS]**

Drug discovery pipeline, drug target identification and validation for microbial pathogen, selection of gene unique to the pathogen, screening for its presence in other microbes and human host, Drug Databases, PubChem, Calculating drug-like properties, introduction to rational drug design methods, optimization of lead compounds.

#### **Course Outcome:**

1. Critically evaluate the drug discovery process.
2. Master the role of bioinformatics and genomics in the drug discovery process.
3. Discuss and place into context the use of high-throughput-screening in the drug discovery process.
4. Appreciate the importance of pharmacology in the drug discovery process.

## **BSHB-DS-301-P PRACTICALS**

**TOTAL HOURS: 30 CREDITS: 2**

(Wherever wet lab experiments are not possible the principles and concepts can be demonstrated through any other material or medium including videos/virtual labs etc.)

1. Preparation of Benzocaine,
2. Preparation of Aspirin and determination of partition coefficient in octanol-water system,
3. Preparation of Paracetamol, Preparation of Phenacetin,

### **SUGGESTED READINGS**

1. Introduction to Medicinal Chemistry, 4th edition (2009), Graham I. Patrick, Oxford University Press. ISBN-13: 978-0199234479.
2. The Organic Chemistry of Drug Design and Drug Action, 2nd edition (2004), Richard B. Silvermann, Elsevier, Academic Press. ISBN-13: 978-0126437324.
3. Medicinal Chemistry: A Molecular and Biochemical Approach, 3rd edition (2005), Thomas Nogrady and Donal F. Weaver, Oxford University Press. ISBN-13: 978-0195104561.

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DISCIPLINE SPECIFIC SUBJECT

COURSE DETAILS

**SUBJECT TITLE: Economic Botany**

**SUBJECT CODE: - BSHB-DS-501**

**SEMESTER – V, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

- To learn the diverse human uses of plants and plant products.
- To learn the taxonomic diversity of useful plants.
- To learn the biological reasons why certain plant resources are important.
- To acquire an increased awareness and appreciation of plants and plant products encountered in everyday life.
- To recognize geographic, historical, & cultural differences in the uses and importance of plants.
- To relate diverse aspects of human cultural endeavors to plant resources, and to gain a better understanding and perspective of the origins, histories, and roles of important plants and plant products to the development of human culture.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>2</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			
<b>Theory:100</b>		<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>35</b>	<b>15</b>

**Economic Botany (Credits: Theory-4, Practical-2) THEORY**

**Unit 1:** Origin of Cultivated Plants (6 lectures) Concept of Centres of Origin, their importance with reference to Vavilov’s work.examples of major plant introductions; Crop domestication and loss of genetic diversity; evolution of new crops/varieties, importance of germplasm diversity.

**Unit 2:** Cereals (6 lectures) Wheat and Rice (origin, morphology, processing & uses), brief account of millets.

**Unit 3:** Legumes (4 lectures) General account, importance to man and ecosystem.

**Unit 4: Sugars & Starches** (4 lectures) Morphology and processing of sugarcane, products and by-products of sugarcane industry. Potato – morphology, propagation & uses.

**Unit 5: Spices** (6 lectures) Listing of important spices, their family and part used, economic importance with special reference to fennel, saffron, clove and black pepper

**Unit 6: Beverages** (4 lectures) Tea, Coffee (morphology, processing & uses)

**Unit 7: Oils & Fats** (8 lectures) General description, classification, extraction, their uses and health implications groundnut, coconut, linseed and Brassica and Coconut (Botanical name, family & uses)

**Unit 8: Essential Oils** (4 lectures) General account, extraction methods, comparison with fatty oils & their uses.

**Unit 09: Drug-yielding plants** (4 lectures) Therapeutic and habit-forming drugs with special reference to Cinchona, Digitalis, Papaver and Cannabis.

**Unit 10: Fibres** (4 lectures) Classification based on the origin of fibres, Cotton and Jute (morphology, extraction and uses).

### **Course Outcomes**

1. After learning the subject the student will develop an understanding of plants as a source of food with emphasis on major food crops and requirements for human nutrition, the origin of agriculture, legumes, and starchy staples
2. They will get a knowledge commercial products derived from plants that provide us with consumable products such as beverages, herbs and spices, and materials such as cloth, paper, and wood.
3. They will make an understanding of plants and the environment with emphasis on the principles of ecology: the major biomes of the world, economic value of certain plants, and the strategy of extractive reserves in the rain forest.

**Suggested Readings** 1. Kochhar, S.L. (2012). Economic Botany in Tropics, MacMillan & Co. New Delhi, India. 2. Wickens, G.E. (2001). Economic Botany: Principles & Practices. Kluwer Academic Publishers, The Netherlands. 3. Chrispeels, M.J. and Sadava, D.E. (2003). Plants, Genes and Agriculture. Jones & Bartlett Publishers

## **SUBJECT CODE: - BSHB-DS-501-P**

### Economic Botany (Practical)

1. Cereals: Wheat (habit sketch, L. S/T.S. grain, starch grains, micro-chemical tests) Rice (habit sketch, study of paddy and grain, starch grains, micro-chemical tests). 2. Legumes: Soya bean, Groundnut, (habit, fruit, seed structure, micro-chemical tests). 3. Sugars & Starches: Sugarcane (habit sketch; cane juice- micro-chemical tests), Potato (habit sketch, tuber morphology, T.S. tuber to show localization of starch grains, w.m. starch grains, micro-chemical tests). 4. Spices: Black pepper, Fennel and Clove (habit and sections). 5. Beverages: Tea (plant specimen, tea leaves), Coffee (plant specimen, beans). 6. Oils & Fats: Coconut- T.S. nut, Mustard-plant specimen, seeds; tests for fats in crushed seeds. 7. Essential oil-yielding plants: Habit sketch of Rosa, Vetiveria, Santalum and Eucalyptus (specimens/photographs) 8. Drug-yielding plants: Specimens of Digitalis, Papaver and Cannabis. 10. Fibre-yielding plants: Cotton (specimen, whole mount of seed to show lint and fuzz; whole mount of fibre and test for cellulose), Jute (specimen, transverse section of stem, test for lignin on transverse section of stem and fibre).

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**DISCIPLINE SPECIFIC SUBJECT**

**COURSE DETAILS**

**SUBJECT TITLE: Dissertation**

**SUBJECT CODE: - BSHB-DS-601**

**SEMESTER – VI, CREDITS: 6**

**Course Objective:**

This course is focused to facilitate student to carry out basic research and development project through problem and gap identification, development of methodology for problem solving, interpretation of findings, presentation of results and discussion of findings. The overall goal of the dissertation is for the student to display the knowledge and capability required for independent work.

<b>Credits</b>	<b>6</b>		
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 150</b>			

Dissertation

**Course Outcome:**

The student will be able to

- gain in-depth knowledge and use adequate methods in the major subject/field of study.
- create, analyze and critically evaluate different research solutions
- clearly present and discuss the conclusions as well as the knowledge and arguments that form the basis for these findings
- identify the issues that must be addressed within the framework of the specific dissertation in order to take into consideration

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GENERIC ELECTIVE COURSE

COURSE DETAILS

**SUBJECT TITLE: Fundamentals of Yoga and Ayurveda**

**SUBJECT CODE: - BSHB-GE-101**

**SEMESTER – V, TOTAL HOURS: 30 CREDITS: 4**

Course Objectives

Objectives

1. Give an introduction of Yoga and its important streams.
2. Give a brief history and the basis different types of Yoga.
3. Understand the concept and principle underlying the Ayurveda medicinal system
4. Have knowledge & skills of therapeutics related to Tridosha system of disease and its treatment.
5. Dietary recommendation of Ayurveda with respect to seasons, behavior and others.
6. Acqu

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

**Unit 1 General Introduction to Yoga [7Hrs.]**

Brief introduction to origin of Yoga Psychological aspects leading to origin of Yoga, History and Development of Yoga; Etymology and Definitions of Yoga, Aim and Objectives of Yoga, Misconceptions about Yoga, True Nature of Yoga; General Introduction to Schools (Streams) of Yoga, Principles of Yoga and Yogic practices for healthy living, Patanjali Yoga.

**Unit 2 Foundations of Yoga and Yoga Traditions [8Hrs.]**

General introduction to Vedas and Upanishads, Yoga in Pre-vedic period, Yoga in Vedic period, Yoga in Ayurveda, Yoga in Principle Upanishads, Yoga in Yogopanishad; General introduction to Bhagavadgita, Yoga in Bhagavadgita; Introduction to Smritis and Yoga in Smritis, Introduction to Puranas, Nature of Yoga in BhagavatPurana ; Yoga in Yoga Vasishtha, Yoga in

Narada Bhakti Sutra, Yoga in Medieval Literature, Bhakti Yoga of Medieval Saints, Yoga by Ramdev Ji and Parmahansa Yogananda Ji.

### **Unit 3 Fundamentals of Ayurveda [8 Hrs.]**

Introduction of Ayurveda: Ayurveda and its Diversified Areas, Aṣṭāṅgāyurveda: The Eight Branches of Āyurveda, Basic principal: Pañcamahābhūta (The Five Basic Elements), The Principle of Triḍoṣa: The Three Biological Humors, Traiyopastambha: Three Supporting Pillars of the Body, Saptadhātu: The Seven Fundamental Tissues, Ojas: The Vital Essence, Upadhātus: Sub-Tissues, Tridaṇḍa: The Three Dimensions of Life - Body, Mind (Psyche) and Soul, PañcaPañcaka: The Five Pentads, Mala: Digestion and Metabolism, Prakṛti, Srotas: Body Channels, Acharya Balkrishna and Ayurveda.

### **Unit 4 Anatomy & physiology and DravyagunaVigyan [7 hours]**

Basic introduction to Anatomy (Sareer Rachana) and Physiology (Sareer Kriya), *Rasa*: Taste: *Rasa* (taste) and the five elements, *Rasa* and *Doṣa*, *Rasa* and *Dhātu*, *Rasa* and *Mala*, Identifying *rasa* and their *guṇa-karma* (qualities and actions), *Guṇa*: Attributes, *Vīrya*: Potency, *Vipāka*: Post-Digestive Effect, *Prabhāva*: Specific Action

#### **Course Outcome:**

1. Students of the UG course will have an understanding about origin, history and development of Yoga.
2. They will have an idea about the insights of Indian philosophy
3. Introduction about Yoga according to various yogic texts.
4. Explain prevention of diseases through preventive health practices like daily and seasonal regimen.
5. Apply the principles of Swasthavritta and Yoga for improving quality of life.

#### **Suggested Reading**

1. Acharya, B. (2004). AusadhDarshan. Haridwar, India: DivyaPrakashan.
2. Acharya, B. (2005). Ayurveda Jadi-butiRahasya. Haridwar, India: DivyaPrakashan.
3. Dasgupta S. N: History of Indian Philosophy, MotilalBanarsidas, Delhi, 2012.
4. Sharma, Chandradhar: A Critical Survey of Indian Philosophy. MotilalBanarasidas, Delhi, 2013.
5. Swami SatyanandaSaraswati: Gheranda Samhita, Pub: BSY Mungher.
6. Swami Kulvyananda: Hath Pradipika, Pub: Kaivalyadhama, Lonawala.
7. Yoga Darshan: Swami Ramdeva, Pub: DivyaPrakashan, Haridwar.
8. Patanjali Yoga Darshan: Geeta Press.
9. Swami Ramdev: Shrimad Bhagavadgita: Geetamrit, Pub: DivyaPrakashan.
10. Shrimad Bhagvadgita: Geeta Press.

# Foundation of Physical Education

**SUBJECT CODE: - BSHB-GE-102**

**Credit 4**

## **Course Objective:**

- 1. The main aim of physical education is to spread awareness about the physical body. It enhances the knowledge of a student regarding physical safety.**
- 2. It also aims to develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.**
- 3. It gives a brief idea of history of physical education**
- 4. It teaches group solidarity and leadership qualities**

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

## **Unit-I** Introduction to Physical Education

- 1.1 Meaning, Definition and Scope of Physical Education
- 1.2 Aims and Objective of Physical Education
- 1.3 Importance of Physical Education in present era.
- 1.4 Misconceptions about Physical Education.
- 1.5 Relationship of Physical Education with General Education.
- 1.6 Physical Education as an Art and Science.

## **Unit-II** Historical Development of Physical Education in India

- 2.1 Vedic Period (2500 BC – 600 BC), Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD), Medieval period
- 2.2 Post Mughal British Period (Before 1947)
- 2.3 Physical Education in India (After 1947)
- 2.4 The early history and significant stages in the revival and development of the modern Olympic movement

2.5 Educational and cultural values of Olympic movement

### **Unit-III Training Components**

3.1 Strength: its type and means methods employed for developing them

3.2 Speed: its type and means methods employed for developing them

3.3 Endurance: its type and means methods employed for developing them

3.4 Flexibility: its type and means methods employed for developing them

3.5 Coordinative abilities: means methods employed for developing those

3.6 Principles of load and its components, Determination of Optimum load,

3.7 overload its causes and identification, Tackling over Load, Training programming and planning

3.8 Periodization and its types of Periodization.

3.9 Aim and Content of Periods–Preparatory, Competition, Transitional period, Planning: Meaning and types, Principles of Planning.

### **Unit-IV Foundation of Physical Education**

4.1 Biological

4.1.1 Growth and development

4.1.2 Age and gender characteristics

4.1.3 Body Types

4.2 Psychological

4.2.1 Attitude, interest.

4.2.2 Cognition, emotions and sentiments.

4.2.3 Practical suggestion from psychology.

4.3 Sociological

4.3.1 Society and culture

4.3.2 Social acceptance and recognition

4.3.3 Leadership in physical education

Assignments, And Presentations

### **Learning Outcomes**

1. After studying the subject the student would be able to compare the relationship between general education and physical education.

2. He/ She should be able to identify and relate with the History of physical education

3. He would be able to comprehend the relationship between philosophy, education and physical education.

4. He/ She would know recent development and academic foundation of physical education.

References:

1. Bucher, C. A. (n.d.) - Foundation of physical education. St. Louis: The C.V. Mosby Co.
2. Deshpande, S. H. (2014) - Physical Education in Ancient India. Amravati: Degree college of Physical education.
3. Dash, B.N. (2003.) –Principles of Education, Neelkamal publication, Hyderabad, 32
4. Kamlesh, M.L. (2002) –Sociological Foundation of Physical Education, Metropolitan Book co. Pvt. Ltd., Delhi,
5. Pandey, R.S.( 1991) Philosophical & Sociological Foundation of Education, Vinod PustakMandir, Agra,.

# INDIAN CULTURE

4 CREDITS

## COURSE DETAILS

**SUBJECT TITLE: Indian Culture**

**SUBJECT CODE: - BSHB-GE-201**

**SEMESTER – II, TOTAL HOURS: 60 CREDITS: 4**

### Course Objectives:

This course introduces to the students the basic ideas and features of ancient Indian religions as manifested through Vedas, Buddhism and Jainism and Puranas. Beginning with the primitive religious beliefs, the Vedic pantheon and sacrifices are focussed in first unit. Next introduces to the students the basic features of the Sraman a traditions which include within its fold Buddhism and Jainism. Life and teaching of Mahāvīra, basic philosophical ideas of Jainism and its spread are discussed. Teachings of Bhagavadgītā are pronounced in detail whereas the core of Purānic religions is sought to be established through Avatāravāda and Pañacadevopāsanā. Various cults like Vaisnavism, Śaivism and Śāktism have played a prominent role in popularizing the basic tenets of Purānic religion.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

### Unit I :

**12 Hours**

Indus period, Early Vedic period, Later Vedic period Science & Technology, Culture & Civilization, Literature and texts, Society and position of women

### Unit II :

**12 Hours**

Tirthankar: Rishabhdev, Parshwanath and Mahaveer. Jainism: Life and teachings of Mahavira, Svetambara and Digambara, Anekantavada and Syadvad Buddhism: Life and teachings of Gautama Buddha, Buddhist Councils, Hinayana and Mahayana. Bhagavatism

### Unit III :

**14 Hours**

Teachings of Bhagavadgita, Gyanayoga, Bhaktiyoga and Karmayoga Puranic Religions: Shaivism, Vaishnavism and Shaktism.

### Unit IV:

**11 Hours**

Adi Shankaracharya, Bhakti movement, Ramanujacharya, Kabirdas, Tulsidas, Surdas, Nanak Dev, Chaitanya, etc

Indian culture in medieval and modern times. Cultural diversity, Uniqueness of Indian Culture, Science & Technology in modern India and cultural change.

**Course outcome:**

Students will able to:

1. Identify Approaches towards the sources and the study of ancient Indian history.
2. Evolution of social and cultural institutions in the Vedic society, Religious dissent and the rise of Jainism and Buddhism
3. Understand Asoka's Dhamma and his inscriptions.
4. To Know Science and Technology in Ancient Text.
5. To Know Science and Technology in Modern Text.
6. To Know our great Yoga Guru.

**Recommended Readings :**

Agrawala, V.S., Prachina Bharatiya Lokadharma (Hindi and English), Varanasi, 1964.

Banerjee, J.N., Development of Hindu Iconography, New Delhi, 1985.

Barth, A., The Religions of India, Varanasi, 1985. 19

Bevarkara, S.K. and R.D. Ranade, History of Indian Philosophy, Vol. II, Poona, 1927.

Bhandarkar, R.G., Vaishnavism, Saivism and Minor Religious Systems (Also in Hindi), Varanasi, 1965.

Bhattacharya, N.N., History of Sakta Religion, New Delhi, 1974

Chaturvedi, P., Vaishnava Dharma, Varanasi, 1977.

Hiriyanna, M.H., Outlines of Indian Philosophy, London, 1932.

Jaiswal, Suvira, Origin and Development of Vaishnavism (also in Hindi), Delhi, 1996 (2nd ed.).

Keith, A.B., The Religion and Philosophy of Veda and Upanishads (also in Hindi), Cambridge, 1925

Upadhyaya, B. Bharatiya Darshana, Varanasi, 1971.

Bapat, P.V. (ed.), 2500 Years of Buddhism ( Also in Hindi ), New Delhi, 1987.

Jain, Hiralal, Bharatiya Samskriti me Jaina Dharma ka Yogadana (Hindi). Bhopal, 1962.

Jaini, J.L., An outline of Jainism, Cambridge, 1916.

Jain, Jyoti Prasad, Religion and Culture of the Jains, Delhi, 1995.

Majumdar, R.C. and A. D. Pusalker (eds.), The History and Culture of the Indian People, Vols. I –V (relevant chapters), Bombay, 1951-1957.

# Introduction to Srimad Bhagavad Gita

**SUBJECT CODE: - BSHB-GE-202**

4 CREDITS

## Course Objectives:

1. Introducing learners towards various aspects of the Bhagavadgeeta.
2. Familiarize the learners with the contributions of the Bhagavadgeeta in the areas of religion, Yoga, science & Technology, education, languages and literature.
3. Enable learners to appreciate the composite nature of Bhagavadgeeta.
4. Develop among learners a feeling of love and a sense of belonging towards the nation by Bhagavadgeeta.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

## Unit 1: Shrimad Bhagwadgita Introduction

(12 Hours)

General Introduction Of The Bhagavad Gita, The Great Significance Of The Bhagavad Gita And Various Scholars' Views In Relation To It, Synthesis Of Yoga In The Bhagavad Gita, The Major Definitions Of Yoga, The Nature Of Yoga, Yoga Sadhana In The Bhagavad Gita, Relevance Of The Bhagavad Gita In The Current Era.

## Unit-2: Gyan Yoga –Atman, Prakriti & Parmatman

(12 Hours)

Sankhya Yoga Or Jnana Yoga (Chapter-2, 3, 4, 5, 6, 13),

The Form Of The Soul (Chapter-2),

The Form Of The Supreme Soul (Purushottama), (Chapter4, 8,10,11,13,15),

Form Of Prakriti (Chapter-9, 13, 14).

## Unit-3: Karma Yoga and Meditation Yoga

(12 Hours)

Concepts Of Karmayoga (Chapter-2-6), Form Of Yajna , Yajnartha Karma, Nishkam Karma (Chapter-3,4), Lok Sangrah (Chapter-3), Jnana-Karma Coordination (Chapter-5), Forms Of Dhyana Yoga (Chapter-6).

Unit 4: Bhakti Yoga

(12 Hours)

Concepts Of Bhakti And Mahatmya (Chapters-7, 8, 9,11, 12), The Necessity Of Devotion In Divine Realization (Chapters-11, Verse-52-55), Types Of Bhakti (Chapters-7,12) Characteristics Of The Devotee (Chapter-12, Verse-13-20)

Unit 5: Personality, Diet And Trigun Concept

(12 Hours)

Role Of Diet In Yoga Practice (Chapter-6), Introduction To Trigunas (Chapter-14), Concept Of Trigun-Based Personality (Chapter-17), Elements Of Personality Development, Ideal Personality- Daivee Sampda (Chapter-16).

### **Course Outcome:**

Students will able to:

1. get knowledge about Karma, Gyan and Bhakti Yoga.
2. understand how Humans can achieve a better goal in their life.
3. know the true meaning of life.

Prescribed Text Book - 1. श्रीमद्भगवद्गीता- गीतामृत- योग ऋषि स्वामी रामदेव जी, पतजंलि योगपीठ

Supporting text book 1. गीता रहस्य लोक मान्द्य नतलक (चयनित पाठ यांश)

2. Shrimadbhagvadgeeta- Tattvavivechini-Jaidayal Goyandaka, Geeta Press Gorakhpur.

**RESEARCH METHODOLOGY** (Credits: Theory-04, Tutorials-02)**Course Objective:**

1. Understand some basic concepts of research and its methodologies
2. Identify appropriate research topics
3. Select and define appropriate research problem and parameters
4. Prepare a project proposal (to undertake a project)

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	-	-
<b>Hrs/Week</b>		<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>		<b>Internal Assessment (CT+TA)</b>		<b>Final Exam (SEE)</b>
<b>70</b>		<b>30</b>		<b>Internal Assessment (CT+TA/PR)</b>
				<b>-</b>
				<b>-</b>

Literature Survey: Print: Sources of information: Primary, secondary, tertiary sources; Journals: Journal abbreviations, abstracts, current titles, reviews, monographs, dictionaries, text-books, current contents, Introduction to Chemical Abstracts and Beilstein, Subject Index, Substance Index, Author Index, Formula Index, and other Indices with examples.

Digital: Web resources, E-journals, Journal access, Hot articles, Citation index, Impact factor, H-index, E-consortium, UGC infonet, E-books, Internet discussion groups and communities, Blogs, Preprint servers, Search engines, Scirus, Google Scholar, ChemIndustry, Wiki- Databases, ChemSpider, Science Direct, SciFinder, Scopus.

Information Technology and Library Resources: The Internet and World Wide Web. Finding and citing published information.

Methods of Scientific Research and Writing Scientific Papers: Reporting practical and project work. Writing literature surveys and reviews. Organizing a poster display. Giving an oral presentation. Writing scientific papers – justification for scientific contributions, bibliography, description of methods, conclusions, the need for illustration, style, publications of scientific work. Writing ethics. Avoiding plagiarism.

Data Analysis The Investigative Approach: Making and Recording Measurements. SI Units and their use. Scientific method and design of experiments. Analysis and Presentation of Data: Descriptive statistics. Choosing and using statistical tests. Chemometrics. Analysis of variance (ANOVA), Correlation and regression, Curve fitting, fitting of linear equations, simple linear cases, weighted linear case, analysis of residuals, General polynomial fitting, linearizing transformations, exponential function fit, r and its abuse. Basic aspects of multiple linear regression analysis.

**Course Outcome:**

At the end of the course students will be able to...

**CO1:** Develop the ability to apply the methods while working on a research project work

**CO2:** Describe the appropriate statistical methods required for a particular research design

**CO3:** Choose the appropriate research design and develop appropriate research hypothesis for a research project

**CO4:** Develop a appropriate framework for research studies

**Reference Books:**

1. Dean, J. R., Jones, A. M., Holmes, D., Reed, R., Weyers, J. & Jones, A. (2011) Practical skills in chemistry. 2nd Ed. Prentice-Hall, Harlow.
2. Hibbert, D. B. & Gooding, J. J. (2006) Data analysis for chemistry. Oxford University Press.
3. Topping, J. (1984) Errors of observation and their treatment. Fourth Ed., Chapman Hall, London.

# Fundamentals of Organic Chemistry

SUBJECT CODE: - BSHB-GE-502

Credit 4

## Course Objective:

1. To understand the core concepts of organic chemistry i.e. resonance, hyperconjugation, inductive effect etc. and their application.
2. To study about the Biodegradable and non-biodegradable polymers.
3. To understand chemistry in everyday life.
4. To acquire basic knowledge of reactive intermediates and mechanism of organic reactions

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

1. Electronic Displacements: Inductive Effect, Electromeric Effect, Resonance and Hyperconjugation. Cleavage of Bonds: Homolysis and Heterolysis. Reaction intermediates: Carbocations, Carbanions and free radicals. Electrophiles and nucleophiles Aromaticity: Hückel's rule, Stereochemistry
2. Aliphatic Hydrocarbons, Aromatic hydrocarbons, Alkyl Halides, Alcohols, Phenols, Esters, Aldehydes and ketones, Carboxylic acids, Amines (preparations, physical properties & chemical reactions)
3. Polymers: Natural and synthetic, methods of polymerization (addition and condensation), copolymerization. Some important polymers: natural and synthetic like polythene, nylon, polyesters, bakelite, rubber. Biodegradable and non-biodegradable polymers.
4. Chemistry in everyday life: Chemicals in Medicine, Cleansing agents

## Course Outcome:

- 1.. Know the fundamental principles of organic chemistry and predict outcomes and derive mechanism of various types of organic reactions.
2. Understand various types of reactive intermediates and factors affecting their stability.
3. Understand the synthesis, isomerism and physical properties of alkanes, cycloalkanes, alcohols, esters, amines, aldehydes, ketones etc

### Books recommended:

1. Morrison, R. T. & Boyd, R. N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
2. Finar, I. L. Organic Chemistry (Volume 1), Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
3. Finar, I. L. Organic Chemistry (Volume 2), Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
4. Nelson, D. L. & Cox, M. M. Lehninger's Principles of Biochemistry 7th Ed., W. H. Freeman.
5. Berg, J. M., Tymoczko, J. L. & Stryer, L. Biochemistry 7th Ed., W. H. Freeman

**BIOCHEMICAL INSTRUMENTATION****Course Objective:**

1. The course will help students to acquaint with basic instrumentation, principle and procedure of various sophisticated instruments
2. This will enable the students to implement the use of these techniques in biological research and in discovering new products/compounds.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>Hrs/Week</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>	

1. Separation of mixtures by Chromatography: Measure the R<sub>f</sub> value in each case (combination of two compounds to be given) (a)Identify and separate the components of a given mixture of 2 amino acids (glycine, aspartic acid, glutamic acid, tyrosine or any other amino acid) by paper chromatography (b)Identify and separate the sugars present in the given mixture by paper chromatography.
2. Optical methods of analysis: Origin of spectra, interaction of radiation with matter, fundamental laws of spectroscopy and selection rules, validity of Beer-Lambert's law. UV-Visible Spectrometry: Basic principles of instrumentation (choice of source, monochromator and detector) for single and double beam instrument; Basic principles of quantitative analysis: estimation of metal ions from aqueous solution, geometrical isomers, keto-enol tautomers.
3. Infrared spectroscopy: Interactions with molecules: absorption and scattering. Means of excitation (light sources), separation of spectrum (wavelength dispersion, time resolution), detection of the signal (heat, differential detection), interpretation of spectrum (qualitative, mixtures, resolution), advantages of Fourier Transform (FTIR).
4. NMR spectroscopy: Principle, Instrumentation, Factors affecting chemical shift, Spincoupling, Applications.
5. Mass spectroscopy: Making the gaseous molecule into an ion (electron impact, chemical ionization), Making liquids and solids into ions (electrospray, electrical discharge, laser desorption, fast atom bombardment), Separation of ions on basis of mass to charge ratio
6. Electrophoresis: Basic Principle of electrophoresis, Paper electrophoresis, Gel electrophoresis, discontinuous gel electrophoresis, PAGE, SDS-PAGE, Native and denaturing gels. Agarose gel electrophoresis, buffer systems in electrophoresis. Electrophoresis of proteins and nucleic acids, protein and nucleic acid blotting, detection and identification. Molecular weight determination
7. Centrifugation  
Principle of centrifugation, basic rules of sedimentation, sedimentation coefficient,

various types of centrifuges, different types of rotors, differential centrifugation, density gradient centrifugation

**Course Outcome:**

1. This paper is crucial for implementation of research ideas at molecular level.
2. It trains the students in adopting various techniques in biological research.
3. This significantly enhances the employability of the candidates in Biotechnological, Pharmaceutical Industries and Analytical Laboratories and research institutes
4. The course will help students to acquaint with basic instrumentation, principle and procedure of various sophisticated instruments
5. The students will be able to implement the use of instruments like chromatography, UV-VIS spectroscopy, NMR, electrophoresis, etc in biological research

**Books recommended:**

1. Principles of Instrumental Analysis - 6th Edition by Douglas A. Skoog, F. James Holler, and Stanley Crouch (ISBN 0-495-01201-7).
2. Instrumental Methods of Analysis, 7th ed, Willard, Merritt, Dean, Settle.
3. P.W. Atkins: Physical Chemistry.
4. G.W. Castellan: Physical Chemistry.
5. C.N. Banwell: Fundamentals of Molecular Spectroscopy.

**STRUCTURAL BIOINFORMATICS**

## Course Objective:

The objective of the course is learning and understanding the detailed developments and applications of the field of Bioinformatics in varied area of biological research. The course generally focuses on genomics, proteomics and computational biology studies and their relevance on research platform.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	-	-
<b>Hrs/Week</b>	<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical: NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	-	-

Unit I What is Bioinformatics and its relation with molecular biology Examples of related tools (FASTA, BLAST, BLAT, RASMOL), databases (GENBANK, Pubmed, PDB ) and software (RASMOL,Ligand Explorer), Data generation; Generation of large scale molecular biology data. (Through Genome sequencing, Protein sequencing, Gel electrophoresis, NMR Spectroscopy, X-Ray Diffraction, and microarray).

Unit II Sequence Alignments and Visualization, Introduction to Sequences, alignments and Dynamic Programming,Local alignment and Global alignment (algorithm and example), Pairwise alignment (BLAST and FASTA Algorithm) and multiple sequence alignment (Clustal W algorithm).Methods for presenting large quantities of biological data: sequence viewers (Artemis, SeqVISTA), 3D structure viewers (Rasmol, SPDBV, Chime, Cn3D, PyMol), Anatomical visualization.

Unit III Fundamentals of X-ray diffraction, NMR spectroscopy of macromolecules, Protein Structure: Primary, Secondary, Super Secondary, Domains, Tertiary, Quaternary, Ramachandran plot.

Unit IV Protein secondary structure classification databases: HSSP, FSSP, CATH, SCOP, Protein secondary structure prediction methods: GOR, Chou-Fasman, PHD, PSI- PRED, J-Pred.

Unit V Protein Tertiary structure prediction methods: Homology Modeling, Fold Recognition, Ab-intio Method, Protein folding, Molecular Dynamics of Protein, Molecular Docking of Protein, Small molecule and Nucleotide, Concepts of Force Field

Unit VI Motif and Domain: Motif databases and analysis tools, Domain databases (CDD, SMART, ProDom) and Analysis tools. HMM (Hidden Markov Model): Introduction to HMM, its application in Sequence alignment and Structure prediction, HMM based Softwares (HMMER and HMMSTR)

**Course Outcome:**

1. The student will be able to apply basic principles of biology, computer science and mathematics to address complex biological problems.
2. The student will learn about the Computer basics like Operating systems, Programming in Visual Basic, Data Access, Internet and Nucleic acid Sequence and protein Data Banks
3. The course will help to understand the Database Similarity Searches like BLAST, FASTA etc., multiple sequence alignments, Primer Designing, Homology Modeling, phylogenetic analysis & Drug Designing, and Determination of Secondary & Tertiary of proteins.

**Books recommended:**

1. Baxevanis & Ouellette 2001. Bioinformatics: A Practical Guide to the Analysis of Genes and Proteins 2nd Edition. John Wiley Publishing.
2. Gibas & Jambeck 2001. Developing Bioinformatics Computer Skills. O'Reilly.
3. Bioinformatics: Genome Sequence Analysis Mount 2001
4. Bioinformatics For Dummies – Claverie & Notredame 2003
5. Introduction to Bioinformatics – Lesk 2002
7. Fundamental Concepts of Bioinformatics Krane & Raymer 2003

**UNIVERSITY OF PATANJALI  
HARIDWAR**



**DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS  
UNDER GRADUATE PROGRAM**

**Bachelor in Physical Education and Sports**

**(B.P.E.S)**

**SYLLABUS 2020-21**



**Preamble:**

Physical Education is a form of one of the most effective means of education imparted through physical exercises, recreational activities and sports. It is an integral part of education. Which by mere participation in it gives the outcomes? These outcomes are both instant as well as have strong carry over values in the life. The children as well as the adults and the old enjoy physical activities & sports and gets benefit in the form of stronger muscles and bones, increased energy, coordination level and most importantly the decreased risk of developing chronic diseases. The UNESCO in its General Conference in 1978 was convinced that, everyone should be free to develop and preserve his or her physical, intellectual and moral powers. Physical Education and Sport should consequently be assured and guaranteed for all human beings. Physical Education is now a regular feature in the primary and secondary schools as well as it is gaining popularity in the higher education. The course opted for this is elective as well as the core at the college and the university level in India. The graduate level course in Physical Education and Sports contains subjects varying from foundation of Physical Education to Anatomy, Physiology, Kinesiology, Officiating & coaching, Test & Measurement, Nutrition, Rehabilitation, Psychology, Sports Training, Sports Biomechanics, Methods of Teachings etc. which are aimed to give thorough knowledge and skills to the students. Students perusing physical education courses are fit to join the jobs as physical trainers,

coaches, game officials, referees, umpires, curators, gym trainers, lifeguards, personal trainers etc. During their course of education the students also develops the expertise to establish their own business as entrepreneurs in the field of sports, fitness, recreation, adventure sports, Camping, event management etc.

### **Aims of the Bachelor's degree program in Physical Education**

Physical education is not only concerned with the physical outcome that accrue from participation in physical activities but also the development of knowledge and attitude conducive to lifelong learning and participation in motor activities. The overall aim of bachelor's degree program in

Physical Education is;

1. The acquisition and refinement of motor skills,
2. To equip the students with the scientific knowledge of body response to various types of exercise.
3. Maintenance of fitness for optimal health and well being,
4. Attainment of knowledge and the growth of positive attitude towards physical activity and sports.

### **Nature and extent of the B.P.E.S degree program**

Physical Education is normally referred to as the science that aims to develop all-inclusive aspects of human personality through physical and sports activities. Physical education practical, Is a Multidisciplinary subject that cannot be studied in seclusion under the scope of one or two subjects. The scope of Physical Education as a subject is very broad. It caters to the need for developing capability of the students on physical, mental and social aspects. Physical education also aims to develop activity as an alternate and prophylactic medicine. The key areas of study within the Physical Education are 'Exercise Physiology, Sports Psychology, Sports Sociology, Sports Management, Sports Journalism, Kinesiology- Biomechanics, Sports Training, Sports Medicine, Kinanthropometry, yoga etc.

Degree program in Physical Education covers topics that overlap with the areas outlined above and that address the interfaces of Physical Education

with other subjects such as Physiology, Bio- Chemistry, Physics, Physiotherapy, Psychology, Management, and Sociology along with training pedagogy employed for enhancing the functional status of individuals with varied needs. As a part of the effort, to enhance the employability of graduates of Physical Education, programs include learning experiences that offer opportunities in various spheres of human.

### **Program Outcomes:**

#### **Program Specific Outcomes of Bachelor's Degree Program in Physical Education**

After successful completion of the program, an individual will be able to :

**PO-1** Interpret practical and sports skills required for physical education Development

**PO-2** Able to officiate in the tournaments

**PO-3** Able to understand functioning of various internal organs of the human body.

**PO-4** Appraise food safety and prevention of injury to maintain a safe and health Environment

**PO-5** Able to applicant and interpret ant of applied psychology

**PO-6** Develop long write goals and strategies that the action needed to each year to meet the objectives

**PO-7** To conduct the rehabilitation program for the players and society

**PO-8** Able to take anthropometric measurement in the field of sports and physical Education

**PO-9** Able to help responsible authorities during natural disaster in their Management.

### **Program Specific Objectives**

#### **Program Specific Objectives of Bachelor's Degree Program in Physical Education.**

- To enable students to understand history, philosophy, values, ethics and functions of Physical Education profession, and

its linkages with other social science & science disciplines;

- To equip students with knowledge on core and ancillary methods of professional work, and its practice base;
- To inculcate in the student's values of enquiry and research; and thereby develop problem solving and decision making abilities;
- To prepare professionals to practice in diverse field settings and also address contemporary issues and concerns such as of games and sports;
- To make learners- the young professionals sensitive to the needs of the people at individuals, group and community levels and to social problems in changing social, cultural and techno-economic context;
- To develop young professionals with good communication skills and quest for a self-motivated life-long learning, focusing on skilling and re-skilling in their respective field of Physical Education.

### **Program Specific Outcomes (PSOs)**

## **Program Specific Outcomes of Bachelor's Degree Program in Physical Education.**

The learning and abilities or skills that a student would have developed by the end of three-year **B.P.E.S. (three Year Degree Program)**:

- PSO-1** Remembering and Understanding the concepts, theories, functions, structures, terminology and skills of physical education and sports sciences.
- PSO-2** Applying and demonstrating various concepts, theories, procedures and skills in different sports situations.
- PSO-3** Analyzing and relating the valuable knowledge about the Health, related issues various communicable disease, its preventive

measures, Nutrition, its role in weight management and healthy life..

**PSO-4** Evaluating and measuring the important methods used for teaching in Physical Education.

**PSO-5** Creating and designing research problem, training sessions, diet plans.

### **I. ELIGIBILITY:**

1. Candidate who has passed +2 Examination with minimum 50% any other examination as equivalent thereto.
2. Preference will be given to those candidates who are sportsman or had participated in Co-curricular Activities.

### **II. AGE:**

- i) No student who has crossed the age of 23 years as on 1<sup>st</sup> July of the relevant year will be allowed admission to B.P.E.S. (Bachelor of Physical Education & Sports 3 Years Course) However, the vice-chancellor, University of Patanjali, Haridwar has the power to relax the upper age limit by 6 months on the recommendation of the Head of the Institution.
- ii) The upper age limit can be relaxed by 3 years in the case of SC and ST candidates.

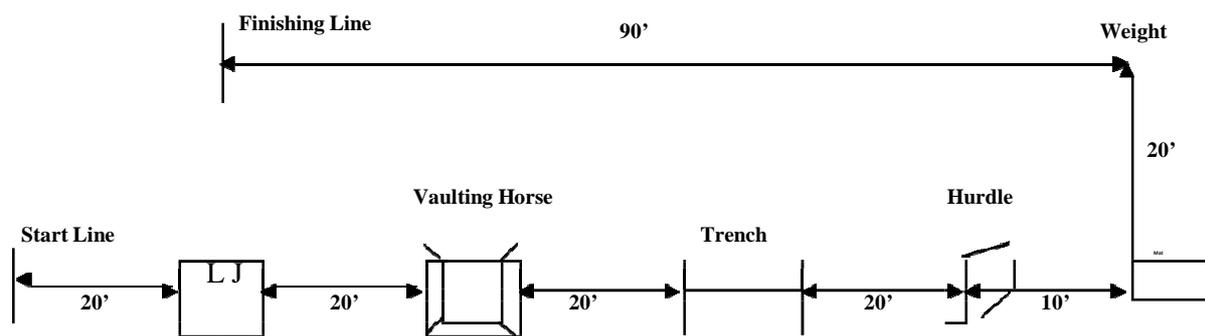
### **III. PHYSICAL EFFICIENCY TEST:**

The candidate for admission to B.P.E.S shall have to qualify the physical efficiency test conducted by the concerned college through the Principal. The details of the test are given as under:

<b>ITEM</b>	<b>MEN</b>	<b>WOMEN</b>	
Long Jump	10'	8'	Report against the end line within 35 seconds. Carrying weight equal to half of his/her own body weight in buckets
Vaulting horse	5'	4'	
Trench (7 Times)	5'	4'	
Hurdle	3'	2'	
Mat (1-Front Roll)			

# The candidate will start running from the starting line, cover the distance/obstacles as per the requirements of the chart. In case the candidate does not cover the required distance/obstacles within 35 seconds, he will be declared unfit for qualifying the Physical Efficiency Test. Not more than two chances will be given to clear Physical Efficiency Test.

## DIAGRAM OF PHYSICAL EFFICIENCY TEST



**Note:-** i) Any candidate who has appeared in qualifying examination can appear in the Physical Efficiency Test but his/her candidature for admission will be considered only if the candidate produces the qualifying examination original certificate at the time of personal interview in addition to other Academic/Sports Certificates authenticated by the concerned state agencies/authorities.

ii) The physical efficiency test is only qualifying test for the admission in BPES No marks will be awarded for this test.

### IV. ADMISSION PROCEDURE:

After qualifying physical efficiency test being conducted by concerned by The H.O.D. of The University of Patanjali'

The admission will be made on merit to be determined on the basis of total percentage of marks in qualifying examination + the weight age of the overall achievement in different sports/games given as under:

#### 1. Senior National:

1 <sup>st</sup> Position	50 Points
2 <sup>nd</sup> Position	45 Points
3 <sup>rd</sup> Position	40 Points
Participation	30 Points

#### 2. Junior National/School National:

1 <sup>st</sup> Position	35 Points
2 <sup>nd</sup> Position	30 Points
3 <sup>rd</sup> Position	25 Points
Participation	20 Points

### 3. State Level:

1 <sup>st</sup> Position	25 Points
2 <sup>nd</sup> Position	20 Points
3 <sup>rd</sup> Position	15 Points
Participation	10 Points

### 4. District/School Level:

1 <sup>st</sup> Position	20 Points
2 <sup>nd</sup> Position	15 Points
3 <sup>rd</sup> Position	10 Points
Participation	5 Points

**Note:-** The weightage of achievement in sports/games shall be given to only those sports/games which are approved and recognized by University of Patanjali, Haridwar Sports and Co-Curricular Activity Council.

## V. EXAMINATION

### 1. Duration (Time Frame):

The UG (TDC) program for a regular student shall be for a minimum period of three years and a maximum of five years from the date of admission of the candidate. Each academic year shall comprise of two semesters, viz. Odd and Even semesters. Odd Semesters shall be from June / July to October / November and the Even Semester shall be from November / December to April / May on the dates to be notified by the Controller of Examinations.

### 2. Evaluation

Evaluation system has the following two components:-

- A. **Continuous Comprehensive Assessment (CCA)** accounting for 50% of the final grade that a student gets in a course; and
- B. **End-Semester Examination (ESE)** accounting for the remaining 50% of the final grade that the student gets in a course.

A. Continuous **Comprehensive Assessment (CCA)**: This would have the following components:

**(i) Classroom Attendance** – Each student will have to attend a minimum of 75%

Lectures / Tutorials / Practicals. A student having less than 75% attendance will not be allowed to appear in the End-Semester Examination (ESE).

- Provided that those having between 74% and 65% attendance will apply for exemption in a prescribed form accompanied by clear reason(s) for absence to the authorized functionaries.
- Provided that those having between 64% and 50% attendance will apply for exemption in a prescribed form accompanied by a Medical Certificate from a Government Hospital.
- Provided that exemption from 75% attendance will be given to those participating in prescribed co-curricular activities (e.g. NCC, NSS, Youth Festivals, Sports etc.) to the extent of 25% (making the necessary attendance as 50% in these cases). However, the claim for this exemption should be supported by authenticated certificate from the concerned college authorities.
- Provided further that those getting the exemptions, except for those getting exemptions for co-curricular activities, will not be entitled for getting the CCA marks for classroom attendance as given below.

**(ii) Classroom Attendance Incentive:** Those having greater than 75% attendance

(for those participating in Co-curricular activities, 25% will be added to per cent attendance) will be awarded CCA marks as follows:-

≥ 75% but < 80%	1 marks
≥ 80% but < 85%	2 marks
≥ 85 but < 90%	3 marks
≥ 90% but < 95%	4 marks
≥ 95%	5 marks

**(iii) Mid-Term (Minor) Tests** – There will be two mid-term tests, first after 48 teaching days

(8 weeks) covering the syllabus covered so far, and second after 90 teaching

days (15 weeks) covering the syllabus after the first minor test. **Each of these mid-term tests will be for 15 marks.**

(iv) **Seminar / Assignment / Term Paper** – The remaining 15 marks of the CCA will be awarded on the basis of seminar / assignment / term paper etc. that the course teacher might give to the students.

(v) **End-Semester Examination (ESE)**: The remaining 50% of the final grade of the student in a course will be on the basis of an end-semester examination (ESE) that will be for three hours duration and will be covering the whole syllabus of the course.

- For the Odd Semesters the ESE will be in the month of October / November and for Even Semesters it will be in the month of April / May.
- A candidate who does not pass the examination (ESE) in any course(s) (or due to some reason is not able to appear in the ESE, other conditions being fulfilled, and so is considered as 'Fail'), shall be permitted to appear in such failed course(s)' ESE in the subsequent ESE to be held in the following October / November or April / May as the case may be.
- The registration for the ESE will be done at the time of the enrollment for the course at the beginning of the semester. The fee for the ESE will also be collected at that time as decided by the university from time to time.
- If a student is not permitted to appear in the ESE due to shortage of attendance beyond the exemption limit (< 50% attendance) shall be deemed to have 'dropped' the course. However such candidate, on his / her written request to be made immediately, can be permitted to redo the missed semester after completing the rest of the programme or whenever the course is offered subsequently. This redoing would mean complete course including CCA and ESE.

The question paper for the ESE will have the following pattern:

γ **Part A**

Compulsory of 18 marks consisting of 10 objective type questions (in MCQ/True False/Fill in the blanks or such type) and four short answer questions of 2 marks each covering whole of the syllabus.

γ **Part B (UNIT I)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part C (UNIT II)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part D (UNIT III)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part E (UNIT IV)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be of long type

**Total marks (A + B + C + D+E)**

**18 + 8 + 8 + 8 + 8 = 50 marks.**

### OUTLINES OF SEMESTER WISE COURSES

SEMESTER-I					
S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course I	Compulsory Course Hindi	CC 101	4	Compulsory – 4  Major Core – 8  Elective – 16  <b>Total = 4 + 8 + 16 = 28</b>
2.	Major Core Course I	Human Anatomy and Physiology-I	BPE 102	4	
3.	Major Core Course II	History of Physical Education and Sports	BPE 103	4	
4.	Elective Course I	(i) Foundation of Yoga	BPE 104	4	
		Or (ii) Sports Journalism	BPE 105		
5.	Elective Ground Course I	Games Practicals : (on any one of the following games) 1. Volleyball 2. Kabaddi 3. Woodball 4. Badminton	BPE-P-106	4	
6.	Elective Ground Course II	General Lessons Practicals : (on any one of the following activities) 1. Marching 2. Calisthenics 3. Dumb-Bell 4. Band & Flute	BPE-P-107	4	
7.	Minor Elective Course I	Yog Practical	BPE-P-108	4	

### SEMESTER-II

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course II	Compulsory Course English	CC 201	4	Compulsory – 4  Major Core –  8 Elective – 16  <b>Total = 4 + 8 + 16 = 28</b>
2.	Major Core Course III	Yoga and Holistic Health	BPE 202	4	
3.	Major Core Course IV	Introduction to Physical Education	BPE 203	4	
4.	Elective Course II	(i) Health Education and Nutrition Or (ii) Exercise Physiology (Any One)	BPE 204 BPE 205	4	
5.	Elective Ground Course III	Athletics Practicals : (on any one of the following athletic events) 1. Discus Throw 2. Triple Jump 3. Hurdles 4. Middle and Long distance races	BPE-P-206	4	
6.	Elective Ground Course IV	Athletics Practicals : (on any one of the following athletic events) 1. Sprints 2. Long Jump 3. Shot Put 4. Relay	BPE-P-207	4	
7.	Minor Elective Course II	Yoga Practical	BPE-P-208	4	

<b>SEMESTER-III</b>					
<b>S.N.</b>	<b>Course</b>	<b>Course Name</b>	<b>Course Code</b>	<b>Credit</b>	<b>Cumulated Credits Category wise</b>
1.	Compulsory Course III	Environmental Science (Self Study Mode)	CC 301	4	Compulsory – 4
2.	Major Core Course V	<u>Methods of Teaching Yoga</u>	<u>BPE 302</u>	4	
3.	Major Core Course VI	Methods in Physical Education	BPE 303	4	
4.	Elective Course III	(i) Fundamentals of Biomechanics in Sports Or (ii) Adapted Physical Education } Any One	BPE 304 BPE 305	4	Elective – 16  <b>Total = 4 + 8 + 16 = 28</b>
5.	Elective Ground Course V	Games Practicals : (on any one of the following games) 1. Kho-Kho 2. Basketball 3. Judo 4. Boxing 5. Table Tennis	BPE-P- 306	4	
6.	Elective Ground Course VI	Gymnastics Practicals : (on any one of the following activity) 1. Floor Exercises 2. Vaulting Horse 3. Parallel Bar 4. Balancing	BPE-P- 307	4	
4 7.	Minor Elective Course III	<u>Yoga Practical</u>	<u>BPE-P- 308</u>	4	

### SEMESTER-IV

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course VII	Remedial and Massage	BPE 401	4	Major Core – 8  Elective – 20  <b>Total = 8 + 20 = 28</b>
2.	Major Core Course VIII	Organization and Administration of Phy. Edu.	BPE 402	4	
3.	Elective Course IV	(i) Basis of Yoga Therapy Or (Any One) (ii) Officiating and Coaching	BPE 403 BPE 404	4	
4.	Elective Course V	Specialization in the Games : (on any one of the following games) 1. Woodball 2. Kabaddi 3. Judo 4. Badminton	BPE 405 BPE 406 BPE 407 BPE 408	4	
5.	Elective Ground Course VII	General Lessons Practicals : (on any one of the following athletic events) 1. Class Formation 2. Lazium 3. Indian Clubs & Rings 4. Aerobics	BPE-P- 409	4	
6.	Elective Ground Course VIII	Gymnastics Practicals : (on any one of the following athletic events) 1. Uneven Bar (for Women) 2. Rhythmic Gymnastics (for Women) 3. Horizontal Bar (for Men) 4. Pomell Horse (for Men)	BPE-P-410	4	

7.	Minor Elective Course IV	Yoga Practical	BPE-P-411	4
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<b>SEMESTER-V</b>					
<b>S.N.</b>	<b>Course</b>	<b>Course Name</b>	<b>Course Code</b>	<b>Credit</b>	<b>Cumulated Credits Category wise</b>
1.	Major Core Course IX	Kinesiology	BPE 501	4	Major Core – 12
2.	Major Core Course X	Fundamental of Sports Training	BPE 502	4	
3.	Major Core Course XI	Common Sports Injuries Prevention and Cure	BPE 503	4	Elective – 16
4.	Elective Course VI	Specialization in the Game : (on any one of the following games) 1. Kho-Kho 2. Basketball 3. Boxing 4. Taekwondo	BPE 504 BPE 505 BPE 506 BPE 507	4	
5.	Elective Ground Course IX	Games Practical : (on any one of the following games) 1. Cricket 2. Handball 3. Taekwondo 4. Weightlifting 5. Football	BPE-P- 508	4	<b>Total = 12 + 16 = 28</b>
6.	Elective Ground Course X	Athletics Practicals : (on any one of the following athletic events) 1. High Jump 2. Hammer Throw 3. Javelin 4. Competitive walking	BPE-P- 509	4	
7.	Minor Elective Course V	Yoga Practical	BPE-P- 510	4	

**SEMESTER-VI**

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course XII	Fundamental of Computer Application in Physical Education	BPE 601	4	Major Core – 12  Elective – 16  <b>Total = 12 + 16 = 28</b>
2.	Major Core Course XIII	Sports Psychology	BPE 602	4	
3.	Major Core Course XIV	Test, Measurement & Evaluation	BPE 603	4	
4.	Elective Course VII	Specialization in the Games : (on any one of the following games) 1. Yoga 2. Hand Ball 3. Volley Ball 4. Foot Ball	BPE 604 BPE 605 BPE 606 BPE 607	4	
5.	Elective Ground Course XI	Marking & Officiating in any Two Games (Covered in course contents of Semester I-V)	BPE-P- 608	4	
6.	Elective Ground Course XII	Marking & Officiating in Athletics  (i.e. one track event & one field event covered in course contents of Semester I-V)	BPE-P- 609	4	
7.	Minor Elective Course VI	Fundamental of Computer Application in Physical Education Practical	BPE-P- 610	4	

## **COURSE CONTENTS IN DETAIL**

### **SEMESTER-1**

**COURSE CODE:CC101**

**(COMPULSORY COURSE-I)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **HINDI**

#### **COURSE OBJECTIVES:**

1. Understand the aspects of linguistic behavior in Hindi language.
2. Understand the position and content of Hindi language taught at secondary level.
3. Understand the constitutional provisions and historical preview of Hindi language.
4. Understand the role of Hindi in India; in nation and in International arena.
5. Understand and develop linguistic systems and other language skills of Hindi language used in classroom teaching.
6. Understand the use of different strategies used in Hindi teaching.

#### **THE COURSE LEARNING OUTCOMES (COs):**

**CO-1.**The students are able to get an in-depth knowledge of this ancient Indian language and its literature.

**CO-2.**The students must get an overview about the poetry grammar and history of its literature.

### हिंदी भाषा और साहित्य :

- क. आधुनिक भारतीय भाषाओं का उद्भव और विकास
- ख. हिंदी भाषा का परिचय एवं विकास
- ग. हिंदी साहित्य का इतिहास, आदिकाल, मध्यकाल : सामान्य परिचय
- घ. हिंदी साहित्य का इतिहास, आधुनिक काल : सामान्य परिचय

### पाठ्य-विषय -

#### 01. हिन्दी ध्वनियों का स्वरूप -

- क. स्वर और व्यंजन
- ख. संज्ञा, सर्वनाम, क्रिया, विशेषण
- ग. वाक्य संरचना

#### 02. उपसर्ग, प्रत्यय

03. हिन्दी शब्द संरचना - पर्यायवाची, समानार्थक, विलोमार्थक, अनेक शब्दों के स्थान पर एक शब्द समूहार्थक शब्दों के प्रयोग, निकटार्थी शब्दों के सूक्ष्म अर्थ-भेद, समानार्थक शब्दों के भेद।

#### 04. लिंग विधान और कारक प्रयोग -

- क. वर्तनी।
- ख. विरामादि चिन्हों के प्रयोग।
- ग. मुहावरे और लोकोत्तियों तथा उनके रचनात्मक प्रयोग।

05. निबन्ध - निबन्ध की परिभाषा, हिन्दी निबन्ध लेखन महत्व, निबन्ध का अंग, निबन्ध के प्रकार, निबन्ध की विशेषता।

#### सन्दर्भ

- 01. राजभाषा हिंदी - गोविन्ददास - हिन्दी साहित्य सम्मेलन, प्रयाग।
- 02. राष्ट्रभाषा आन्दोलन- गोपाल परशुराम- महाराष्ट्र सभा।
- 03. आधुनिक हिन्दी व्याकरण एवं रचना- वासुदेव नन्दन प्रसाद, पटना।
- 04. हिन्दी शब्द मीमांसा- किशोरी प्रसाद बाजपेयी।
- 05. हिन्दी का सामान्य ज्ञान भाग-2, हरदेव बाहरी, लोकभारती, इलाहाबाद।
- 06. शुद्ध हिन्दी- जगदीश प्रसाद कौशिक।
- 07. अच्छी हिन्दी- रामचन्द्र वर्मा।
- 08. निबन्ध के रूप और तत्व- देवमित्र।
- 09. हिन्दी साहित्य का इतिहास- आचार्य रामचन्द्र शुक्ल।
- 10. सामान्य हिन्दी- अरिहन्त पब्लिकेशन पृथ्वीनाथ सिंह।

**COURSE CODE: BPE102**

**(MAJOR COURSE-I)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **HUMAN ANATOMY AND PHYSIOLOGY-I**

#### **Objectives:-**

- Fundamentals of Anatomy & Physiology gives students in-depth instruction in the organization, structures, and functions of the human body.
- Students will learn the terminology, anatomy and physiology, and pathology of each body system and how they interrelate to maintain homeostasis.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will

be learning and able to do/perform the following.....

**CO-1.**Describing the concept, need and importance of anatomy and physiology in physical education.

**CO-2.**Describing and define the cell, tissue, organs and systems.

**CO-3.**Explaining the circulatory systems and its functions.

**CO-4.**Describing the respiratory systems and its functions.

**CO-5.**Explainingthe digestive systems and its functions.

#### **Unit-I Introduction: (14 Hours)**

1. Meaning and Concept of Anatomy & Physiology.
2. Its importance in the field of physical education and sports.
3. Meaning and definition of cell, tissue, organ and system.
4. Microscopic structure and functions of cell.
5. Properties of living cell.

#### **Unit-II Skeletal System: (16 Hours)**

1. General structure of bone, classification of bones and functions of the bones.
2. Location of various bones in skeleton.
3. Joints, their structure and classification.

#### **Unit-III Muscular System: (15 Hours)**

1. Meaning of muscle.
2. Various types of muscle, their structure and functions.

3. Microscopic structure of skeletal muscle.
4. Mechanism of muscular contraction of skeletal muscle.

**Unit-IV      Cardiovascular System:    (15 Hours)**

1. Heart, its location, structure and function.
2. Major blood vessels of the body.
3. Mechanism of blood circulation.
4. Systemic, pulmonary and coronary circulatory.
5. Blood pressure, cardiac output, cardiac cycle, heart rate, pulse rate and athletes heart.

**Reference Books:**

1. Pearce E., "Anatomy and Physiology for Nurses." Delhi Oxford University Press 1989.
2. Parrot, J.W. , "Anatomy for the students and teachers of Physical Education." London Edward Arnold Ltd. 1973.
3. Miller, A. and Leavel L.C., "Kimber-Grey-Stack pole's, Anatomy and Physiology." Amerind Publishing Co. Pvt. Ltd. New Delhi, Bombay, Calcutta, new York 1973.
4. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers Ludhiana Second revised addition 2008.
5. Grays Anatomy.
6. Characids, B.D., " Handbook of General Anatomy." CAS Publication, New Delhi.
7. Fox, E.L, "Physiological Basis of Physical Education and Athletic" Brown Publication, 1989.

## SEMESTER-I

COURSE CODE: BPE103

(MAJOR COURSE-II)

Credit:

4Marks:(ESE=70+CCA=30)=100

### HISTORY OF PHYSICAL EDUCATION AND SPORTS

#### Learning Objectives

- -This aims to develop the students into better-rounded, balanced individuals.
- -Including martial arts and self-defense.
- -Not only do these activities capture the interest of the students
- They also promote their safety and well-being.
- -This is a practical improvement on the usual Physical Education program.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Describing the meaning, definition, need, scope, and historical perspective of physical education.

**CO-2.** Describe and define the aims and objectives of physical education.

**CO-3.** Explaining the development of physical education at the global level.

**CO-4.** Interpreting the philosophical aspect of physical education.

**CO-5.** Explaining the sports institution in India before and after independence.

**CO-6.** Classifying the different committees and schemes in the field of physical education.

**CO-7.** Discussing the different awards and honors.

#### **Unit-I History of Physical Education in India in Ancient Period: (13 Hours)**

1. Physical education in Indus Valley civilization (3250BC – 2500 BC).
2. Physical Education in Vedic Period (2500 BC – 600 BC).
3. Physical Education in Early Hindu Period (600 BC – 320 AD).
4. Physical Education in Later Hindu Period (320 AD – 1000 AD).
5. Physical Education in Medieval Period (100 AD – 1757 AD).

#### **Unit-II History of Physical Education in Pre & Post Independence Era in India:**

(15 Hours)

1. Physical Education during British Period (till 1947).
2. Physical Education in India after independence.

3. Kothari Commission and its recommendation.
4. National policy on Education (1986).
5. Role of the following organization in promoting Physical Education and Sports:
  - a. Y.M.C.A.
  - b. S.N.I.P.E.S.
  - c. L.N.I.P.E.
  - d. N.S.N.I.S.
  - e. S.A.I.

**Unit-III Historical Perspective of Physical Education World Wide: (15 Hours)**

1. Physical Education in Rome.
2. Physical Education in Germany.
3. Physical Education in USA.
4. Physical Education IN English.
5. Physical Education in Japan.
6. Physical Education in China.

#### **Unit-IV Historical Perspective of Physical Education with special reference to Greece**

(17 Hours)

1. Physical Education in Athens.
2. Ancient Olympic Movement.
3. Modern Olympic Games.
  - a. Olympic Motto
  - b. Governing body
  - c. Olympic torch and flag
  - d. Opening ceremony
  - e. Awards
  - f. Closing ceremony

#### **Reference Books:**

1. Kamlesh M.L., "Physical Education, Facts and foundations" Faridabad P.B. Publications.
2. Barrow Harold M., "Man and movements principles of Physical Education" 1978.
3. Ravanes R.S., "Foundation of Physical Education" Houghton Millin Co. Boston USA(1978)
4. Krishana Murthy V. and Paramesara Ram, N., "Educational Dimensions of Physical Education", 2<sup>nd</sup> Revised edition, Print India, New Delhi 1990.
5. Singh Ajmer et.al., "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised Addition 2008.
6. Deleh V.A., "World History of Physical Education", prentice Hall Inc.
7. HallInc.

## SEMESTER-I

**COURSECODE:BPE-104**

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**(ELECTIVECOURSE-I)**

**Credit: 4Marks:(ESE=70+CCA=30)=100**

### **Foundation of Yoga**

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**Objectives:** Following the completion of this course, students shall be able to..

- Understand the basic principles of Teaching Methods.
- Have knowledge of different aspects of teaching methods used in Yoga.

#### **Learning outcomes :**

**CO-1** Demonstrate basic skills associated with yoga and Pilates.

**CO-2** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3** Apply the knowledge of basic choreography, and effective group management.

**CO-4** Demonstrate the ability to create and present various yoga activities.

**Unit-I: General introduction to yoga [15Hrs.]**

1. Brief about origin of Yoga: Psychological aspects and Mythological concepts;
2. History and Development of Yoga: prior to the Vedic period, Vedic period, Medieval period, modern era;
3. Etymology and Definitions of Yoga, Aim and Objectives of Yoga,
4. Misconceptions of Yoga; Brief about Streams of Yoga; Principles of Yoga, Importance of Yoga.

**Unit - II: General introduction to Indian philosophy [15Hrs.]**

1. Philosophy: meaning, definitions and scope;
2. Indian Philosophy: Salient features, Branches (Astika and Nastika Darshanas),
3. Distinction from Religion and Science,
4. Brief introduction to Prasthanatrayee and Purushartha Chatushtaya;
5. Relationship between Yoga and Indian Philosophy.

**Unit - III: Brief about Yoga in texts – I [15Hrs.]**

1. Brief to Upanishads and Yoga in Principal Upanishads,
2. Yoga in Yogopanishad; Yogic perspective of Epics: Ramayana, Adhyatma Ramayana and Mahabharata;
3. Yogic perspective: Bhagavad Gita, Yoga Vasishtha, Narada Bhakti Sutras.

**Unit-IV: Brief about Yoga in texts – II [15 Hrs.]**

1. Yogic perspective: Smritis, Puranas with emphasis to Bhagavat Purana;
2. Yogic perspective to Shad-darshanas;
3. Emphasis to Vedantic approach of Shankara, Ramanuja, Madhva and Vallabha;
4. Brief: Agamas, Tantras, Shaiva Siddhanta.

**TEXT BOOKS**

1. Lal Basant Kumar : Contemporary Indian Philosophy, Motilal Banarsidas Publishers Pvt. Ltd, Delhi, 2013
2. Dasgupta S. N : History of Indian Philosophy, Motilal Banarsidas, Delhi, 2012
3. Singh S. P : History of Yoga, PHISPC, Centre for Studies in Civilization Ist, 2010
4. Singh S. P & Yogi Mukesh: Foundation of Yoga, Standard Publication, New Delhi, 2010.

## SEMESTER 1

COURSE CODE:BPE105

(ELECTIVE COURSE-I)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPORTS JOURNALISM

#### Objective:-

- Basically, the primary objective of sports journalism is not to know about the environment of games or sports, but to present the facts. A sports enthusiast's first concern is the statistics related to a sporting event.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.**Describing the Meaning and Definition of Journalism.

**CO-2.**Explaining the role of Sports News agencies.

**CO-3.** Determining the Concept of Sports Bulletin.

**CO-4.** Comparing the General news reporting and sports reporting.

**CO-5.**Editorializing and evaluating of Reported News.

#### Unit-I (15 Hours)

1. Introduction to Mass Media.
2. Purpose of Mass Media for the propagation/promotion of sports.
3. Growth of sports communication.
4. Coverage of sports:
  - a. In daily newspapers.
  - b. General magazines and sports magazines.
  - c. Radio and Television.

#### Unit-II (12 Hours)

1. Space allocation for sports sections in a daily news paper.
2. News agency.
3. Magazine office.
4. Sports personalities, their pictures and thumbnail sketches in news papers.

#### Unit-III (17 Hours)

1. Journalistic techniques:
  - a. News writing and news story.
  - b. Reporting various schemes.

- c. Editing and headings of news.
  - d. Picture section and editing sports page makeup
- 2. Characteristics of News
- 3. Writing a sports features:
  - a. Types of sports features.
  - b. Exclusive picture feature

**Unit-IV** (16 Hours)

1. Ethics of sports writing.
2. Sportsman's gratuities.
3. Amateurism V/s Professionalism.
4. Invasion of private life.
5. Sports for charity.
6. Writing a weekly or fortnightly common.
7. Writing sports editorials.

**Reference Books:**

1. Health. Jr. Gelfand: How to cover, write and edit sports, Ames Lowe USA, 1951
2. Woodward, S: Sports page Simon a and Schuster, New York, 1949.
3. Juries, John R: This writing game, New York, Columbia University, Press, 1969.
4. "Sports" by Bhola Singh Thakur (pp 1124) in the Indain reports Guide by Richard Critchfield, Allied Pacific Pvt. Ltd. Bombay, 1962.
5. Nea, Robest," News Gathering and new writing, New York, Prentice Hall, inc., 1949.



**SEMESTER I  
PRACTICAL  
GAMES LESSON**

**COURSE CODE: BPE-P-106**

**(ELECTIVE GROUND COURSE-I)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Change management. ...
- Problem solving. ...
- Morale building. ...

**The Course learning outcomes :**

- Experiencing the General & Specific warming up for games.
- Acquiring the Basic skills of games
- Demonstration and application of various techniques of games Warming up: - General & Specific
- Specific conditioning program for games
- Basic skills- offensive & defensive.

Lesson on any one of the following games:-

1. VolleyBall
2. Kabaddi
3. Hockey
4. Badminton

**SEMESTER-I**  
**PRACTICAL**  
**GENERAL LESSONS PRACTICAL**

**(ELECTIVE GROUND COURSE-II)**

**COURSE CODE: BPE-P-107**

**Credit:4**

**Marks=100**

**(120Hours)**

Objectives:-

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Communication. ...
- Change management. ...
- Problem solving. ...
- Flexible thinking. ...

Morale building

**Course learning outcomes :**

**CO-1.** Define the meaning and general principles of Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

General Lessons Practical:

(on any one of the following activities)

1. Marching
2. Calisthenics
3. Dumb-Bell
4. Band&Flute

## **SEMESTER I**

### **PRACTICAL**

#### **YOGA**

#### **PRACTICAL**

**COURSE CODE: BPE-P-0107**

**(MINOR ELECTIVE COURSE-I)**

**Credit:4**

**Marks=100**

**(120Hours)**

#### **Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

### **Course learning outcomes :**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Understand and apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

### **ASANA**

Siddhasana , Vajrasana , Veerasana , Udarakarshanasana , Janushirasana , Gomukhasana , Ushtrasana , Naukasana , Katichraasana , Tadasana , Vrikshasana , Garudasana , Padhastasana , Ardhhdhanurasana , Marjari asana , Ardhshalabhasana , Bhujangasana , Shavasana , Samkonasana , Setubandasana , Shashankasana , Mandukasana , Ardhhallasana, Ardhpadmasana

### **PRANAYAMA**

Deep Breath Inhale – Exhale  
Diaphragm Breathing  
Nadi Shodhan Pranayama  
Suryabhedhi Pranayam

## **SATKARMA**

Jal Neti  
Rubber Neti

## **MUDHRA AND BANDH**

Gyan Mudra  
Viparita Karani Mudra

## **DHYAN**



## SEMESTER-II

**COURSE CODE:CC201**

**(COMPULSORY COURSE-II)**

**Credit:4(T+P)**

**Marks:(ESE=70+CCA=30)=100**

## ENGLISH

### Objectives:

- Improve pronunciation and Use English Grammar worksheets and exercises to improve grammatical knowledge for competitive exams
- Enhance reading, understanding and writing abilities in English
- Develop the ability to read, understand and improve English vocabulary
- Demonstrate conversational skills, Asking Questions

### The Course Learning Outcomes (COs):

**CO-1.** Improve and widen employment prospects.

**CO-2.** Explore the world with confidence

**CO-3.** Increase cognitive ability.

**CO-4.** Access world-class education system and establishment.

**Method of Teaching & Assessment-** Videos, Audio clippings, discussion, written and oral exercises

### UNIT-I VOCABULARY BUILDING (12 Hours)

1. Vocabulary Building / Synonyms / Antonyms
2. Syntax (Spell Correction & Sentence Correction)
3. Formation of Words

### UNIT-II READING COMPREHENSION (12 Hours)

#### Unseen Long Passage

The total length of the passage will be between 800 - 900 words. The passage will include following questions:

- 5 - MCQs
- 9 - Short answer type questions

#### Unseen Short Passage

A second passage of 400-500 words. There will be two Descriptive questions

### UNIT-III WRITING (16 Hours)

1. Paragraphs / Essays / Composition
2. Application Letter / Personal Letter

3. Make a Notice, Report, Newspaper Article, Project Front Page Making

**UNIT-IV      SPEAKING & PRESENTATION SKILLS      (20 Hours)**

1. How to improve Speaking Skills
2. Different types of Speaking
3. Different types of Speech
4. Spoken English in British Style
5. Spoken English in American Style
6. Types of Presentation
7. How to improve Presentation Skills
8. How to prepare presentation
9. Prepare Presentation any one topic of Yoga & Sports

## References

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1. Wren, P.C. & Martin, H.; (Edition 2015). High School English Grammar & Composition; S. Chand Publishing.
2. Wren, P.C. & Martin, H.& Prasada Rao, N.D.V. ; (Edition 2015). High School English Grammar & Composition; Blackie.
3. Eastwood, John (2003). Oxford Guide to English Grammar; Oxford.
4. Biber, Douglas ; Finegan, Edward ; Johansson, Stig ; Conrad, Susan ; Leech, Geoffrey (1999) Longman Grammar Spoken & Written English Cased; Longman.
5. Aarts, Bas (2011) Oxford Modern English Grammar; OUP Oxford
6. Orion, Gertrude (2<sup>nd</sup> Edition 1999) Pronouncing American English: Sounds, Stress, and Intonation; Heinle & Heinle Pub.
7. Carter, Ronald & McCarthy, Michael (2006) Cambridge Grammar of English: A Comprehensive Guide; Cambridge University Press.
8. Huddleston, Rodney & K. Pullum ,Geoffrey (2002) The Cambridge Grammar of the English Language; Cambridge University Press.
9. Dictionaries, Oxford (1884) Oxford English Dictionary; Oxford University Press, United Kingdom.
10. Simpson, John & Weiner, Edmund (2<sup>nd</sup> Edition 1989) The Oxford English Dictionary (Oxford English Dictionary (20 Vols.)); Clarendon Press.
11. Stevenson, Angus (3<sup>rd</sup> Revised ed. Edition 2010) Oxford Dictionary of English; Oxford University Press, USA.
12. Dictionaries (7<sup>th</sup> Edition 2011 ) Oxford English Mini Dictionary - Indian Edition; Oxford.

## SEMESTER-II

**COURSE CODE: BPE202**

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**(MAJOR COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

## **YOGA AND HOLISTIC HEALTH**

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### **Objective:-**

- **Yoga is a holistic science that embodies the union of our physical, mental and spiritual health. It can help us achieve mental equilibrium, as well as providing numerous health benefits for our body.**
- **Yoga as a practice encourages a lifestyle that focuses on balance, harmony, positive thinking and health**

### **The Course learning outcomes (COs):**

**CO-1.**Approach of holistic health in physical education.

**CO-2.** Five components of holistic health.

**CO-3.** Principles of holistic health.

**CO-4.** To promote health living and to facilitate prevention early detection and management of disease.

**CO-5.**Explore transfer and career opportunity in health related profession.

**Unit-I: Concept of Body, Health and Disease [15 Hrs.]**

1. Definition & Importance of Health According to WHO.
2. Dimension of Health: Physical, Mental, Social and Spiritual.
3. Concept of Body, Health & Disease in Yoga-Yogic concept of Body from Taittiriya Upanishad.
4. Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi according Yoga Vasistha and remedial measures; Holistic health care through Yoga.
5. Concept of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing.
6. Concept of Pancha-koshas & Shat-chakra and their role in Health & Healing.

**Unit - II: Causes of Ill Health & Remedial Measures as per Patanjali [15 Hrs.]**

1. Potential causes of Ill-health: Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Dukkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva;
2. Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi).

**Unit - III: Yogic Principles & Practices of Healthy Living - I [15 Hrs.]**

1. Dietary regulation according to Hatha yoga and Bhagavadgitha;
2. shatkriyas and tatva shuddhi;
3. Asana for mind body and spirit;
4. Practice for pranamaya kosha– pranayama;
5. Definition of Mental Health & Mental Hygiene & Total Health ;
6. Indian approach to personality and personality integration Psycho-Social Implications of yoga;
7. Adjustment Personal and interpersonal adjustment through yogic methods Niyamas & Yamas.

**Unit - IV: Yogic Principles & Practices of Healthy Living - II [15 Hrs.]**

1. Attitude change towards yoga through individualized counselling.
2. Psychological & yogic method Tackling ill effects of conflict and Frustration;
3. Yogic methods Yoga Psychology for Adjustment: Psychological, philosophical and yogic counselling;
4. the remedial measures; Action in relaxation-the secret of Karma Yoga;
5. Unattached action, not to the fruits of action, equanimity in success and failure.

**TEXT BOOK**

1. Ghosh. Shyam : The Original Yoga Munshiram Manoharlal, New Delhi. 1999)
2. Jnanananda Bharati : Essence of Yoga Vasishta Pub: Sanata Books, Chennai
3. Hatha Ratnavali: Tirumala Tirupathi Devasthanam, Andhra Pradesh.

## SEMESTER-II

COURSE CODE: BPE203

(MAJOR COURSE-IV)

Credit:4

Marks:(ESE=70+CCA=30)=100

### INTRODUCTION TO PHYSICAL EDUCATION

#### Objective:-

Develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.

#### The Course Learning outcomes (COs):

**CO-1.** The pass out would be able to compare the relationship between general education and

Physical education.

**CO-2.** He/she would be able to identify and relate with the History of Physical Education.

**CO-3.** He/she would be able to comprehend the relationship between Philosophy, Education and Physical Education.

**CO-4.** He/she would able to identify the works of Philosophers of Education and Physical Education.

**CO-5.** He /she would know recent developments and academic foundation of Physical Education.

#### Unit-I Introduction: (15 Hours)

1. Definition, aim and objectives of Physical Education.
2. Principles of Physical Education.
3. Relationship of Physical Education with general education.
4. Misconception, regarding Physical Education.
5. Personality development of an individual.

#### Unit-II Philosophical aspect of Physical Education (17 Hours)

1. Meaning of Philosophy.
2. Different philosophies applied to Physical Education:
  - a. Idealism.
  - b. Pragmatism.
  - c. Realism.
  - d. Naturalism.

- e. Existentialism.
3. Need and importance of different philosophies in modern Physical Education program.

**Unit-III      Biological Concept of Physical Education:**                      (14 Hours)

- 1. Biological principles of Physical Education.
  - a. Growth and development.
  - b. Heredity and environment.
  - c. Somatic types.
  - d. Sex differences.
  - e. Use, disuse and over use.
  - f. Chronological, physiological and anatomical ages

**Unit-IV      Emerging Trends in Physical Education      (14 Hours)**

1. Career opportunities in Physical Education and Sports:
  - a. As a Physical Education teacher.
  - b. Coach / trainee.
  - c. Gym instructor.
  - d. Physiotherapist.
  - e. Psychologist.
  - f. Dietitian.
  - g. Sports administrator/manager
  - h. Rehabilitator
2. Adventure Sports
3. Water Sports
4. Worldwide therapeutic acceptance of Yoga
5. Fast growing professional in sports

**Reference Books:**

1. Kamlesh M.L., “Physical Education, Facts and foundations”, Faridabad P.B. Publications.
2. Barrow Harold M., “Man and movements principles of Physical Education”, 1978.
3. Ravanes R.S., “Foundation of Physical Education”, Houghton Millin Co. Boston USA(1978)
4. Krishana Murthy V. and Paramesara Ram, N. “Educational Dimensions of Physical Education”, 2<sup>nd</sup> Revised edition, Print India, New Delhi 1990.
5. Singh Ajmer et.al., “Essentials of Physical Education”, Kalyani Publishers LudhianaSecond revised Addition 2008.
6. Deleh V.A., “World History of Physical Education”, prentice Hall Inc.

## SEMESTER-II

**COURSECODE: BPE204**

**(ELECTIVE COURSE-II)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### HEALTH EDUCATION AND NUTRITION

#### Objective:-

- They are to promote health and reduce the risk of developing chronic diseases by encouraging Americans to consume healthful diets and to achieve and maintain healthy body weights. Nutrition criteria are reflective of a solid scientific foundation for health and weight management

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Defining the concepts and principles of health education.

**CO-2.** Explaining the meaning, definition, and importance of health education.

**CO-3.**Classifying hygiene and its types.

**CO-4.** Writing about the role and uses of pollution.

**CO-5.** Discussing the types of natural resources.

#### **Unit-I Introduction: (12 Hours)**

1. Concept of health, meaning, definition and scope of health education.
2. Objective of health education.
3. Principles of health education.
4. Need and significance of health education.

#### **Unit-II Personal health and Hygiene: (17 Hours)**

1. Meaning of personal hygiene.
2. Personal care of:
  - a. Skin.
  - b. Hair.
  - c. Ear.
  - d. Eyes.
  - e. Nose.
  - f. Teeth.
  - g. Feet.



- c. Centers of communicable disease.

**3. Health instructions related to:**

- a. Personal care.
- b. Communicable disease.
- c. Nutrition.
- d. Healthful living.

**4. Nutrition:**

- a. Balanced diet and its elements:
  - i. Carbohydrates, proteins, fats, vitamins, minerals, salts and water.
- b. Daily energy/calorie requirements of healthy person.

**Unit-IV Communicable Disease: (15 Hours)**

1. Meaning and definition of communicable disease.
2. Mode of transmission, prevention and cure and sanitation of communicable disease.
3. Common Communicable Diseases:
  - a. Influenza.
  - b. Malaria.
  - c. Small pox.
  - d. Tuberculosis.
  - e. Typhoid.
  - f. Cholera.
  - g. Measles.

**Reference Books**

1. Klander H.F., "School Health Education", The Mac Million Co. 1962.
2. Pande P.K. and Gango Padhyay S.R., "Health Education for School Children."
3. S. Dheer and Others, "Introduction to Health Education, AP Publishers 9, Books Market Chowk Adda, Tande, Jalandhar 1989.
4. Nebmir. A. "The school Health Education, New York: Harper and Brothers.
5. Park, JE and park, K., "Text Books of Preventive and Social medicine" Tenth Edition, Banarsi Dass Bhanot, Habalpur 1985.



## SEMESTER-II

COURSE CODE:BPE205

(ELECTIVECOURSE-II)

Credit:4

Marks:(ESE=70+CCA=30)=100

### EXERCISEPHYSIOLOGY

#### Objective:-

- Exercise physiology serves to **empower individuals to understand how to safely move their body, how frequently they should exercise and how to measure their outcomes to see the improvement over time.**

#### The Course Learning Outcomes (COs):

**CO-1.** He/she would be able to Relate and interpret the role of exercise on body systems and its relation

to well being, through literature reviews and physical conditioning exercises.

**CO-2.** Adapt the art to apply the knowledge of physiology in physical activity classes at school level.

Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

#### Unit-I (14 Hours)

1. Meaning and definition of exercise physiology
2. Need and importance of exercise physiology in the field of Physical Education.
3. Energy sources
  - a. Definition of energy
  - b. Adenocine triphosphete (ATP)
  - c. Creative phosphate
  - d. Metabolism

#### Unit-II (17 Hours)

1. Structure of skeletal muscle
2. Sliding filament theory of skeletal muscle
3. Effect of exercises of muscular system
4. Fatigue

5. Symptoms of fatigue
6. Factors responsible for fatigue

**Unit-III** (14 Hours)

1. Effect of exercise on circulatory system
2. Effect of exercise on respiratory system
3. Effect of exercise on digestive system
4. Cardiac output, heart rate, vital capacity, second wind, oxygen debt, dead space & tidal volume.

**Unit-IV** (15 Hours)

**1. *Balance between heat loss and heat production***

- a. Radiation
- b. Convection
- c. Evaporation
- d. Conduction

**2. *Measurement of body temperature***

- a. Effects of high altitude on sports performance, heat cramps
- b. Dehydration, heat stroke and shivering
- c. Acclimatization with hot and cold temperature

**Reference Books:**

- 1. Brooks, G. Fahey, T. and Baldwin, K. (2004). Exercise physiology, MC Graw Hill. USA
- 2. McArdle, WD, Katch, FI and Katch VL (2000), Essentials of Exercise physiology 2<sup>nd</sup> edition Lippincott Williams and Wilkins, USA.
- 3. Powers, S. and Howley, E. (2006), "Exercise Physiology" MC Graw Hill. USA.
- 4. Wilmore Hack Hand Costil David L. (2004), "Physiology of sports and exercise Human Kinetics.
- 5. Rowland Thomas W. Children's (2005), "Exercise Physiology" 2<sup>nd</sup> edition Human Kinetics.

## **SEMESTER II**

### **PRACTICAL**

### **ATHLETICS**

#### **LESSON**

**COURSE CODE: BPE-P-206**

**(ELECTIVE GROUND COURSE-III)**

**Credit:4**

**Marks=100**

Objective:-

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

- Demonstrate an expert knowledge of the strategies and skills of the sport and use critical thinking skills to apply this knowledge in competitive situations in order to participate to the best of one's ability in competition.
- Demonstrate traits of good sportsmanship and teamwork in both competition and practice.

On any one of the following athletic activities:-

(120 Hours)

1. Discus Throw
2. Triple Jump
3. Hurdles
4. Middle and Long distance races

## **SEMESTER-II**

### **PRACTICAL**

### **ATHLETICS LESSON**

**COURSE CODE: BPE-P-0206**

**(ELECTIVE GROUND COURSE-IV)**

**Credit:4**

**Marks=100**

Objective:-

- **To enhance the sports performance:** It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

**CO-1** Demonstrate an expert knowledge of the strategies and skills of the sport and use critical thinking skills to apply this knowledge in

competitive situations in order to participate to the best of one's ability in competition.

**CO-2** Demonstrate traits of good sportsmanship and teamwork in both competition and practice.

Lessons on any one of the following athletic events:-

(120 Hours)

1. Sprints
2. Long Jump
3. Shot put
4. Relay

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in athletics and general lesson activities (5 lessons each in athletics and general lesson). In addition each trainee shall complete 1 assignment each in athletics and general lesson.
2. For the purpose of examination in practicals, one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weightage.

The contents of teaching for each activity are as follows:-

1. History of athletics.

2. Measurements of track & field events.
3. Equipments & specification of equipments.
4. Fundamental skills and lead up activities.
5. Rules and regulations of athletic events.
6. Tournaments at national and international level.
7. Records (World, Olympics, Asian and National games)
8. Awards in athletics.
9. Related books and magazines.
10. Officiating: -
  - a. Duties of official
  - b. Knowledge of score sheet
  - c. Officiating signals
  - d. Technical equipment for officiating.

## **SEMESTER-II**

### **PRACTICAL**

#### **YOGA PRACTICAL**

**COURSE CODE: BPE-P-208**

**(MINOR ELECTIVE COURSE-II)**

**Credit:4**

**Marks=100**

(120Hours)

(120Hours)

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

**The Course Learning Outcomes:**

**CO-1** Demonstrate basic skills associated with yoga and Pilates.

**CO-2** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3** Apply the knowledge of basic choreography, and effective group management.

**CO-4** Demonstrate the ability to create and present various yoga activities.

**ASANA**

Pawanuktasana, Padmasana, Swastik Asanas, Bhadrasana, Uttanpadasana, Sarvangasana, Halasana, Matsyasana, Suptvajasana, Chakrasana, TiryakaTadasana, EkPadPranamasana, Hastottanasana, Makarasana, Balasana, Sarpasana, Hanumanasana, Sukhasana, Markatasana, VipritNaukasana, ParshvaTadasana, Sinhasana

**PRANAYAMA**

Chandra Bhedi Pranayama  
UjjayiPranayam

**SATKARMA**

Vaman Dhauti / Kunjal  
KriyaVatkram/Kapalbhati

**MUDHRAAND BANDH**

Jalandhar  
BandhaUddiyana  
BandhaMulbandha  
Yog Murda

## SEMESTER-III

**COURSE CODE:CC-301**

**(COMPULSORY COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### ENVIRONMENTAL SCIENCE

#### Objectives:

- Students will integrate knowledge from multiple disciplines representing physical and life sciences perspectives, political and economic perspectives, and social and cultural perspectives on humans' interactions with their environments;
- Students will contribute to and facilitate interdisciplinary research and problem solving, through independent and collaborative work; and
- Students will use quantitative and qualitative research tools and techniques to analyze, implement, envision, assess, and report sustainability efforts.

#### The Course Learning Outcomes (COs):

- CO-1.** Articulate the interconnected and interdisciplinary nature of environmental studies;
- CO-2.** Demonstrate an integrative approach to environmental issues with a focus on sustainability;
- CO-3.** Use critical thinking, problem solving, and the methodological approaches of the social sciences, natural sciences, and humanities in environmental problem solving;
- CO-4.** Communicate complex environmental information to both technical and non-technical audiences;
- CO-5.** Understand and evaluate the global scale of environmental issues & problems; and
- CO-6.** Reflect critically on their roles, responsibilities, and identities as citizens, consumers and environmental actors in a complex, interconnected world.

#### **Unit- 1: Introduction to environmental studies and Ecosystem**

**[15 Hrs.]**

Multidisciplinary nature of environmental studies; Scope and importance; Need for public awareness; What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

#### **Unit-2: Natural Resources: Renewable & Non-renewable Resources**

**[15 Hrs.]**

Land resources and land use change; Land degradation, soil erosion and desertification; Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations; Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state); Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

**Unit-3: Biodiversity & Conservation****[15 Hrs.]**

Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots; India as a mega-biodiversity nation; Endangered and endemic species of India; Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity; Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

**Unit 4: Environmental Pollution, policies & practices****[15 Hrs.]**

Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution; Nuclear hazards and human health risks; Solid waste management: Control measures of urban and industrial waste; Environmental Policies & Practices; Sustainability and sustainable development; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture; Environment Laws: environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

## **TEXT BOOKS**

1. Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.
2. Carson, Rachel. 1962. Silent Spring (Boston: Houghton Mifflin, 1962), Mariner Books, 2002.
3. Economy, Elizabeth. 2010. The River Runs Black: The Environmental Challenge to China's Future.
4. Gadgil, M. & Ramachandra, G. 1993. This fissured land: an ecological history of India. Univ of California Press.

## **REFERENCE BOOKS:**

1. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
2. Grumbine, R. Edward, and Pandit, M.K. Threats from India's Himalaya dams. Science 339.6115 (2013): 36-37.
3. Heywood V.H. & Watson, R.T. 1995. Global Biodiversity Assessment. Cambridge University Press.
4. Mc Cully, P. 1996. Silenced rivers: the ecology and politics of large dams. Zed Books.



## SEMESTER-III

**COURSECODE: BPE 302**

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**(MAJORCOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **METHODOFTEACHINGYOGA**

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**Objectives:** Following the completion of this course, students shall be able to

- Understand the basic principles of Teaching Methods.
- Have knowledge of different aspects of teaching methods used in Yoga.

#### **Course Outcomes:-**

**CO-1** To enable the student to have good health

**CO-2** To practice mental hygiene.

**CO-3** To possess emotional stability.

**CO-4** To integrate moral values.

**Unit-I: Principles and methods of teaching yoga [15 Hrs.]**

1. Teaching and Learning : Concepts and Relationship between the two;
2. Principles of Teaching: Levels and Phases of Teaching,
3. Quality of perfect Yoga Guru; Yogic levels of learning, Vidyaarhi, Shishya, Mumuksha;
4. Meaning and scope of Teaching methods, and factors influencing them;
5. Sources of Teaching methods; Role of Yoga Teachers and Teacher training.

**Unit-II: Basics of yoga class management [15 Hrs.]**

1. Practice of Yoga at different levels (Beginners, Advanced, School Children, Youth, Women and Special attention group);
2. Techniques of mass instructions;
3. Techniques of Individualised teaching;
4. Techniques of group teaching;
5. Organisation of teaching (Time Management, Discipline etc.).

**Unit-III: Lesson planning in yoga [15 hrs.]**

1. Essentials of Good Lesson Plan: concepts, needs, planning of teaching Yoga (Shatkriya, Asana, Mudra, Pranayama & Meditation);
2. Models of Lesson Plan;
3. Action Research of Yoga: Meaning, Roles, Steps in action research in Yoga Teaching;
4. Effective use of Library and other resources; Lesson Plan and its Practical applications.

**Unit-IV: Educational tools of yoga teaching [15 hrs.]**

1. Yoga classroom: Essential features, Area, Sitting arrangement in Yoga class etc.;
2. Class room problems: Types and Solutions, Characteristics and essentials of good Yoga teaching;
3. Time table: Need, Types, Principles of Time table construction; Time Table for Yoga teaching;
4. Meaning, Importance and Types of Educational technology; Role of Educational Technology in Yoga.

**TEXT BOOKS**

1. Dr. Shri Krishna : Notes on basic principles & methods of teaching as applied to yogic practices and a ready reckoner of yogic practices, Kaivalyadhama, Lonavala, 2009

**BOOKS FOR REFERENCE**

1. Dr. Gharote M L : Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007
2. Dr. Raj Kumar : Principles & methods of Teaching, Printo graphics, Delhi,
3. Saket Raman Tiwari & others : Teaching of Yoga, DPH Publishing Corporation, Delhi, 2007

### SEMESTER-III

**COURSE CODE: BPE 303**

**(MAJOR COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

#### METHOD IN PHYSICAL EDUCATION

##### Objective:-

- Develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.

**The Course learning outcomes (COs):**On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the Meaning and types of Teaching Methods.

**CO-2.** Discuss the Presentation Techniques in Physical Education.

**CO-3.** Generalizing the Methods of Words of command.

**CO-4.** Determining the knowledge to Lesson Planning.

**CO-5.** Applying the knowledge to take Lesson Plan in different categories.

**CO-6.** Reviewing the impact of all units in conduction of competitions

1

##### Unit-I (17 Hours)

1. Meaning, scope and importance of teaching methods in physical education.
2. Basic types of teaching methods.
3. Factors affecting teaching methods.
4. Command and types of command:
  - a. For beginners
  - b. For advance groups
  - c. For large groups
  - d. For complicated exercises
5. Techniques of commanding:
  - a. Counting
  - b. Continuous counting
  - c. Counting the beat
  - d. Rhythmic counting
  - e. Counting aloud
  - f. Use of whistle
  - g. Procession instruments and music

##### Unit-II (13 Hours)

###### 1. Preliminary preparation:

- a. Personal preparation

- b. Technical preparation
- c. Steps of preparation

**2. *Presentation Techniques:***

- a. Orientation
- b. Verbal explanation
- c. Demonstration
- d. Explanation

- e. Discussion
- f. Supervision
- g. Evaluation

**3. *Teaching aids and types of teaching aids***

- a. Motion pictures
- b. Charts & diagrams
- c. Models and exhibitions
- d. Musical instruments and recording

**Unit-III** (17 Hours)

1. Lesson planning and objectives of lesson planning.
2. Parts of lesson planning and their order:
  - a. Introductory part
  - b. Fundamental or main body part
  - c. Concluding part
3. Types of lesson planning:
  - a. General lesson plan
  - b. Specific lesson plan
4. Principles of lesson planning.
5. Lesson plan evaluation and re-planning.

**Unit-IV** (17 Hours)

1. Class formation, its values and types of class formation:
  - a. Single line
  - b. Double line
  - c. File formation
  - d. Semi-circle
  - e. Circle formation
  - f. Spoke
  - g. Horse shoe
  - h. L- shape
  - i. Triangular
  - j. Rectangular
  - k. Double sided
  - l. Three sided
  - m. Free formation

2. Supervision and inspection of teaching methods.
3. Methods of supervision and qualities of a supervisor.
4. Evaluation of teaching methods.
5. Need and importance of evaluation.

**Reference Books:**

1. Kamalesh M.L. and Sangral M.S., "Methods in Physical Education" Parkash Brothers, 5,6 Books Market Ludhinana 1986.
2. Tirunarayan and Hariharan, "Methods in Physical Education." M/S C.T. and S.H. Allagappa College of Physical Education Karaikudi-4.
3. Kazmer, H.C. and Cassidy, R., "Methods in Physical Education" W.B. Saunders andCo. Philadelphia, London 1958.
4. Charrles, E. Forrythe and Irrn A. Keller, "Administration of High School Athletics." Prentice Hall Inc. Englewood, N.J. 1979.

### SEMESTER-III

**COURSE CODE: BPE304**

**(ELECTIVE COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

#### **FUNDAMENTALS OF BIOMECHANICS IN SPORTS**

Objectives:-

- The major goal of biomechanics of sport and physical exercise is to **improve performance in given sport or physical exercise**.
- In a wider context the goal of biomechanics of sport and physical exercise is also to increase physical fitness.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

- CO-1.** Memorizing the Meaning, nature, role and scope of Biomechanics.
- CO-2.** Explaining the CG, Line of gravity Vectors and Scalars Quantities.
- CO-3.** Acquiring the knowledge of Linear and Angular Kinematics.
- CO-4.** Acquiring the knowledge of Linear and Angular Kinetics.
- CO-5.** Applying the concept of Lever & Equilibrium in game situation.
- CO-6.** Estimating the role of resistance in sports.

#### **Unit-I (15 Hours)**

1. Meaning, definition and importance of biomechanics in the field of sports.
2. Fundamental mechanical concept of:
  - a. Mass
  - b. Weight
  - c. Volume
  - d. Density
  - e. Pressure
3. Introduction to kinematics and its related terms:
  - a. Time
  - b. Displacement
  - c. speed
4. Role of kinematics in the field of sports.

#### **Unit-II (17 Hours)**

1. Fundamental biomechanical terms:
  - a. Friction
  - b. Inertia

- c. Force
  - d. Centripetal force
  - e. Centrifugal force
  - f. Center of gravity
2. Equilibrium, types of equilibrium and principles of equilibrium.
  3. Kinetics and its role in the field of sports.

**Unit-III** (17 Hours)

1. Motion and types of motion.
2. Newton's laws of motion and their implications in the field of physical education and sports.

3. Lever and types of lever.
4. Advantages of lever.

**Unit-IV** (17 Hours)

1. A brief description of mechanical principles:
  - a. Projectile
  - b. Aerodynamics
2. Mechanical analysis of following:
  - a. Walking
  - b. Running
  - c. Jumping
  - d. Throwing
3. Application of Biomechanics in the field of sports.

**Reference Books:**

1. Barrlea, R. (20047), "Introduction to Sports Biomechanics." Ran sedge Publishers, USA.
2. Blazeovich, A. (2007), "Sports Biomechanics." A and C Black Publishers USA.
3. Beer and Zarmicks (1979), "Efficiency of Human Movement." WIB Sounders CO. USA.
4. Hamill. J and Knutzen, K.M. (2003), "Biomechanical Basis of Human Movement." Lippincott Williams and Wilkins USA.
5. McGimsis, P. (2004), "Biomechanics of Sports and Exercise." Human Kinetics, USA.
6. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers Ludhiana second revised addition 2008.

## SEMESTER-III

**COURSE CODE: BPE 305**

**(ELECTIVE COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **ADAPTED PHYSICAL EDUCATION**

#### **Objectives:-**

- To develop a healthy level of balance, flexibility, muscular strength, body composition, and cardio-respiratory endurance.
- To learn new games and their rules and to demonstrate it correctly in the game settings.

**The Course learning outcomes (COs):**An individualized program of developmental activities, exercises, games, rhythms, and sport designed to meet the unique physical education needs of individuals.

#### **A sub discipline of PE or emerging field of studying**

- 1) Designed to meet long term unique needs
- 2) May take place in mainstream classes or segregated classes
- 3) An active program rather than a passive one
- 4) Adapted or modified sport can be used in APE program
- 5) Adapted means to adjust and to fit
- 6) Service to 3-21 years old (IEP) and may include 0-2 (IFSP)

#### **Unit-I (15 Hours)**

1. Introduction :
  - a. Meaning and aim of adapted physical education.
  - b. Objectives of the adapted physical education.
  - c. Basis for adapted physical education.
  - d. Functions of adapted physical education.
2. The adapted program in action :
  - a. Scope of adapted program.
  - b. Adapted program for elementary schools, high/secondary schools, colleges and university.

#### **Unit-II (16 Hours)**

1. Personal preparation :
  - a. Guiding principles of adapted physical education.
  - b. The policies for adapted physical education.
  - c. Preparation of personal.

- d. In-service training programe.

**Unit-III** (14 Hours)

- 1. Evaluation and measurement :
  - a. Selection of evaluation procedures.
  - b. Classification of handicapped and disabled individuals.
  - c. Determination of specific disabilities.
  - d. Need based program emphasis for individual handicapped.

**Unit-IV** (17 Hours)

- 1. Social and psychological adjustment :
  - a. Courses of maladjustment.

- b. Role of physical education in preventing maladjustment and in the promotion of adjustment.
- c. Recreation for the handicapped.
- d. Postural defects-flat foot, spinal defects and shoulder deformities and their rehabilitation.
- e. Special physical education programs for blind, deaf, dumb and mentally challenged children.
- f. Rehabilitation programs for bone and joint injuries, ankle, knee, shoulder, elbow and hand injuries.
- g. Neurological disabilities- Spastic poliomyelitis (Cerebral Palsy).

**References Books:**

1. H.H. Clark and D.H. Clark, "Development and Adapted Physical Education", Englewood, Prentice Hall, 1964.
2. A.S. Daniels, "Adapted Physical Education", New York, Harpers and Brothers, 1972.
3. G.T. Stafford, "Prevention and Corrective Physical Education", New York, A.S. Barnes and Co. 1970.
4. V.V. Hunt, "Recreation for the Handicapped", Prentice Hall inc. 174.
5. B.J. Gratty, "Adapted Physical Education in the Main Stream" Move Publisher Co. Denver Colorado-802222, 1989.

**SEMESTER-III**  
**PRACTICAL**  
**GAMES LESSON**

**COURSE CODE: BPE-P-306**

**(ELECTIVE GROUND COURSE-V)**

**Credit:4**

**Marks=100**

**Objectives:-**

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Communication. ...
- Change management. ...
- Problem solving. ...
- Flexible thinking. ...
- Morale building. ...

**The Course learning outcomes:**

**CO-1** Experiencing the General & Specific warming up for games

**CO-2** Acquiring the Basic skills of games.

**CO-3** Demonstration and application of various techniques of games

**CO-4** Warming up: - General & Specific

**CO-5** Specific conditioning program for games

**CO-6** Basic skills- offensive & defensive

Lesson on any one of the following games:- (120Hours)

1. Kho-Kho
2. BasketBall
3. Judo
4. Boxing
5. Table tennis

**SEMESTER-III**  
**PRACTICALS**  
**GYMNASTICS**  
**LESSON**

**COURSE CODE: BPE-P-307**

**(ELECTIVE GROUND COURSE-VI)**

**Credit:4**

**Marks=100**

**Objectives:-**

(120Hours)

- Helping members to develop physical confidence.

- Helping members to develop mentally.
- Promoting balance and co-ordination.
- Developing strength, improving flexibility.
- Improving body posture.
- Developing social skills.

## **The Course learning outcomes:**

**CO-1.** Define the meaning and general principles of

Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

On any one of the following gymnastics activities:-

1. Floor Exercises (Both for men&women)
2. Vaulting Horse (Both for men&women)
3. Parallel Bar (For men only)
4. Balancing Beam (For women only)

The contents of teaching for each activity are as follows:-

1. History of game/ gymnastic.
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.

7. Tournaments at national and international level.
8. Records (world, Olympic, Asian games and National Games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating: -
  - a. Duties of official.
  - b. Knowledge of score sheets.
  - c. Signals officiating.
  - d. Technical equipment for officiating.

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastics activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weightage.



**SEMESTER-III**  
**PRACTICALS**  
**YOGA PRACTICAL**

**COURSE CODE: BPE-P-308**

**(MINORELECTIVE COURSE-III)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

**The Course learning outcomes:**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

**ASANA**

Utkatasana , Chakrasana , Vrishabhasana , Kukkutasana , Vakrasana , Hasta Padangusthasana ,Paravatasana , Bhunamanasana , Konasana , Vatayanasana , Tulasana , Garbhasana , Mandukasana ,TiryakBhujangasana,Ardhchandrasana

**PRANAYAMA**

Shitali  
PranayamaShitkariPranay  
am

**SATKARMA**

Aganisar Kriya Shitkram  
Kapalbhati SutraNeti

**MUDHRAAND BANDH**

Shambhavi MurdaTadagi  
MurdaPran Murda

Kaki Murda

## SEMESTER-IV

COURSE CODE:BPE-401

(MAJOR COURSE-VII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### REMEDIAL AND MASSAGE

#### Objectives:

- Reducing stress and increasing relaxation.
- Reducing pain and muscle soreness and tension.
- Improving circulation, energy and alertness.
- Lowering heart rate and blood pressure.

#### The Course learning outcomes (COs):

**CO-1.** Use observation, verbal and other assessment tool to plan and perform a general relaxation massage.

**CO-2.** Apply the detailed knowledge of anatomy as it relates to the study of muscles, joint and ligament.

**CO-3.** Use the knowledge of physiological principles as it relates to the different system of the body and massage therapy.

**CO-4.** Apply the knowledge of pathological condition as they indicate or contraindicate the application of massage therapy

#### Unit-I (15 Hours)

1. Definition of Remedial, physiotherapy and corrective exercises.
2. Concept of posture, its meaning and characteristics of correct and incorrect posture.
3. Causes of incorrect posture
4. Necessity and importance of correct posture.
5. Principles of correct posture.
6. Tests for correct posture.

#### Unit-II (16 Hours)

##### 1. *Classification of posture :*

- a. Good Type
- b. Bantom Type
- c. Fatigue Type

##### 2. *Postural deformities and their causes :*

- a. Kyphosis
- b. Lordosis
- c. Scoliosis

- d. Bow legs
- e. Knock knee
- f. Flat foot

**3. *Preventive and remedial measures for postural defects :***

- a. Psychological and habitual consideration in preventing and correcting postural defects.
- b. Corrective exercises for various postural defects.
- c. Physiotherapist treatment in correcting postural defects.

**Unit-III** (17 Hours)

1. Massage :
  - a. Meaning, definition and a brief history of massage.
  - b. Massage as means of relaxation and points to be considered while giving massage.
  - c. General effects of massage.
  - d. Classification of the manipulation and movements in the massage :
    - i. Effleurage and stroking
    - ii. Petrissage
    - iii. Percussion/Tapotement
    - iv. Vibration and shaking
  - e. Effects of manipulation and movements on the different systems of humanbody.

**Unit-IV** (13 Hours)

1. ***Classification of positions :***
  - a. Fundamental positions
  - b. Derived positions
  - c. Modified positions
2. ***Classification of exercises along with their practical instructions :***
  - a. Free mobility exercises
  - b. Assisted exercise
  - c. Resisted exercises

**Reference Books:**

1. Smith Lara K. and Others, “Srunnstrem’s Clinical Kinesiology”, Jaypee Brothers P.B.No-7193 New Delhi 1998.
2. J.L. Rathoore, “Corrective Physical Education”, Philadelphia W.B. Saunders Co.1968.
3. P.G. Rasch and R.K. Burke, “Kinesiology and Applied Anatomy”, Lee and Febriger, Philadelphia 1978.
4. Singh Ajmer et.al, “Essentials of Physical Education”, Kalyani Publishers, Ludhiana,Second revised addition 2008.

## SEMESTER-IV

**COURSE CODE: BPE402**

**(MAJOR COURSE-VIII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION**

#### **Objectives:**

- It is the education that concerns physical activities, which develop and maintain human body
- Activity
- Teaching.
- Direction, coordination and control of group efforts

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the Students will be learning and able to do/perform the following.....

**CO-1.** Memorizing the Importance of Organization and Administration.

**CO-2.** Describing the Scope, Need and Importance of Organization and Administration.

**CO-3.** Acquiring the knowledge of Leadership in Physical Education and Sports.

**CO-4.** Determining the Role of Reports and records.

**CO-5.** Estimating the concept of drawing Fixtures.

#### **Unit-I** (15 Hours)

1. Meaning and definition of planning, organization, administration and management and their nature and scope.
2. Importance of management in educational institution.
3. Principles of management.
4. Theories of management.
5. Scheme of organization in school, college and university.

#### **Unit-II** (16 Hours)

##### **1. Facilities and equipment :**

- a. Layout of physical education facilities and sports facilities.
- b. Need and importance of equipment for physical education.
- c. Procedure for the purchase of equipment.
- d. Development of improvised equipment.

- e. Care, maintenance and disposal of unserviceable equipment.

**2. *Office management and budget :***

- a. Maintenance of records.
- b. Office correspondence and reports.
- c. Physical education budget and its preparation.
- d. Income and expenditure.
- e. Petty cash.

**Unit-III** (14 Hours)

**1. *Intramurals and extramural :***

- a. Intramurals :
  - i. Its importance and planning.
  - ii. Events of competitions, time and facility factor.

- b. Extramurals :
  - i. Planning and conduct.
  - ii. Outcomes of participations (Educational).
  - iii. Limitations in participations.
  - iv. Selection and training of teams.
  - v. Participation, finance and other aspects.

**Unit-IV** (18 Hours)

**1. Curriculum designing:**

- a) Curriculum designing its need and importance.
- b) Factors affecting time table.
- c) Place of physical education periods in curriculum and teacher-pupil ratio.

**2. Tournament organization:**

- a) Conduct of tournaments and athletic meet.
- b) Types of tournaments.
  - i. Elimination (knockout).
  - ii. League.
  - iii. Combination.

**Reference Books:**

1. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers Ludhiana Second revised addition 2008.
2. Kamlesh M. L. and Sangral M.S., "Methods in Physical Education", Parkash Brothers, 5,6 Book Market Ludhiana 1986.
3. Kamlesh M. L. "Principles and history of physical Education" , ParkashBrother Paliala, 1991.
4. Charles, E. Foxythe and Irrn A. Keuer, "Administration of High School Athletics" , Prentice Hall Inc. Englewood, N.J. 1979.

## SEMESTER-IV

**COURSE CODE: BPE403**

**(ELECTIVE COURSE-IV)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **BASIS OF YOGA THERAPY**

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#### **Objectives:**

- the application of Yogic principles to a particular person with the objective of achieving a particular spiritual, psychological, or physiological goal.

#### **The course learning outcomes (COs):**

**CO-1.**Effect of yoga in different factors

**CO-2.** Physical activity implement in asana and pranayama

**CO-3.** Yoga help in improves strength, balance and flexibility

**CO-4.** Yoga therapy benefits with disabilities and limitations.

**Unit-I: Yogic concepts of health and disease [15 Hrs.]**

1. Definition & Importance of Health According to WHO;
2. Dimensions of Health: Physical, Mental, Social and Spiritual;
3. Concept of Health and Disease in Indian Systems of Medicine i.e. Ayurveda, Naturopathy and Siddha Systems of Medicine, Utility and Limitations of these systems in health and healing;
4. Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi, Yogic concept of Health and Disease, role of Yoga in preventive health care – Heyam dukham anagatam;
5. Potential causes of Ill-health: Tapatrayas and Kleshas. Physical and Physiological manifestation of Disease: Vyadhi, Alasya, Angamejayatva and Svasa-prashvasa. Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva;
6. Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi).

**Unit-II: Yogic concepts for health and healing [15 Hrs.]**

1. Concepts of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing;
2. Concept of Pancha-koshas & Shat-chakra and their role in Health and Healing;
3. Concept of Abhyas and Vairagya, Chitta and Chitta Prasadana, Kriya-yoga, Ashtanga Yoga of Patanjali for Health and Healing;
4. Concept of Cleansing (Shuddhi), its role and importance in Health and Healing;
5. Concept of Swara Yoga and its efficacy in Health and Healing.

**Unit-III: Yogic principles and practices of healthy living [15 Hrs.]**

1. Yogic Principles of Healthy Living: Aahara, Vihara, Aachara and Vichara;
2. Role of Yogic Positive Attitudes (Maitri, Karuna, Mudita and Upeksha) for Healthy Living,
3. Concept of Bhavas and Bhavanas with its relevance in Health and well-being;
4. Yogic principles of Lifestyle management and its role in prevention of disease and health promotion;
5. Yogic Principles of Diet and its role in Healthy living;
6. Yogic Practices of Healthy living : i.e. Yama, Niyama, Shatkarma, Asana, Mudra & Bandha Pranayama, Pratyahara, Dharna and Dhyana, and their role in Healthy living.

**Unit-IV: Health benefits of yogic practices [15 Hrs.]**

Psycho-physiological effects and health benefits of Yogasana , Pranayama, Shatkarma, Bandha and Mudra, and Meditation.

### **TEXT BOOKS**

1. Preeti Goel and Rita Jain : Spectrum of Health (Sports Publications, New Delhi, 2003)
2. M. M. Gore : Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008)
3. Dr. K. Krishna Bhat: The power of Yoga

### **BOOKS FOR REFERENCE**

1. Dr. R. S. Bhogal : Yoga Psychology, Kaivalyadhama Publication
2. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
3. T.S. Rukmani: Patanjala Yoga Sutra
4. Sahay, G. S.: Hatha Yoga Pradeepika, MDNIY Publication, 2013
5. Kdham : Gheranda Samhita, Kaivalyadhama, Lonavla.

## SEMESTER-IV

COURSE CODE: BPE404

(ELECTIVE COURSE-IV)

Credit:4

Marks:(ESE=70+CCA=30)=100

### OFFICIATING AND COACHING

#### Objectives:

- They provide leadership and guidance to participants, ensuring that the competition is conducted in a safe and fair manner.
- to unlock people's potential to maximize their own performance.

**The Course learning outcomes (COs):**On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the meaning and general principles of Officiating.

**CO-2.** Discuss financial and legal aspects of officiating.

**CO-3.** Describe the qualification and qualities of an officiating.

**CO-4.** Classify the duties of officials.

**CO-5.** Define the ingredients of officiating.

**CO- 6.** Discuss enforcement, Facilities, Arrangement, and environment for officiating

**CO-7.** Explain the relations of officials with management, players, coaches, captains, spectators, and fans.

**CO-8.** Classify the preparations of officials before, during and after the game.

#### Unit-I (14 Hours)

1. Coaching :
  - a. Meaning and definition of coaching.
  - b. Principles of coaching.
  - c. Qualification and Qualities of a good coach.
  - d. Duties and responsibilities of a good coach.
  - e. Measures for improving the standard of coaching in India.

#### Unit-II (17 Hours)

1. Training Schedule :
  - a. Concept of Training Schedule.
  - b. Types of Training Schedule (Plan) :
    - i. Short term.
    - ii. Long term.
  - c. Periodization : Meaning of single and double periodization.
  - d. Principles of training schedule.

- e. Preparation of training schedule.

**Unit-III** (13 Hours)

1. Officiating :

- a. Meaning and definition of officiating.
- b. Principles of officiating.
- c. Qualification and qualities of a good official.
- d. Duties and responsibilities of an official.
- e. Measures for improving the standard of officiating in India.

**Unit-IV** (18 Hours)

1. Rules, regulations and plan of the following athletic events :
  - a) Sprints
  - b) Long jump
  - c) Shot put
  - d) Relay races
  - e) Middle and long distance races
  - f) Hope step and jump
  - g) Discus throw
  - h) Hurdles.
2. Score sheets and award of points for the above mentioned athletic events

**Reference Books:**

1. AAFB, "Officiating in Athletics", 2012.
2. Bunn, J.N. "Art of officiating in Sports", Prentice Hall Englewood N.J. 1968.
3. "Pearson G.F. Athletics", Thomson Nelson and sons ltd. London.
4. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, LudhianaSecond revised addition 2008.

## SEMESTER-IV

COURSE CODE: BPE405

(ELECTIVE COURSE-V)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPECIALIZATION IN WOODBALL

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, ground marking, rules and duties of officials, etc.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Chapter-I Introduction

Brief introduction of Woodball, Meaning & Definition of Woodball, History of Woodball (Invention, Player etc.), Woodball in India (origin Player etc.), Working Federation of Woodball in International, National, State Level.

#### Chapter-II Woodball-Equipments & Course

General Principles of woodball. Woodball course design (Figure), Specifications of course, layout plans of different woodball course, Shape & Size of Mallet, Ball & Gate.

#### Chapter-III Woodball Skill :

Player movement, Rules of Hitting & Penalties Putting  
, Penalties

Short Distance stroke. Mid

Distance stroke. Long

Distance stroke. Stoke

completion

**Penalties :** Penalties Rules in 1<sup>st</sup> shot.

Penalties Rules of Hitting

Penalties Rules in play Penalties

Rule in gate area.

#### Chapter-IV

Organization of woodball team & Dress, referee in woodball & recording methods.

##### Tournaments

State Level, National Level, International Level, AIU & SGFI Games, Distribution of Medals

##### Teams in Woodball

About woodball team, Manager Coach, Single event, Double event, Mix Double event

##### Players dress

Function of referee & chief referee line man

International Referee: Hand signs & Referee Marking

methods in score sheet, Results making

## **Chapter-V**

### **Yoga & Exercise for Woodball Player**

Asana, Pranayama, Mudra & Bandha, Dhyan, Shatkarma

#### **Reference :**

1. Woodball Association of India <[woodballindia.com](http://woodballindia.com)>
2. International Woodball Federation <[www.iwbf-woodball.org](http://www.iwbf-woodball.org)>
- 3.

## SEMESTER-IV

COURSE CODE: BPE0406

(ELECTIVECOURSE-V)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPECIALIZATION IN KABADDI

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

- CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of various team games.
- CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Kabbadi
2. Development of Kabaddi in India and worldwide.
3. Establishment of national and international federations/associations of Kabaddi.
4. Major tournaments of Kabaddi.
5. Awards associated with Kabaddi.

#### Unit-II (16 Hours)

1. Measurements and marking of Kabaddi court.
2. Preparation and maintenance of Kabaddi court.
3. Officials, no. of officials and duties of officials in the game of Kabaddi.
4. Technical equipments for officiating.

#### Unit-III (16 Hours)

1. Fundamental skills of Kabaddi:
  - a) Holding
  - b) Dodging
  - c) Kicking

- d) Chain formation
- e) Raiding
- 2. Lead-up games.
- 3. AAHPERD Youth Fitness Test.

**Unit-IV** (16 Hours)

- 1. Major rules and regulations of Kabaddi.
- 2. Important Signals in Kabaddi.
- 3. Knowledge of score sheet.
- 4. Related sports terminologies.
- 5. Eminent sports personalities associated with Kabaddi.

**Reference Books:**

1. "Training Manual of Kabaddi", NSNIS, Patiala.
2. Mishra S.C. (2007), "Teach Yourself Kabaddi", Sports Publishers, New Delhi.
3. Rao, C.V. (1983), "Kabaddi : Native Indian Sports", NSNIS, Patiala Publishers, Patiala.
4. Rao, E.P. (1994), "Modern Coaching in Kabaddi", DVS Publishers, New Delhi.
5. "Official Rule Book of Kabaddi", International Kabaddi Federation.

## SEMESTER-IV

**COURSECODE: BPE407**

**(ELECTIVECOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN JUDO

#### Course Objectives

- Judo, Japanese jūdō, system of unarmed combat, now primarily a sport.
- The rules of the sport of judo are complex.
- The objective is to cleanly throw, to pin, or to master the opponent, the latter being done by applying pressure to arm joints or to the neck to cause the opponent to yield.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques,

stances, forms, rules and duties of officials, etc. in the event of Judo.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Judo.
2. Development of Judo in India and worldwide.
3. Contribution of 'Jigaro Kano' in the promotion of Judo.
4. Establishment of national and international federations/associations of Judo.
5. Major tournaments of Judo.
6. Awards associated with Judo.

#### Unit-II (16 Hours)

1. Measurements of Competition Area for Judo.
2. Preparation and maintenance of Competition area of Judo.
3. Officials/Judges, no. of officials and duties of officials in the game of Judo.
4. Technical equipments for officiating.

#### Unit-III (17 Hours)

1. Fundamental skills of Judo:
  - a) Rolling.
  - b) Rei.

- c) Kumikata.
  - d) Ushiro Ukemi.
  - e) Yoko Ukemi.
  - f) Mai Ukemi.
2. Lead-up game.
  3. AAHPERD Youth Fitness Test.

**Unit-IV** (17 Hours)

1. Major rules and regulations of Judo.
2. Important Signals in Judo.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Judo.

**Reference Books:**

1. “Training Manual of Judo”, NSNIS, Patiala.
2. Law, M. (2009), “Falling Hard : A Journey in to the world of Judo”, Trumperer Publishers, Japan.
3. Takahashi, M. (2005), “Mastering Judo”, Human Kinetics, USA.
4. Harison, E.J. (2002), “Coaching Successfully Judo”, Sports Publishers, New Delhi.
5. “Official Rule Book of Judo”, International Judo Federation.

## SEMESTER-IV

**COURSE CODE: BPE408**

**(ELECTIVE COURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN BADMINTON

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of fundamental skills, techniques,

stance, rules and their interpretation and duties of officials in the event of badminton.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Badminton.
2. Development of Badminton in India and worldwide.
3. Establishment of national and international federations/associations of Badminton.
4. Major tournaments of Badminton.
5. Awards associated with Badminton.

#### Unit-II (17 Hours)

1. Measurements and marking of Badminton court.
2. Specifications of equipments related to Badminton.
3. Preparation and maintenance of Badminton court.
4. Officials, no. of officials and duties of officials in the game of Badminton.
5. Technical equipments for officiating.

#### Unit-III (16 Hours)

1. Fundamental skills of Badminton:
  - a) Holding (Grip) of the racket
  - b) Service
  - c) Smash
  - d) Drop
2. Lead-up games.
3. AAHPERD Youth Fitness Test.

**Unit-IV****(17 Hours)**

1. Major rules and regulations of Badminton.
2. Important Signals in Badminton.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Badminton.

**Reference Books:**

1. "Training Manual of Badminton", NSNIS, Patiala.
2. Grice, T. (2007), "Badminton : Steps to Success", 2<sup>nd</sup> Ed., Human Kinetics, USA.
3. Singh, M.K.(2006), "A to Z Badminton", Friends Publication, New Delhi.
4. Jain, D. (2001), "Teaching and Coaching Badminton", Khel Sahitya Kendra, NewDelhi.
5. "Official Rule Book of Badminton", International Badminton Federation.

**SEMESTER-IV**

**PRACTICAL**

**GENERAL**

**LESSON**

**COURSE CODE: BPE-P-409**

**(ELECTIVE GROUND COURSE-VII)**

**Credit:4**

**Marks=100**

**Objectives:**

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

**The Course Learning Outcomes:**

**CO-1.** Define the meaning and general principles of Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

Lesson on any one of the following general lesson activities:- (120Hours)

1. Class formation
2. Lazium
3. Indian club&rings
4. Aerobics.

**SEMESTER-IV**

**PRACTICAL**

**GYMNASTICS PRACTICAL**

**COURSECODE: BPE-P-410**

**(ELECTIVE GROUND COURSE-VIII)**

**Credit:4**

**Marks=100**

**Objectives:-**

**(120Hours)**

- Gymnastics, the performance of systematic exercises—often with the use of rings, bars, and other apparatus—either as a competitive sport or to improve strength, agility, coordination, and physical conditioning.

## **The Course Learning Outcomes:**

- CO-1.** Define the meaning and general principles of Rhythmic activities.
- CO-2.** Discuss the Rules and their interpretation.
- CO-3.** Describe the types of exercises.
- CO-4.** Examine the performance of skills.

Lessons on any one of the following gymnastics activities:-

1. Uneven bar (for women)
2. Rhythmic gymnastics ( for women)
3. Horizontal bar ( for men)
4. Pommel horse ( for men)
5. Roman rings ( for men)

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastic activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weight age.

The contents of teaching for each activity are as follows:-

1. History of game/gymnastics.
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead-up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.
7. Tournaments at national and international level.
8. Records (World, Olympic, Asian and National games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating :-
  - a. Duties of the official.
  - b. Knowledge of score sheets.
  - c. Officiating signals.
  - d. Technical equipment for officiating.

e. .

## SEMESTER- IV YOGA

### PRACTICAL

COURSE CODE: BPE-P-411

(MINOR ELECTIVE COURSE-IV)

Credit:4

Marks=100

(120Hours)

#### Objectives:-

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values

#### The Course Learning Outcomes:

**CO1-** Demonstrate basic skills associated with yoga and Pilates.

**CO2-** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO3-** Apply the knowledge of basic choreography, and effective group management.

**CO4-** Demonstrate the ability to create and present various yoga activities.

#### ASANA

Paschimottanasana , Natarajasana , Kurmasana , Uthit Padmasana , Padangusthasana , AkarnDhanurasana, BaddhaPadmasana, Astavakrasana, Guptpadmasana, Sarpasana, ArdhaChandrasana , ParivrttaJanushirasana, Sankatasana

#### PRANAYAMA

Bahyavriti  
pranayamaAbhyantaraVritipranayama

#### SATKARMA

VyutkramaKapalbhatiTratak

#### MUDHRAAND BANDH

MahamudraMahabandhaM  
urdaMahavedh Murda

## SEMESTER-V

**COURSECODE: BPE501**

**(MAJORCOURSE-IX)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

## KINESIOLOGY

### Objectives:-

- Kinesiology studies the mechanics of human movement and how they impact our health and wellbeing.
- During classes, students learn how to combine a holistic approach with Anatomy, Biomechanics, and Psychology principles to help increase or repair the physical mobility of patients.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be

learning and

able to do/perform the following:

**CO-1.** Describe the definition and meaning of kinesiology.

**CO-2.** Discuss the aims and objectives of kinesiology.

**CO-3.** Explain the role of kinesiology in physical education.

**CO-4.** Interpret the fundamental concept of center of gravity, line of gravity, axis, and planes.

**CO-5.** Write about the composition, and classification of bones and Muscles

### Unit-I (13 Hours)

1. Meaning and definition of Kinesiology
2. Origin and development of kinesiology
3. Aim and objectives of kinesiology
4. Need and scope of kinesiology
5. Importance of kinesiology in Physical Education

### Unit-II (17 Hours)

1. Planes and axis
2. Joint and types of joints
3. Various fundamental movements
4. Movements around various joints :
  - a. Neck
  - b. Shoulder
  - c. Elbow
  - d. Wrist
  - e. Hip

- f. Ankle

**Unit-III** (15 Hours)

**1. *Muscle contraction and its types:***

- a. Isotonic
- b. Isometric
- c. Isokinetic

**2. *Corrective/therapeutic exercises:***

- a. Passive exercises
- b. Active assistive exercises
- c. Active exercise

- d. Resistive exercise
- e. Stretching exercises

**3. *Application of kinesiology in the field of physical education and sports***

**Unit-IV** (17 Hours)

1. Structural classification of skeletal muscles
2. Functional classification of skeletal muscles
  - a. Agonist
  - b. Antagonist
  - c. Stabilizer
  - d. Neutralizer
3. Location, origin, insertion and action of the following muscles :
  - a. Deltoid
  - b. Biceps
  - c. Gastrocnemius
  - d. Latissimus dorsi
  - e. Trapezius major
  - f. Sternocleidomastoid

**Reference Books:**

1. Rasch, P.I. and Burke R.K., "Kinesiology and Applied Anatomy", Lee and Febiger.
2. Wells K., "Kinesiology", Philadelphia W.B. Saunders Co. 1986.
3. Cooper and Cleseo, "Kinesiology", St. Louis C.V. Mosby Co.1968.
4. Smith Lara K. and Others, "Srunnstrem's Clinical kinesiology", Jaypee Brothers P.B.No-7193 New Delhi 1982.
5. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised addition 2008.

## SEMESTER-V

**COURSECODE: BPE502**

**(MAJORCOURSE-X)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### FUNDAMENTALS OF SPORTS TRAINING

#### Objectives:-

- Every sport activity needs specific type of physical fitness, and hence, the improvement of various components of physical and skills related fitness like strength, speed, coordination, endurance and flexibility is an important aim and objective of sports training.

#### The Course Learning Outcomes (COs):

**CO-1.** The learners will be able to identify the fundamental concepts, theories and principles of human body training related to sports performance.

**CO-2.** The learners will be able to demonstrate the skills to train different fitness components and related planning.

**CO-3.** The learners will be able to understand the organization to achieve high performance in sports.

#### Unit-I (15 Hours)

1. Meaning, definition, aim and objectives of sports training.
2. Characteristics of sports training.
3. Principles of sports training.
4. Concept of warming up and cooling down, its use and importance.

#### Unit-II (17 Hours)

1. Meaning and definition of physical fitness and its components :
  - a. Speed.
  - b. Strength.
  - c. Endurance.
  - d. Flexibility.
  - e. Co-ordinative ability/agility.
2. Speed training :
  - a. Meaning of speed training, types of speed and methods of speed training.
  - b. Factors influencing speed.
3. Strength training :
  - a. Meaning of strength training, types of strength and methods of strength training.

- b. Factors influencing strength.

**Unit-III** (17 Hours)

1. Endurance training :
  - a. Meaning of endurance training, types of endurance and methods of endurance training.
  - b. Factors influencing endurance.
2. Concept of training load, adaptation and recovery :
  - a. Definition of load and training load.

- b. Types of load.
- c. Symptoms, causes and measures to overcome overload.
- d. Meaning, definition and benefits of adaptation.
- e. Meaning, definition and benefits of recovery.

**Unit-IV** (16 Hours)

- 1. Meaning and definition of technique, skill and style.
- 2. Implications of technical training in various phases.
- 3. Stages of technical training.
- 4. Meaning and definition of tactical training.
- 5. Methodology of tactical training, strategy and tactics.
- 6. Relationship between technical training and tactical training.

**Reference Books:**

- 1. "Fundamentals of sports training, progress publishers", Moscow, 1977.
- 2. Dyson, "The mechanics of Warwick square, Athletics."
- 3. Buwn J. "Scientific Principles of coaching." Prentice Hall.
- 4. Broer, M. "Efficiency of Human movement." Philadelphia W.B. Saunders Co. 1978.
- 5. "Science of Coaching" By Hardy Singh.
- 6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana Second revised addition 2008.

## SEMESTER-V

**COURSE CODE: BPE503**

**(MAJOR COURSE-XI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **COMMON SPORTS INJURIES ,PREVENTION AND CURE**

#### **Objectives:-**

- The ultimate goal of the rehabilitation process is to limit the extent of the injury, reduce or reverse the impairment and functional loss, and prevent, correct or eliminate altogether the disability

#### **The Course Learning Outcomes (COs):**

**CO-1.** To know the different type of injuries and illness associated with sports participation

**CO-2.** Understand risks and hazards associated with sports participation

**CO-3.** Be able to undertake a risk assessment relevant to sports

**CO-4.** Pupils will be able to recognize the common sign and symptoms for injuries

**CO-5.** Pupils will understand the difference between a chronic and acute injury.

#### **Unit-I (15 Hours)**

1. Sports injuries and its types:
  - a. Acute injuries
  - b. Overuse injuries
2. Common sport injuries:
  - a. Sprain
  - b. Strain
  - c. Fracture
  - d. Dislocations
  - e. Abrasion
  - f. Contusion
  - g. Bruise
  - h. Blisters
  - i. Corn
  - j. Athletes foot
  - k. Tennis elbow
  - l. Footballers Knee
  - m. Footballers Ankle
3. Preventive measures for common sports injuries
4. Treatment for common sports injuries

**Unit-II** (15 Hours)

1. Meaning, aim and objectives of first aid
2. First aid box and its articles
3. Types of bandages and splinters
4. Qualities and functions of a first aider
5. Principles of first aid
6. Causes of sports injuries

7. First aid for the common sports injuries
8. Concept of PRICE.

**Unit-III** (15 Hours)

1. Emergency treatment for common accidents:
  - a. Drowning
  - b. Burning
  - c. Insect stings & bitings
  - d. Snake bite
  - e. Dog bite
  - f. Poisoning
  - g. Unconsciousness
  - h. Fainting
  - i. Hysteria
  - j. Sunstroke
  - k. Shock
  - l. Electric shock
  - m. Acid burn
2. Ergogenic aids in sports and their ill effects :
  - a. Anabolic agents
  - b. Stimulants
  - c. Beta blockers
  - d. Narcotic analgesics
  - e. Diuretics
  - f. Blood doping

**Unit-IV** (15 Hours)

1. Rehabilitory exercises for sports injuries
2. Rehabilitation procedures of sports injuries :
  - a. Cold Therapy
  - b. Heat Therapy
  - c. Hydrotherapy
  - d. Electron radiotherapy
  - e. Ionization Therapy
  - f. Exercise Therapy
  - g. Massage

## Reference Books

1. Armstrong and Tuckler; "Injuries in sport", London, Staples press, 1964.
2. Bolan J.P., "Treatment and prevention of athletic injuries".
3. More house, L.E. and Resch, P.J., "Sports medicine for Trainers, Philadelphia".
4. Ryans Allan; "Medical Care of the Athlete", McGraw Hill.
5. Evans, A. William; "Everyday safety", Chicago: Iyan and Chamaha.
6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana, Second revised addition 2008.

## SEMESTER-V

**COURSE CODE: BPE504**

**(ELECTIVE COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN KHO-KHO**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills of running and chasing, techniques, sitting positions, field dimensions, rules of the games and duties of officials in the event of kho-kho.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Kho-Kho.
2. Development of Kho-Kho in India and worldwide.
3. Establishment of national and international federations/associations of Kho-Kho.
4. Major tournaments of Kho-Kho.
5. Awards associated with Kho-Kho.

#### **Unit-II (15 Hours)**

1. Measurements and marking of Kho-Kho playfield.
2. Preparation and maintenance of Kho-Kho playfield.
3. Officials, no. of officials and duties of officials in the game of Kho-Kho.
4. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Kho-Kho :
  - a. Offensive skills :
    - i. Giving Kho
    - ii. Covering

- iii. Tapping
- iv. Diving
- b. Defensive skills :
  - i. Running
  - ii. Chain
  - iii. Ring
- 2. Lead-up games.
- 3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Kho-Kho.
2. Important Signals in Kho-Kho.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Kho-Kho.

**Reference Books:**

1. "Training Manual of Kho-Kho", NSNIS, Patiala.
2. Chakaraborty, G.(2002), "Kho-Kho Avlokan", Khel Sahitya Kendra, New Delhi.
3. Pandey, L. (1982), "Kho-Kho Sarvaswa", Metropoliton, New Delhi.
4. "Official Rule Book of Kho-Kho", International Kho-Kho Federation.

## SEMESTER-V

**COURSECODE: BPE505**

**(ELECTIVECOURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALISATION IN BASKETBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of basketball.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of BasketBall.
2. Development of BasketBall in India and worldwide.
3. Establishment of national and international federations/associations of BasketBall.
4. Major tournaments of BasketBall.
5. Awards associated with BasketBall.

#### **Unit-II (15 Hours)**

1. Measurements and marking of BasketBall court.
2. Specifications of Basketball.
3. Preparation and maintenance of BasketBall court.
4. Officials, no. of officials and duties of officials in the game of BasketBall.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of BasketBall :

- a. Dribbling
  - b. Passing
  - c. Shooting
- d. Defense
2. Lead-up games.
3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of BasketBall.
2. Important Signals in BasketBall.
3. Knowledge of score sheet.
4. Related sports terminologies.
6. Eminent sports personalities associated with BasketBall.

**Reference Books:**

1. “Training Manual of Basketball”, NSNIS, Patiala.
2. Drewelt, J. (2007), “How to improve Basketball”, Crabtree Publishing Co., USA.
3. Sharma, O.P. (2003), “Basketball Skills and Rules”, Khel Sahitya Kendra, New Delhi.
4. Thani, Lokesh (1995), “Skills and Tactics of Basketball” , Sports Publication, NewDelhi.
5. “Official Rule Book of Basketball”, International Basketball Federation.

## SEMESTER-V

**COURSECODE: BPE506**

**(ELECTIVECOURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALISATIONIN BOXING**

#### **Objectives:-**

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, apparatus

used, court markings and dimensions, rules and duties of officials, etc. in the individual

event of boxing.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Boxing.
2. Development of Boxing in India and worldwide.
3. Establishment of national and international federations/associations of Boxing.
4. Major tournaments of Boxing.
5. Awards associated with Boxing.

#### **Unit-II (15 Hours)**

1. Measurements of Boxing Arena/Ring.
2. Specifications of equipments related to Boxing.
3. Preparation and maintenance of Boxing Arena/Ring.
4. Officials, no. of officials and duties of officials in the game of Boxing.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Boxing :
  - a. Shot Ring Boxing
  - b. Middle Ring Boxing

- c. Long Ring Boxing
- 2. Lead-up games.
- 3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

- 1. Major rules and regulations of Boxing.
- 2. Important Signals in Boxing.
- 3. Knowledge of score sheet.
- 4. Related sports terminologies.
- 5. Eminent sports personalities associated with Boxing.

**Reference Books:**

1. "Training Manual of Boxing", NSNIS, Patiala.
2. Gotay, A.L.(2008), "Boxing Basics", Outskirts Press, USA.
3. "Official Rule Book of Basketball", International Basketball Federation.

## SEMESTER-V

**COURSE CODE: BPE507**

**(ELECTIVE COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN TAEKWONDO**

#### **Objectives:-**

- **To enhance the sports performance:** It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Taekwondo.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Taekwondo.
2. Development of Taekwondo in India and worldwide.
3. Establishment of national and international federations/associations of Taekwondo.
4. Major tournaments of Taekwondo.
5. Awards associated with Taekwondo.

#### **Unit-II (15 Hours)**

1. Measurements of Competition Arena for Taekwondo.
2. Specifications of equipments related to Taekwondo.
3. Preparation and maintenance of Competition area of Taekwondo.
4. Officials, no. of officials and duties of officials in the game of Taekwondo.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Taekwondo :
  - a. Blocking

- b. Open & Closed Stance
  - c. Kicking & Striking
  - d. Punching
  - e. Stepping
  - f. Offensive & Defensive Techniques
  - g. Kicking Combinations
2. Introduction of Gyeorugi & Poomsae.
  3. Motor Ability Test.

## **Unit-IV**

(15 Hours)

1. Specific Taekwondo Goals for Individual Grades
2. Major rules and regulations of Taekwondo.
3. Important Signals in Taekwondo.
4. Knowledge of Score Sheet.
5. Related Sports Terminologies.
6. Eminent sports personalities associated with Taekwondo.

### **Reference Books:**

1. Anslow, Stuart (2013). From Creation to Unification: The Complete Histories Behind the Ch'ang Hon (Itf) Patterns: CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
2. Anslow, Stuart (2nd Edition 2009). Ch'ang Hon Taekwon-Do Hae Sul: Real Applications to the Itf Patterns; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
3. Kim, Bok Man (1<sup>st</sup> Edition 2015). Taekwon-Do: Origins of the Art: BOK Man Kim's Historic Photospective (1955-2015) ; Moosul Publishing, LLC.
4. Chun, Richard (2<sup>nd</sup> edition 2007). Tae Kwon Do: The Korean Martial Art ; Ymaa Publication Center.
5. Son, Duk Sung & Clark, Robert J.(1st edition 1968).Korean Karate: The Art of Tae Kwan Do ; Prentice-Hall.
6. Chun, Richard (1<sup>st</sup> Edition 2013). Tae Kwon Do Black Belt Poomsae: Original Koryo and Koryo ; Ymaa Publication Center.
7. Kim, Sang H (2010). Taekwondo Step Sparring ; Turtle Press.
8. Kim, Sang H (2009). Taekwondo Self Defense: Taekwondo Hoshinsool ; Turtle Press.
9. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 1 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
10. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 2 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
11. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 3 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
12. Cook, Doug (3<sup>rd</sup> Edition 2001). Taekwondo: Ancient Wisdom for the Modern Warrior ; Ymaa Publication Center.

13. Cook, Doug (1<sup>st</sup> Edition 2006). Traditional Taekwondo: Core Techniques, History and Philosophy ; Ymaa Publication Center.
14. Cook, Doug (1<sup>st</sup> Edition 2009). Taekwondo: A Path to Excellence ; Ymaa Publication Center.
15. Gillis, Alex (1<sup>st</sup> Edition 2008). A Killing Art: The Untold History of Tae Kwon Do ; ECW Press, Canada.
16. Park, Yeon Hwan & Gerrard, Jon (Updated Edition 1999). Tae Kwon Do: The Ultimate Reference Guide to the World's Most Popular Martial Art; Checkmark Books.
17. Park, Yeon Hwan & Gerrard, Jon (1<sup>st</sup> Edition 2013). Black Belt Tae Kwon Do: The Ultimate Reference Guide to the World's Most Popular Black Belt Martial Art; Skyhorse.
18. Lee, Kyu Hyung & H. Kim, Sang (1<sup>st</sup> Edition 2007). Complete Taekwondo Poomsae: The Official Taegeuk, Palgwae and Black Belt Forms of Taekwondo ; Turtle Press, U.S.
19. Hornsey, Kevin (1<sup>st</sup> Edition 2003). Taekwondo: A Step-by-Step Guide to the Korean Art of Self-Defense ; Tuttle Publishing.
20. Park, Dong Keun & Schein, Allan (1<sup>st</sup> Edition 2006). Tae Kwon Do: The Indomitable Martial Art of Korea : Basics, Techniques, and Forms ; Invisible Cities Press Llc.

“Official Rule Book of Taekwondo”, World Taekwondo Federation. [www.worldtaekwondo.org](http://www.worldtaekwondo.org) , [www.taekwondofederationofindia.com](http://www.taekwondofederationofindia.com)

**SEMESTER-V**  
**PRACTICAL**  
**GAMES LESSON**

**COURSECODE:BPE-P-508**

**(ELECTIVE GROUND COURSE-IX)**

**Credit:4**

**Marks=100**

(120Hours)

Objectives:-

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

**The Course Learning Outcomes:**

- Experiencing and Immiting the General & Specific warming up for games
  - Acquiring the Basic skills of games
  - Demonstration and application of various techniques of games.
- Warming up: - General & Specific
- Specific conditioning program for games
- Basic skills- offensive & defensive

Lesson on any one of the following games:-

1. Cricket
2. HandBall
3. Taekwondo
4. Weight Lifting
5. Football.

## **SEMESTER-V**

### **PRACTICAL**

#### **ATHLETICS LESSON**

**COURSE CODE: BPE-P-0509**

**(ELECTIVE GROUND COURSE-X)**

**Credit:4**

**Marks=100**

#### **Objectives:-**

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

**CO-1.**Administrating of the skill performance.

**CO-2.**Practicing of the skill performance.

**CO-3.**Summarizing record file

Lesson on any one of the following athletics events:-

(120 Hours)

1. High Jump.
2. Hammer Throw
3. Javelin
4. Competitive walking.

#### **Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastics activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsion for each candidate which will be assessed by external examiner appointed by the university.

3. Each group of practical examination will be of three hours duration irrespective of its weight age.

The contents of teaching for each activity are as follows:-

1. History of Game/Athletics .
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead-up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.
7. Tournaments at national and international level.
8. Records (World, Olympic, Asian games and national games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating: -
  - a. Duties of official
  - b. Knowledge of score sheets
  - c. Signals officiating
  - d. Technical equipment for officiating.

**SEMESTER-V**  
**PRACTICALSYOGAPRAC**  
**TICAL**

**COURSECODE: BPE-P-510**

**(MINORELECTIVECOURSE-V)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values

**The Course Learning Outcomes:**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

**ASANA**

Mayurasana, Shirshasana, Eka Pada Skandasana, Vatayanasana, Titibasana, Garbhasana, Shirsha Padangusthasana, Guptasana, Padambakasana, Purna Ustrasana, Vibhaktapaschimottanasana, Karnapidasana

**PRANAYAMA**

Bhramari  
Pranayama Bhastrika  
Pranayama Udgeeth  
Pranayama Murcha Pranayama

**SATKARMA**

Shankh  
Prakshalan Nauli Kriya  
Vastra Dhauti

**DHYAN**

YogaNidra

## SEMESTER-VI

**COURSE CODE: BPE601**

**(MAJOR COURSE-XII)**

**Credit:4**

**Marks: (ESE=70+CCA=30)=100**

### **FUNDAMENTALS OF COMPUTER APPLICATIONS IN PHYSICAL EDUCATION**

#### **Objectives:-**

- **Operate a variety of advanced spreadsheet, operating system and word processing functions.**  
Solve a range of problems using office productivity applications, and adapt quickly to new software releases. Maintain quality assurance through critically evaluating procedures and results.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

- CO-1.** Memorizing the Importance of Computer, characteristics and application.
- CO-2.** Describing the block diagram and classification of the computers.
- CO-3.** Acquiring the knowledge of software, hardware, and storage devices of the computers.
- CO-4.** Determining the role of MS-Word, MS-Excel & MS Power point.
- CO-5.** Define Word processor and its types.
- CO-6.** Applying the concept of prepare the presentation and slide show, animation with function.
- CO-7.** Estimating the working with graph.

#### **Unit-I Concepts of Computer and its basics: (15 Hours)**

1. History, application, characteristics, types of computer (Analog, Digital, Hybrid) and generations of Computer.
2. Physical structure of computer.
3. Use of computer
4. Human V/s Computer
5. Role of computer in various fields
6. Aspects and need of computer in Physical Education.

#### **Unit-II Component of Computer System: An Introduction of Hardware and Soft ware (15 Hours)**

1. Components of computer system
2. CPU (CU, ALU and Main memory)
3. Input devices (Keyboard, Mouse and Track Ball, Touchpad, Joysticks, Touch Sensitive Screens, Data Scanning Device, Bar Code Readers, Optical Mark Reader (OMR) and Magnetic Ink Character Reader (MICR))

4. Output Devices (Monitor, Printer, LCD)
5. Hardcopy Devices (Printers and Plotter)
6. UPS and types of UPS
7. Operating System Programme Languages translator.
8. Application program/package

**Unit-III Operating System :** (15 Hours)

1. Operating system and its functions.
2. DOS, Internal and External DOS Commands
3. Window features
4. Windows accessories- Calculator, notepad, word-pad and paint.
5. Structure of window screen (Desktop, wallpaper, taskbar and icons)
6. Start button

7. Programme, documents, setting search, help and support, run, concept of file and folders and shut down.
8. Virus- Types, symptoms, effects and protection.

#### **Unit-IV MS Office :**

(15 Hours)

1. Work-Introduction to word processor, creating and saving documents, editing and formatting a document, including color, size, font, alignment of text, printing a document, inserting word art, clip art and picture, page sorting, bullets and numbering, inserting tables, creating rows and columns and mail-merge.
2. Power point.
3. Excel- Introduction to excel, need of spreadsheet, creating, opening and saving workbook, editing worksheet, using links, applying different views and types of functions.
4. Internet and its benefits.
5. Types of connections: dial up, dedicated or leased lines, Wi-Fi.
6. Using search engine downloading the information
7. Communication on the Internet: e-mail, chatting and internet newsgroups.

#### **Reference Books**

1. Arora S., "Introduction to Information and Technology", Dhanpat Rai and Co. (Pvt.)Ltd. Education and Technical Publisher (2002).
2. Nasib Fill, "Essential of Computer and Network Technologies", Khana Book Publishing Company Darya Ganj New Delhi.
3. Hussain; "Computer Technology and Application", 1996.
4. Carter Roger, "The Information Technology Handbook", Heinmar Professional Publishing (Ltd.) 1987.
5. Raja Raman V; "Fundamentals of Computer", Prentice Hall of India (Pct) Ltd. 1982.
6. Raja Gopalan R., "Understanding Computers", Tata McGraw Hill Publishing Company Ltd. 1920.

## SEMESTER-VI

COURSE CODE: BPE602

(MAJOR COURSE-XIII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPORTS PSYCHOLOGY

#### Objectives:-

Most people study sport and exercise psychology with two objectives in mind:

- (1) to understand how psychological and social factors influence an individual's behavioural outcomes (e.g., sport performance, exercise motivation)
- (2) to understand how participation in sport and exercise influences psychological

**The Course learning outcomes (COs):** On completion of the four years B.P.E.S, program, the students will be learning and able to do/perform the following.....

State the Meaning and Definition of Psychology.

- CO-1.** Estimating the stages of Growth and Development.
- CO-2.** Acquiring the knowledge of Individual Differences.
- CO-3.** Estimating the Learning curves.
- CO-4.** Acquiring the knowledge of Individual differences and body types.
- CO-5.** Determining the factors of motivation in Physical Education & Sports.
- CO-6.** Estimating the knowledge of Mental Preparation Strategies.
- CO-7.** Combining the knowledge of Mental Preparation Strategies in relation to Sports performance.

#### Unit-I (13 Hours)

1. Meaning, definition, scope and importance Sports Psychology.
2. Relationship of sports psychology with other sports sciences.
3. Development of sports psychology in India.
4. Psychological factors effecting physical performance.
5. Utility of sports psychology in the field of physical education and sports.

#### Unit-II (16 Hours)

1. Concept of growth and development.
2. Physical, mental, social, intellectual and emotional development in infancy, later childhood and adolescence stages.
3. Learning: meaning, definition and nature of learning.
4. Laws of learning and learning curve.
5. Theories of learning.

#### Unit-III (16 Hours)

1. Meaning and definition of motivation.
2. Types of motivation and motivation in learning.
3. Individual differences its type and nature.
4. Determinants of individual difference:
  - a. Heredity
  - b. Environment
5. Intelligence, its meaning and types.

**Unit-IV** (15 Hours)

1. Meaning, definition and characteristics of personality.
2. Types of personality.
3. Factors affecting personality development.

4. Role of Physical Education and sports in the development of personality.
5. Description of Important psychological terms:
  - a. Anxiety
  - b. Stress
  - c. Self Confidence
  - d. Group Dynamic
  - e. Group Cohesion

### **Reference Books**

1. "Educational Psychology", Little Field Adms OC. 1979.
2. Cratty B.J., "Psychology in contemporary sports", Prentice Hall, Englewood Cliffs
3. Kamlesh M.L., "Psychology of Physical Education and sports", MetropolitanBook Co. (P) Ltd. New Delhi 1983.
4. Sharma Y.P., "Psychology in Physical Education and sports", Reliance PublishingHouse New Delhi 2000.
5. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised addition 2008.

## SEMESTER-VI

**COURSE CODE: BPE603**

**(MAJOR COURSE-XIV)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **TEST MEASUREMENT AND EVALUATION**

#### **Objectives:-**

- To frame the objectives –
- Test and Measurement helps in setting the target or goal according to the need and requirement.
- By adopting the Test and Measurement techniques the physical education teachers gets an accurate idea about the progress made by the students.

**The Course learning outcomes(COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the meaning and general principles of Test, Measurement &Evaluation

**CO-2.** Discuss the role and Importance of Test, Measurement & Evaluation.

**CO-3.** Acquiring the knowledge of Concept of Physical Fitness

**CO-4.** Determining the role of Endurance

**CO-5.** Calculating and examine the Anthropometric Measurements

#### **Unit-I** (15 Hours)

1. Meaning and definition of test, measurement and evaluation
2. Relationship between test, measurement and evaluation
3. Principles of evaluation
4. Need and importance of test, measurement and evaluation in the field of physical education

#### **Unit-II** (15 Hours)

1. Criteria for test selection
2. Characteristics of an effective test:
  - a. Validity
  - b. Reliability
  - c. Objectivity
  - d. Norms/subjectivity
3. Classification of tests :
  - a. Standardized test
  - b. Teacher made test
4. Construction of a test:

- a. Knowledge test
  - b. Skill test
5. Administration of a test:
- a. Advance preparations
  - b. During test duties
  - c. After test duties

**Unit-III** (15 Hours)

- 1. Meaning and definition of motor ability
- 2. Tests for motor ability:

- a. Barrow motor ability test
- b. Scott motor ability test
3. Meaning and definition of physical fitness
4. Test of physical fitness and cardiovascular endurance test:
  - a. AAHPERD test
  - b. Harvard step test

**Unit-IV** (15 Hours)

1. Specific sports skill test:
  - a. Badminton- French short serve and clear test.
  - b. Basket ball- Johnson basket ball test.
  - c. Kabaddi- Schmithals French test in field Kabaddi.
  - d. Volley ball- SAI Volleyball Test.

**Reference Books:**

1. Clarks H. Harrison; "Application of measurement to health and Physical Education" Prentice Hall Inc., Englewood Cliffs, N.J. 5<sup>th</sup> Edition, 1976.
2. Scott Gladys and French; "Measurement and Evaluation in Physical Education", W.M.C. Brown Co. Publishers, Dubuque, Iowa, 1959.
3. Mathews K. Donald; "Measurement in Physical Education" W.B. Saunders Co., Philadelphia, London (Second Edition).
4. Mayer J.C; "Tests and Measurements in health and Physical Education", AppletonCentury Crafts, Inc. Third Edition.
5. Johnson, Barry L. and Nelso Jack K; "Practical Measurement for Evaluation in Physical Education", Surjeet Publications, 1982.

## SEMESTER-VI

**COURSE CODE: BPE604**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN YOGA**

#### **Objectives:-**

- 1- To enable the student to have good health.
- 2- To practice mental hygiene.
- 3-To possess emotional stability.
- 4- To integrate moral values

#### **The Course Learning Outcomes (COs):**

**CO-1.** The purpose of this course is to create awareness among everyone about yoga that helps in

transforming body and mind and promoting well-being of the society.

**CO-2.** To teach knowledge, skills, proficiency and

teaching techniques necessary for teaching Yoga.

#### **Unit-I (16 Hours)**

1. Meaning, definition and origin of Yoga.
2. Aims, objectives and scope of yoga.
3. Historical development of yoga in India.
4. Importance of yoga in the modern era.
5. Types of Yoga:
  - a. Gyana Yoga
  - b. Karam Yoga
  - c. Bhakti yoga
  - d. Raj Yoga
  - e. Hatha Yoga
  - f. Mantra Yoga
  - g. Laya Yoga

#### **Unit-II (14 Hours)**

1. Concept and philosophy of Asthanga Yoga.
2. Constituents of Asthanga Yoga & Shat Chakras :
  - a. Yama
  - b. Niyama
  - c. Asana

- d. Pranayama
- e. Pratyahar
- f. Dharma
- g. Dhyana
- h. Smadhi

3. Role and mode of practice of each step in the attainment of goal.

**Unit-III** (14 Hours)

- 1. Asanas and their importance.
- 2. Classification of asanas:

- a. Meditative
  - b. Relaxative
  - c. Cultural
3. General techniques and benefits with lesson plan any one of the following: Padmasana, Vajrasana, Halasana, Bhujangasana, Sarvangasana, Chakrasana, Dhanurasana, Salabhasana, Paschimotanasana, Mayurasana, Shirshasana.
  4. Technique and benefits of Surya namaskar.
  5. Difference between yoga and general exercises.

#### **Unit-IV** (16 Hours)

1. Lesson Plan (any one)
2. Concept of Shat Karma (Shudhi Kriyas), Hast Mudras and brief description of the following:  
Neti, Dhوتي, Basti, Nauli, Tratak, Kapalbhathi
3. Meaning and definition of Pranayama, general techniques and physiological benefits of the following :  
Ujjai, Sitkari, Shitali, Bhastrika, Bhramari, Kapalbhathi, Anlom-Vilom
4. Meaning and definition of Hast Mudra and Bandhas.
5. Rule & Regulation of Yoga Competition (All India Yoga Society Reg.)
6. Equipments, Officiating & Coaching

#### **Reference Books:**

1. "Facts about Yoga", By Shri Jogindera, The Yoga Institute, Santa Cruz, Bombay-55(1975)
2. "The Complete Book of Yoga", By Shre Anand Publishers Orient.
3. "Yoga in Modern Life", By Shri Jogindera, The Yoga Institute Santa Cruz, Bombay-55 (1966).
4. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers, Ludhiana, second revised addition 2008.
5. Ramdev, S. (2006). *Yoga Sadhana and Yoga Chikitsa Rahasya*. Haridwar, India: Divya Prakashan.
6. Ramdev, S. (2009). *Pranayam Rahasya*. Haridwar, India: Divya Prakashan.

## SEMESTER-VI

**COURSE CODE: BPE605**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN HANDBALL

#### Objectives:-

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### The Course Learning Outcomes:

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, Techniques, stances, forms, rules and duties of officials, etc. in the event of Handball.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (14 Hours)

1. Origin and brief history of Handball.
2. Development of Handball in India and worldwide.
3. Establishment of national and international federations/associations of Handball.
4. Major tournaments of Handball.
5. Awards associated with Handball.

#### Unit-II (17 Hours)

1. Measurements and marking of Handball court.
2. Specifications of Handball.
3. Preparation and maintenance of Handball court.
4. Officials, no. of officials and duties of officials in the game of Handball.
5. Technical equipments for officiating.

**Unit-III** (14 Hours)

1. Fundamental skills of Handball :
  - a. Dribbling
  - b. Passing
  - c. Shooting
  - d. Defense
2. Lead-up games.
3. Barrow motor ability test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Handball.
2. Important Signals in Handball.
3. Knowledge of score sheet.
4. Related sports terminologies.

5. Eminent sports personalities associated with Handball.

**Reference Books:**

1. Training Manual of Handball”, NSNIS, Patiala.
2. Phillips, B. E. (2009), “Fundamental Handball”, Kessinger Publishers, USA.
3. Jain, D. (2003), “Play and Learn Handball”, Khel Sahitya Kendra, New Delhi.
4. Surbone, L.M. et. al. (2010),“Team Handball ”, Betascript Publishing Co.,USA.
5. “Official Rule Book of Handball”, International Handball Federation.
6. .

## SEMESTER-VI

**COURSECODE: BPE606**

**(ELECTIVECOURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN VOLLEYBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

- CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Volleyball.
- CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of VolleyBall.
2. Development of VolleyBall in India and worldwide.
3. Establishment of national and international federations/associations of VolleyBall.
4. Major tournaments of VolleyBall.
5. Awards associated with VolleyBall.

#### **Unit-II** (16 Hours)

1. Measurements and marking of VolleyBall court.
2. Specifications of VolleyBall.
3. Preparation and maintenance of VolleyBall court.
4. Officials, no. of officials and duties of officials in the game of VolleyBall.
5. Technical equipments for officiating.

#### **Unit-III** (15 Hours)

1. Fundamental skills of VolleyBall :

- a. Service
  - b. Pass
  - c. Smash
  - d. Blocking
2. Lead-up games.
  3. Barrow motor ability test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of VolleyBall.
2. Important Signals in VolleyBall.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with VolleyBall.

**Reference Books:**

1. Training Manual of Volleyball”, NSNIS, Patiala.
2. American Volleyball Coaches Association (2005), “Volleyball : Skills and Drills”, Human Kinetic, USA.
3. Scates, A.E.(1993), “Winning Volleyball”, W. C. Brown, USA.
4. Sagar, S. K.(1994),“Cosco skill Tactics -Volleyball ”, Sports publication, Delhi.
5. “Official Rule Book of Volleyball”, International Volleyball Federation.

## SEMESTER-VI

**COURSE CODE: BPE607**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN FOOTBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Football.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of Football.
2. Development of Football in India and worldwide.
3. Establishment of national and international federations/associations of Football.
4. Major tournaments of Football.
5. Awards associated with Football.

#### **Unit-II** (17 Hours)

1. Measurements and marking of Football ground.
2. Specifications of Football.
3. Preparation and maintenance of Football ground.
4. Officials, no. of officials and duties of officials in the game of Football.
5. Technical equipments for officiating.

#### **Unit-III** (15 Hours)

1. Fundamental skills of Football :
  - a. Passing
  - b. Kicking
  - c. Trapping
  - d. Heading
  - e. Throw in
2. Lead-up games.
3. Barrow motor ability test.

**Unit-III** (14 Hours)

1. Major rules and regulations of Football.
2. Important Signals in Football.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Football.

**Reference Books:**

1. Training Manual of Football”, NSNIS, Patiala.
2. American Football Coaches Association (2002), “The Football Coaching Bible”, 1<sup>st</sup> edition, Human Kinetic, USA.
3. Sharma, O.P.(2001), “Teaching and Coaching Football”, Khel SahityaKendra, New Delhi.
4. Thani, Yograj (2002), “Coaching Successfully Football ”, Khel SahityaKendra, New Delhi.
5. “Official Rule Book of Football”, Federation International Football Association.

## SEMESTER-VI

### PRACTICAL

#### MARKING&OFFICIATINGIN GAMES

**COURSE CODE: BPE-P-608**

**(ELECTIVE GROUND COURSE-XI)**

**Credit:4** Marks=100 (120Hours)

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes:**

- Know the role of and the correct terminology used by a Marker
- Know the role of and the correct terminology used by a Referee
- Know the correct times allowed for various intervals during a game of squash
- Know the rules relating to the serve
- Understand the basic rules relating to interference on court
- Know the different categories relating to injuries and the times allowed for recovery (including for bleeding)
- Have a basic knowledge of the Conduct Rule and when it can be used

**SEMESTER-VI**  
**PRACTICAL**  
**MARKING&OFFICIATING IN ATHLETICS**

**COURSE CODE: BPE-P-609**

**(ELECTIVE GROUND COURSE-XII)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

**The Course Learning Outcomes:**

- Know the role of and the correct terminology used by a Marker
- Know the role of and the correct terminology used by a Referee
- Know the correct times allowed for various intervals during a game of squash
- Know the rules relating to the serve
- Understand the basic rules relating to interference on court
- Know the different categories relating to injuries and the times allowed for recovery (including for bleeding)

- Have a basic knowledge of the Conduct Rule and when it can be used

Lessons on marking and officiating on any two events (one track and one field event) of athletics covered in the practical's course content of B.P.E. course (Semester I to V).

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons on marking & officiating in athletics and games (5 lessons each in athletics & games). In addition each trainee shall complete 1 assignment each in marking & officiating in athletics & games.
2. For the purpose of examination in practical's one lesson each in marking and officiating of respective games & athletic events is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its

weight age.

The contents of teaching for each activity are as follows:-

1. Measurements & marking of track & field events and play fields of games.
2. Equipments & specification of equipments.

3. Rules & regulations of athletic events and games.
4. Related books & magazines.
5. Officiating :
  - a). Duties of official
  - b). Knowledge of score sheets
  - c). Officiating signals
  - d). Technical equipment for officiating
  - e). No. and types of officials.

## **SEMESTER-VI PRACTICAL**

**(Fundamental of Computer Application In Physical Education Practical)**

**COURSECODE:BPE-P-610**

**(MINOR ELECTIVELAB COURSE-VI)**

**Credit:4**

**Marks=100**

**(120Hours)**

### **Objectives:-**

- **Operate a variety of advanced spreadsheet, operating system and word processing functions.**  
Solve a range of problems using office productivity applications, and adapt quickly to new software releases. Maintain quality assurance through critically evaluating procedures and results.

### **The Course Learning Outcomes:**

- CO-1.** Memorizing theImportance ofComputer, characteristics and application.
- CO-2.** Describing the block diagram and classification of the computers.
- CO-3.** Acquiring the knowledge of software, hardware, and storage devices of the computers.
- CO-4.** Determining the role of MS-Word, MS-Excel& MS Power point.
- CO-5.** Define Word processor and its types.
- CO-6.** Applng the concept of prepare the presentation and slide show, animation with function.
- CO-7.**Estimating the working with graph.

1. M.S. Word :
  - a. Creating Document
  - b. Typing Text
  - c. Text Formatting

- d. Inserting Tables, rows and columns
  - e. Mail- Merge
  - f. Page Formatting
2. Excel:
    - a. Creating Spread Sheet and Sorting
  3. Power Point Presentation:
    - a. Creating PPT's
  4. Creating e-mail, Id and Web-browsing.





University of Patanjali Haridwar



Department of Psychology

## **CONTENTS**

<b>S. No.</b>	<b>Name of the Program</b>
<b>1</b>	M.A Psychology with specialization in Clinical Psychology
<b>a.</b>	Program Educational Objectives (PEOs)
<b>b.</b>	Program Outcomes (POs)
<b>c.</b>	Program Specific Outcomes (PSOs)
<b>d.</b>	Eligibility of Admissions
<b>2</b>	Structure of the Courses
<b>a.</b>	Semester I
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## Department of Psychology

University of Patanjali

Haridwar

### M.A Psychology with specialization in Clinical Psychology

(w.e.f. Academic Session: 2020-21)

#### 1. Program Educational Objectives (PEOs):

PEO1	Promotion of holistic health with the knowledge of Clinical Psychology.
PEO2	Application of scientific knowledge to understand and interpret psychological phenomena.
PEO3	Engagement in innovative and integrative thinking of psychotherapies.
PEO4	Apply psychological concepts and skills to career goals.
PEO5	Apply ethical standards to conduct and evaluate psychological science and practice.

#### 2. Program Outcomes (POs):

PO1	Use scientific Knowledge to understand and interpret psychological phenomena.
PO2	Applications of Rational thinking approach in the solution of problems.
PO3	To promote the ability to work with <i>Manoyoga</i> (passion).
PO4	Use psychological principles to understand local, regional, national and international issues.
PO5	Apply psychological principles and theories to serve and improve one's community.

#### 3. Program Specific Outcomes (PSOs):

PSO1	Students will be able to create Yogic-Psychological environment in different areas of life.
PSO2	Students of Psychology will be able to have unconditional positive regard and empathy towards others.
PSO3	Students will learn to work in a team and develop leadership qualities.
PSO4	Students will be able to conduct short empirical researches so that they develop an understanding about application of statistics and research methodologies.
PSO5	Students will be able to apply psychological principles and theories to serve and improve one's community.

## Eligibility of Admissions

The course requirements for the degree of M.A Psychology with specialization in Clinical Psychology have been designed with the objective to provide comprehensive knowledge and training with research orientation in the details of modern Psychology. The students shall have to pass in the theory and practical papers separately.

**Eligibility for Admission:** Bachelor's Degree in any discipline from UGC recognized University/Institute. Reservation will be as per University/ Central Government Rules.

**Duration:** Four semesters (Two years course)

The distribution of theory and practical papers for M.A I year and II year examinations (semester wise) is as follows-

### FIRST YEAR (M.A. PART-I)

#### I Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-101	Yoga Psychology	30	70	100
MAP-102	Statistical techniques and experimental designs	30	70	100
MAP-103	Social Psychology	30	70	100
MAP-104	Biological foundations of behaviour	30	70	100
MAP-105	Practicum	30	70	100
	Total Marks			500

#### II Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-201	Research Methods	30	70	100
MAP-202	Positive Psychology	30	70	100
MAP-203	Cognitive Psychology	30	70	100
MAP-204	Theories of Personality	30	70	100
MAP-205	Practicum	30	70	100
	Total Marks			500

**Important:** In second year (Semester III and IV). Clinical Psychology course (**Group-A**) will be run by the department and five **days educational tour** to visit Mental Health Institution and **one month internship** should be mandatory.

## SECOND YEAR (M.A. PART-II)

### Group A: Clinical Psychology

#### III Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-301	Health Psychology	30	70	100
MAP-302	Psychopathology	30	70	100
MAP-303	Clinical Psychology	30	70	100
MAP-304	Psychometry	30	70	100
MAP-305	Practicum	30	70	100
	Total Marks			500

#### IV Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-401	Guidance and Counseling Psychology	25	70	100
MAP-402	Psychological Testing	25	70	100
MAP-403	Therapeutic techniques	25	70	100
MAP-404	Dissertation/Project work	25	70	100
MAP-405	A report of the academic tour/survey in mental Health Institution/in clinical situation prepared by the students	25	70	100
	Total Marks			500

\*Dissertation/Project work will be of 100 marks.

**SEMESTER-I**  
**CODE: MAP 101**  
**Yoga Psychology**

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**Marks-70**  
Time- 03 Hrs

### **Course Objectives:**

- To initiate the understanding of psychological knowledge within yoga and meditation linking with the idea of mental health and well-being.
- To deepen the practice of yoga and meditation systems and linking to applications in various contexts.

### **Course Outcomes (COs):**

After completion of the course students will be able:

- CO 1- To achieve spiritual and mental wellbeing.
- CO 2- To promote ancient Indian Knowledge.
- CO 3 -To understand human behaviour as per Yogic Perspectives.

### **Course Contents**

**Unit 1: Yoga Introduction:** Definition and meaning of Yoga, Historical Development of Yoga over the ages including a brief philosophical overview (Patanjali yoga)

**Unit 2: Yoga in Modern Context:** Vivekananda's framework of Raja Yoga; Karma Yoga, Swami Ramdev and his ideas.

**Unit 3: Yoga school in contemporary context:** Bihar school of Yoga, Art of living and Sri SriRavi Shankar, Integral Psychology by Sri Aurobindo.

**Unit 4: Fundamental text of Yoga Psychology 1:** Samadhi Paada- Concepts Svaroop, Samsskara, Vasana, Viveka, Vairagya and Ishwar.

**Unit 5: Fundamental text of Yoga Psychology-11:** Saadhana Paada- Kriya Yoga, Tapas, Svadhyaya, Ishwar Pranidhana, Kleshas, Avidya, asmita, raga-dvesa, abhinivesha, yama, niyampranayama, pratyahara, two yoga therapies: Meditation and yognidra (with practical knowledge).

### **Books Recommended:**

- Taimni, I. K. (1961). The science of yoga. Adyar, India: The Theosophical Society of India.
- Feuerstein, G. (2002). The yoga tradition: Its history, literature, philosophy and practice. Delhi, India: Bhavana Books and Prints.
- Jacobsen, K. A., Larson, G. J. (2005). Theory and practice of yoga: Essays in honour of Gerald James Larson. Leiden, Holland: Brill.
- Vivekananda, S. (1982). Raja yoga or conquering the internal nature. Calcutta, India: Advaita Ashram.

Semester- I  
Code: MAP 102  
**Statistical Techniques and Experimental Designs**

**Marks-70**  
Time- 03 Hrs

**Course Objectives (COs):**

- To develop an understanding of various statistical techniques in terms of their Applications
- To create understanding about different types of Design employed in Psychological Research

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO 1- To collect organizes, interpret and analyze of psychological data in various fields of life.
- CO 2- To obtain scientific results by using different statistical methods.
- CO 3- To utilize statistical knowledge in various fields of science and arts.

**Course Contents**

- Unit 1** : **Measures of Variability:** NPC- Characteristics & Applications of Normal Probability Curve, Average Deviation, Quartile and Standard Deviation.
- Unit 2** : **Test of Statistical Significance:**Significance of difference between means: CR and 't' test (Correlated & Uncorrelated). Analysis of variance (one way and two ways), Non-Parametric Statistics:Chi-Square test, Sign Test, Median Test. Difference between parametric and non-parametric statistics.
- Unit 3** : **Correlation Methods:** Concept and Significance of correlation methods, Product Moment Correlation (Ungrouped Data), Rank Difference Correlation, Bi-serial, Point Bi serial, Phi contingency.
- Unit 4:** **Regression and Prediction:** Partial and Multiple (Introduction only not numerical).
- Unit 5** : **Introduction to Experimental Design:** Randomized group design, Block design, within group design, factorial design.

**Note:**

1. Students can use simple calculator (Without Programming/Nonscientific) during the Examination.
2. Statistical Tables will be provided during the Examination.

**Books Recommended:**

1. Gareett, H.E. (2005). Statistics in Psychology and Education. New Delh. Paragon International Publishers.
2. Haslam, S.A., &Mcarty, C. (2003). Research Methods and Statstics in Psychology. London: Sage Publication.
3. D. Howitt, D., & Cramer, D. (2000). An Introduction to Statistics in Psychology. London: Pearson Education.

## Semester- I

Code: MAP 103

### Social Psychology

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To understand the use of social psychological perspectives to explore human experiences and behaviour within social situations or socio-historical context.
- To develop insight about the basic assumptions and scope of social psychological perspectives.
- To explore the use of social psychological perspectives in addressing the issues and problems of the real world.

#### Course Outcomes (COs):

After completion of the course, students will be able to:

- CO 1- Describe a broad social perspective towards social issues.
- CO 2- Present scientific solutions of social problems.
- CO3 – Explain intergroup relationship.

#### Course Contents

**Unit 1: Introduction to Social Psychological Perspectives:** Nature and scope of Social Psychology, Methods of Social Psychology: Experimental, Survey, Field Studies and Questionnaire.

**Unit 2: Social Influence and Responding to Social Situations:** Social facilitation, social loafing, Social perception, attitude and its change within cultural context, aggression and ways to manage aggression.

**Unit 3: Intergroup relations:** Group dynamics, leadership style and effectiveness, theories of intergroup relations (relative deprivation theory, realistic conflict theory, conflicts and resolution).

**Unit 4: Socialization:** Agents, process and characteristic of socialization, determinants of socialization, communication and language.

**Unit 5: Social Conformity and Social Problems:** Social Conformity, Conformity Bias, Impact of Feedback and Non-Conformity, Social Problems: Poverty and Deprivation, Gender Issues and Social Violence.

#### Books Recommended:

1. Baron, R.A. & Byrne, D. (2000). Social Psychology, New Delhi: Prentice Hall of India Pvt. Ltd.
2. Fraser, C. & Burchell, B. (2001). Introducing Social Psychology. Madlen: Blackwell.
3. Myers, D. (2007.) Social Psychology. New Delhi: Cengage Learning.
4. Singh, A.K. (2009). An outline of Social Psychology. New Delhi: Motilal Banarasi Das.
5. S. Mohamad (2009). Advanced Social Psychology. New Delhi: Motilal Banarasi Das.

Semester- I  
Code: MAP 104

## **Biological Foundations of Behavior**

**Marks-70**  
**Time- 03 Hrs**

### **Course Objectives:**

- To learn about biological foundations of behavior.
- To understand about physiology and importance of brain functions.

### **Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1- Describe causes of human behaviour as per biological perspectives.
- CO 2- Control and manage the physiological changes of one's own body.
- CO3 – explain neurological understanding about human behaviour.

### **Course Contents**

- Unit 1** : **Introduction to Physiological Psychology** (Meaning and definition), nature and scope of Physiology Psychology.
- Unit 2** : **Central Nervous System:** Structure and functions of human brain (spinal cord, medulla oblongata, cerebellum, thalamus and hypothalamus, cerebrum.)
- Unit 3** : **Peripheral Nervous System:** Cranial nerves and spinal nerves, Sympathetic and Para- Sympathetic nervous system- structure and functions, Endocrine glands and Psychological functions.
- Unit 4** : **Brain and behavior:** Mechanism of Hormonal action, Reproductive behavior, sleep and biological rhythm.
- Unit 5** : **Recent advances in neurophysiology:** hemispheric specialization and localization.

### **Books Recommended:**

1. F. Leukel. (1985). Introduction to Physiological Psychology. New Delhi: CBS Publishers and Distributors.
2. Tiwari, G & Pal, R. (1985). Experimental Psychology: A Dynamic Approach. Agra: Vinod PustakMandir.
3. Morgan, C.T. (1965). Physiological Psychology. New York: McGraw Hill.
4. Tiwari, B.D. (2001). Modern Physiological Psychology. Varanasi: MotilalBanarasidas.

Semester- I  
Code: MAP 105  
**Psychology Practicum**

**Course Objectives:**

- The course aims to deliver practical and in-depth experience in accordance to the principles learnt in the theory courses covering the areas of verbal learning, memory, forgetting etc.
- To provide the students with the practical knowledge of conducting various experiments and Psychological Tests.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1-Describe the basic concepts of psychological testing.
- CO 2- Measure various psychological characteristics.
- CO 3- Compare individual differences.

**List of Practicals:**

➤ **Any five of the following:**

1. Marital Adjustment Inventory
2. Emotional Competency
3. Depth Perception
4. Eysenck Personality Inventory
5. Sixteen Personality Factors
6. Retroactive Interference
7. Reaction time
8. Division of attention
9. Mirror Drawing Apparatus
10. Effect of noise of attention

➤ **Division of Marks:**

- |                               |   |          |
|-------------------------------|---|----------|
| • Conduction of 02 Practicals | : | 40 Marks |
| • Viva Voce                   | : | 35 Marks |
| • Practical Record Book       | : | 15 Marks |
| • Internal Viva-Voce          | : | 10 Marks |

Total : 100 Marks

**Note:** Any five practicals shall be conducted /administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

**Semester- II**  
**Code: MAP 201**  
**Research Methods**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To inform students about the basics of scientific research in applied psychology.
- To make them learn the statistical rigors in designing research and processing data.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1- To conduct short empirical research.
- CO 2- To prepare and present scientific research report in various fields of life.
- CO 3- To prepare research reports.

**Course Contents:**

- Unit 1 : **Research Process:** Nature of research, Problem and hypothesis, Variables: selection, manipulation and control of independent and extraneous variables, measurement of dependent variables.
- Unit 2 : **Types of Research:** Experimental, Quasi Experimental, Correlation Research and Ex-post facto research.
- Unit 3 : **Sampling:** Meaning, Purpose and Types, Sampling error, Factors affecting sampling error.
- Unit 4 : **Methods of Data Collection:** Observation, Interview and questionnaire, content analysis, sociometry method.
- Unit 5 : **Report Writing** – Research Report Writing based on APA Style. Ethical issues in psychological research – APA ethics code.

**Books Recommended:**

1. K.D. Broota (1992). Experimental Design in Behavioural Research, New Delhi: Willey Eastern.
2. F.N. Ferlinger (1973). Foundation of Behavioural Research, Delhi: Surjeet Publications.
3. A.K. Gupta and R. Singh (2009). Research Methodology, New Delhi: Vayu Education of India.
4. L.H. Kidder (1981). Research Methods in Social Science. Tokyo: Holt Saunders.
5. Mohsin: Research Methods in behavioural Sciences, New Delhi; Longman

Semester- II  
Code: MAP 202

## **Positive Psychology**

Marks-70  
Time- 03 Hrs

### **Course Objectives:**

- To recognize what contributes/does not contribute to happiness.
- To understand the right kind of vocation relationship and values in life that enhances one's well-being
- To recognize the role of positive emotions and traits in enhancing happiness.

### **Course Outcomes (COs):**

After completion of the course, students will be able:

- CO 1- To know and apply the true meaning of life.
- CO 2- To create happy and healthy ambiance.
- CO 3- Explain the importance of holistic wellbeing.

### **Course Contents:**

1. **Introduction: Positive psychology:** meaning, definitions, nature, goals and relation with other fields.
2. **Happiness and well-being:** Happiness: concept and definitions, happiness and facts of life, gender, love, marriage, close relationships and others.
3. **Emotion, personality traits and well-being:** Emotional Intelligence, Positive emotion and well-being, positive beliefs and illusions.
4. **Virtues, character strengths and well-being:** Classification of human virtues, religion, spirituality, religion and virtue: Buddhism, Islam and Hinduism.
5. **Positive Health and Positive change:** meaning of positive health, stages of change process.

### **Books recommended:**

- Kumar, V., Archana, & Prakash, V. (2015). Positive Psychology-Application in work, health and well-being. Delhi& Chennai, India:Pearson.
- David, S, A., Boniwell, I & Ayers, A.C. (2013) The oxford handbook of happiness. Oxford: Oxford University.

## Semester- II

Code: MAP 203

### **Cognitive Psychology**

Marks-70

Time- 03 Hrs

#### **Course Objectives:**

- To learn about basic psychological processes through scientific experiments.
- To understand various mental processes: Attention and consciousness, Memory processes, Reasoning and decision making.

#### **Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- Provide an in-depth understanding of some of the cognitive processes in terms of current theories, models and applications.
- CO2 -Help learners understand the importance of these cognitive processes in everyday life.
- CO3- Become creative and decision oriented.

#### **Course Contents:**

- Unit 1 : **Attention and Perceptual Processes:** Attention: Concepts and Mechanisms, factors affecting attention, Perception – Figure- ground organization. Perception of depth and movement, Perceptual constancy – Brightness, size and shape.
- Unit 2 : **Memory and Forgetting:** Memory – Types of memory (STM and LTM). Methods and Material, determinants of memory. Forgetting – Concepts, Causes and theories of forgetting – Interference Theory (Behaviouristic) and repression theory.
- Unit 3 : **Thinking and Problem solving:** Thinking – Meaning and Types, Language and thinking. Problem solving – Nature, factors affecting problem solving and strategies.
- Unit 4 : **Verbal Learning:** Nature, materials and methods of verbal learning, Determinants of verbal learning and transfer of learning.
- Unit 5 : **Creativity and decision Making: Meaning and nature, Factors affecting decision making, improving Decision Making.**

#### **Books Recommended:**

1. M.R. D'Amato (1979). Experimental Psychology: Methodology, Psychophysics and learning. New Delhi: Tata McGraw Hill.
2. B.E. Goldstein (2002). Sanstationand Perception. USA: Wadsworth.
3. J.W. Kling and L.A. Riggs (1984). Woodworth and Schlosberg's Experimental Psychology. New Delhi: Khosla Publishing House.
4. R.L. Solso (2001). Cognitive Psychology, Singapore: Pearson Education.

Semester: II  
Code: MAP 204  
**Psychology of Personality**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To develop an understanding of the concept of individual difference.
- To develop an appreciation of the biological and social impact on personality.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1- Achieve and maintain dignity of human behaviour.
- CO 2- Built organized personality.
- CO 3 – Explain importance of Indian virtues.

**Course Contents**

- Unit 1 : **Concept and Definition of Personality:** Meaning and definition of Personality, Views on self and Personality: Upanishadic, Gita and Buddha
- Unit 2 : **Determinants of Personality:** Importance of heredity in the development of personality, Role of biological factors: Direct genetic effect; mediated effect through environment factors: Physical and socio- cultural impact.
- Unit 3 : **Trait and type Approaches:** Allport, Cattell, Eysenck and Big Five Factors Models.
- Unit 4 : **Personality of individual differences:** Biological and social explanation of gender differences in Personality, Trigun theory of Personality.
- Unit 5 : **Recent advances in Personality Research:** Human Strength and virtues: Learned Helplessness.

**Books Recommended:**

1. G.C. Hall, G. Lindzey and J.C. Campbell (1998). Theories of Personality. New York: John Wiley and Sons.
2. W. Mischel (1976). Introduction to Personality. New York: Holt Reinhart and Winston.
3. R.M. Rchman (2000). Theories of Personality. USA: Thomson Wadsworth.
4. R. Frager and J. Fadiman (1998). Personality and Personal Growth, New York : Longman.
5. J.M. Burger (2004), Personality. USA: Thomson Wadsworth.

Semester- II  
Code: MAP 205  
**Psychology Practicum**

**Course Objectives:**

- To provide a understanding of psychological tests having applications in clinical practice.
- Exposure to the general concepts of psychology through experimentation and testing.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO -1 Detect various mental diseases through psychological tests.
- CO - 2Provide scientific report of psychological qualities.
- CO-3Compare individual differences.

**List of Practicals:**

**Any Five of the following:**

1. Defense Mechanism
2. Emotional Maturity Scale
3. Attribution Style
4. Adjustment Inventory
5. Mental Health Scale/Inventory
6. Muller Lyer
7. Two Hand Coordination
8. Maze learning
9. Aggression Scale
10. Judging Emotions by Photographs

**Division of Marks:**

Conduction of 02 Practicals	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
<hr/>		
Total	:	100 Marks
<hr/>		

Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

Semester- III  
Code: MAP 301  
Group A: Clinical Psychology  
**Health Psychology**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To familiarize with the concept of health psychology to live healthy life.
- To orient the students about management of stress.

**Course Outcomes (Cos):**

After completion of the course, students will be able to:

- CO 1- Maintain a holistic approach of health.
- CO 2 - Promote Indian psycho-yogic views of health in the society.
- CO 3- Describe conceptual knowledge of behavioural health.

**Course Contents**

- Unit 1: **Concept of Health:** Definition of Health, Biopsychosocial model VS biomedical model. Interaction of biopsychosocial variables, clinical implication of biopsychosocial model, cross cultural perspective of health.
- Unit 2: **Social and Environmental Factors:** Global health trends, Health care systems, socio-economic factors in health, Gender and Health.
- Unit 3 : **Stress and Coping:** Meaning and sources of stress, Stress as stimulus and Response, techniques of coping, Stress related health problems: – cardiovascular disease: hypertension, stroke, diabetes.
- Unit 4: **Modification of Health Behaviour:** Changing health beliefs, self observation and self monitoring, Health enhancing behaviour – Exercise, accident prevention and weight control.
- Unit 5 : **Behavioural health:** Effect of smoking, interventions to reduce smoking, effects of alcohol, preventing alcohol.

**Books Recommended:**

1. Baum, A., R.J. Gatchel, R. J. & Krantz, D.S (1997). An Introduction to Health Psychology. New York: McGraw Hill.
2. Baum, A., Revenson, T.A & Singer, J.E. (2001). Handbook of Health Psychology. New Jersey: Lawrence Erlbaum.
3. Dimatteo, M.R. & Martin, L.R. (2010). Health Psychology. New Delhi: Dorling Kindersley Pvt. Ltd.
4. Khokhar, C.P. (2007). A Text Book of Stress Coping and Health Meerut: Shalab Publication

Semester- III  
Code: MAP 302  
Group A: Clinical Psychology  
**Psychopathology**

Marks-70  
Time- 03 Hrs

### Course Objectives:

- To develop understanding of the various manifestations of psychopathology.
- To familiarize with DSM IV and ICD II to classificatory systems in the context of diagnosis of various psychiatric/psychological disorders.

### Course Outcomes (COs):

After completion of the course, students will be able:

- CO-1 To understand nature, aetiology and prevention of mental health issues.
- CO-2 To develop skills for diagnosis and classification of mental disorders.
- CO-3 To prepare mental status examination.

### Course Contents

**Unit 1: Approaches to Psychopathology:** overview of latest version of Diagnostic and statistical Manual (DSM) International classification of diseases. Biological, Psychodynamic, behavioural, cognitive, Socio-cultural.

**Unit 2: Anxiety disorders:** Approaches and etiology of generalized anxiety disorder, panic disorder, phobia, obsessive-compulsive disorder and post traumatic stress disorder.

**Unit 3: Psychotic disorders:** Approaches and etiology of Schizophrenia, Paranoid and mood disorders.

**Unit 4: Cognitive Impairments:** Approaches and etiology of delirium, dementia and amnesic syndromes, dementia of the Alzheimers type.

**Unit 5: Substance Related Disorders:** Alcohol Dependence, Short-term effects of Cannabis.

### Books Recommended:

1. Buss, A.H. (1999). Psychopathology. New York: John Wiley and Sons.
2. Lamm, A. (1997). Introduction to Psychopathology. New York : Sage Publications
3. Davison, G.C., & Neals, J.M. (1996). Abnormal Psychology. New York: John Wiley and Sons.
4. Mohanty, G.B. (1998). Text Book of abnormal Psychology. New Delhi: Kalyani Publishers.

Semester- III  
Code: MAP 303  
Group A: Clinical Psychology

**Clinical Psychology**

Marks-70

Time- 03 Hrs

**Course Objectives:**

- To familiarize with the history and development of clinical psychology as a field in India and its evolving professional identity.
- To orient students to major theoretical models which guide clinical psychological practice and research
- To orient about clinical assessment process and its application in various domains.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To describe the basic concepts of clinical psychology.
- CO-2 To assist clinical psychologists and psychiatrists
- CO-3 To assess and prepare a treatment plan under clinical setting.

**Course Contents:**

**Unit 1: Clinical Psychology:** meaning and nature of clinical psychology, professional issues: roles, skills and ethics.

**Unit 2: Psychoanalytic approach:** Brief orientation to four psychoanalytic psychologies: Drive, Ego, Object relations and Self-personality, understanding of psychological defences.

**Unit 3: Other approaches of clinical psychology:** Behavioural approach, humanistic approach, attempt at integration: bio-psycho-social.

**Unit 4: Clinical assessment:** Meaning and stages of Clinical interview with its merits and demerits, case history

**Unit 5: Areas of application:** Intellectual and educational, personal and interpersonal.

**Books Recommended:**

1. Llewelyn, S., Murphy, D. (Eds.) (2014). What is clinical psychology? Oxford UK: Oxford University Press.
2. Bellack, A. S., & Hersen, M. (1980). Introduction to clinical psychology. New York: Oxford University Press.
3. Korchin, S. J. (1986). Modern clinical psychology. Delhi: CRR Publishers and Distributors.
4. Ray, S. D. (1996). The practice of psychotherapy. New Delhi: New Age International.

Semester- III  
Code: MAP 304  
Group A: Clinical Psychology  
**Psychometry**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with Psychometry and psychological measurement.
- Criteria of psychological test and the steps used in test construction.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To create critical understanding of measurement issues and techniques in psychological inquiry
- CO-2 To develop skills and competencies in test construction and standardization
- CO-3 To learn the application and contextual interpretation of data from psychological measurement

**Course Contents**

- Unit 1: **Foundations of Psychometric:** Basic of measurement theory, Speed vs. power test, nature of psychological testing.
- Unit 2: **Test Construction:** Item writing – method of scoring, step use in test construction, Item analysis – meaning and purpose, items difficulty, difficulty value and index of discrimination.
- Unit3: **Standardization of tests:** Types of norms, specificity of norms.
- Unit 4: **Reliability and Validity:** Meaning of reliability, Methods – test retest, internal consistency/ split half. Factors influencing reliability of a test. Validity – meaning, types-content, criterion, predictive, concurrent and construct validity. Factors influencing validity of the test.
- Unit 5: **Application of Tests:** Applications of Psychological testing in various settings- education, counseling and guidance, and ethical issues.

**Books Recommended:**

1. Chadha, N.K. (2009). Applied Psychometry. New Delhi: Sage Publications.
2. Guilford, J.P. (1989). Psychometric Methods, New Jersey: John Wiley and Sons.
3. C. Jackson (2003). Understanding Psychological Testing, Mumbai: JaicoPublishings House.
4. Nunnaly, J.C. (1978). Psychometric Theory. New York: McGraw Hill.
5. Chandha, N.K. (1996). Theory and Practice of Psychometry. New Delhi: New Age international Publishers.

Semester- III  
Code: MAP 305  
**Psychology Practicum**

**Course Objectives:**

- To provide an understanding of psychological tests having applications in clinical practice.
- Exposure to the general concepts of psychology through experimentation and testing.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO-1 Demonstrate working knowledge of report writing and providing psychological consultancy in various setting.
- CO-2 Developing an appreciation of how psychological tests can be applied to real life settings.
- CO-3 Compare individual differences.

**List of Practical:**

**Any Five of the following:**

1. Rorschach
2. T.A.T.
3. PGI Health Questionnaire
4. Depression Scale
5. Rosenberg Self Esteem
6. Self Concept Rating Scale
7. Sportsman Spirit Test
8. The group test of general mental ability
9. Draw a man test
10. Eight State Questionnaire

**Division of Marks:**

Conduction of 02 Practical	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
Total	:	100 Marks

**Note:** Any five practicals shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

Semester- IV  
Code: MAP 401  
Group A: Clinical Psychology  
**Guidance and Counseling Psychology**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain the knowledge about guidance and counseling
- Importance of counseling in real life.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To understand bio- psycho-social issues of human life as per psychological perspectives.
- CO-2 To assist clients under the supervision of clinical psychologists in various areas of life.
- CO-3 To provide counselling in school, college and university levels.

**Course Contents:**

- Unit 1 : **Counseling Psychology: Meaning and nature of guidance and counseling, Ethical issues in counseling, Distinctions between counseling and Psychotherapy.**
- Unit 2 : **Expectations and goals of Counseling:** Goals and expectations, Process, Characteristics of counselors, Role and functions of the counselors and their professional training.
- Unit 3 : **Theoretical Approaches to Counseling:** Psychoanalytic, Behavioral, Rational- Emotive Behavior Therapy, Client Centered and Transactional Analysis.
- Unit 4 : **Areas of Counseling:** Educational, Career, Family and Marital, Gerontological and Weaker Sections, Stress Management Oriented Counseling.
- Unit 5 : **Future of Counseling:** The future and status of counseling with special reference to India.

**Books Recommended:**

1. C.J. Gelso and B.R. Fretz (1995). Counselling Psychology. Bangalore: Prism Books Pvt. Ltd.
2. V.R. Patri (2001): Counselling Psychology, New Delhi : Authors Press.
3. S.N. Rao (2002). Counselling and Guidance, New Delhi : McGraw Hill
4. A. David (2004). Guidance and Counselling. New Delhi: Common Wealth Publishers.

Semester- IV  
Code: MAP 402  
Group A: Clinical Psychology  
**Psychological Testing**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with psychological testing and its nature and functions
- To create understanding about different types of testing.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1-To administer psychological testing in various settings like school, hospitals and NGO.
- CO2-To provide help in the assessment of mentally retarded and physically handicapped persons
- CO3- To explain about various types of psychological testing.

**Course Contents**

- Unit 1: **Psychological Test:** Nature, Uses, Functions and Types of Psychological Tests. Test Administration- Effects of examiner and situational variables. Test-takers perspective, Effects of training on test performance.
- Unit 2: **Measurement of Aptitude and Abilities:** Group Tests – Multidimensional Aptitude Battery, Multilevel Aptitude Batteries – Cognitive Ability Test. Multiple Aptitude Test Batteries- Differential Aptitude Test
- Unit 3: **Personality Testing:** Self Inventories – MMPI, EPPS, 16PF, Neo Personality, Inventory, Projectivetechniques: TAT, Rorschach test.
- Unit 4: **Interest Inventories:** Strong interest Inventory, Kuder Interest Inventory, Jackson's Vocational Interest Inventory.
- Unit 5: **Tests for special Population:** Infant and Pre-school testing, Assessment of mentally retarded and physically handicapped.

**Books Recommended:**

1. A. Anastasi (1998). Psychological Testing. New Delhi : McMillan.
2. Paul Kline (1993). The Hand Book of Psychological Testing. London Poutlege.
3. K.R. Morphy and C.O. Davidshofer (1988). Psychological Testing: Principles and Application. New Jersey: Prentice Hall of India Pvt. Ltd.
4. F.S. Freeman (1971). Theory and Practices of Psychological Testing. New York: Oxford Press.
5. L.J. Cronbach (1972). Essentials of Psychological Testing. New York: Harper and Row.

## Semester- IV

Code: MAP 403

### Group A: Clinical Psychology Therapeutic Techniques

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To gain knowledge about different therapies
- To create understanding and awareness about the use of therapies in professional life.

#### Course Outcomes (COs):

After the completion of this course students will be able:

- CO1-To apply psycho - therapeutic knowledge in practical life.
- CO2-To assist psychotherapist and clinical psychologist.
- CO3- To explain the basic utility of psychotherapies.

Unit 1: **Psychotherapies:** Concept, Roles and responsibilities, The Client and therapist Relationship, Ethical issues.

Unit 2: **Psychodynamic Therapy:** Freudian Psychoanalysis, Alfred Adler and Erik Erikson.

Unit 3: **Behaviour Therapy:** Guided Exposure, Systematic desensitization, Aversion Therapy, Assertion training, Modeling, Biofeedback.

Unit 4: **Cognitive Behaviour Therapy:** Beck's Cognitive Therapy, Rational emotive behavior Therapy, Michenbaum's cognitive behaviour therapy.

Unit 5: **Humanistic Therapies:** Person centered therapy- Gestalt Therapy, existential therapy. Transactional therapy, Interpersonal Relationship Therapy- Marital and Family Systems Therapy.

#### Books Recommended:

1. G. Corey (2001). Theory and Practice of Counselling and Psychotherapy. Belmont CA: Brooks Cole.
2. S. Culari (1998). Foundations of Clinical Psychology. New York: Allyn and Bacon.
3. T. Plante (2005). Contemporary Clinical Psychology, New York: John Wiley and Sons.
4. R. Erskine (1988) Integrative Psychotherapy in Action, New York: Sage Publications
5. M.B. Ghorpade and V.B. Kumar (1988). Introduction to Modern Psychotherapy. New Delhi: Himalaya Publishing House.
6. A Bandura (1969). Principle of Behaviour Modification. New York: Holt Rinehard and Winston.
7. G.D. Rastogi (1991). Psychopathology and Treatment. New Delhi: Wiley Eastern Ltd.

**Semester- IV**  
Code: MAP 404  
Group A: Clinical Psychology  
**Dissertation**

**Course Objectives:**

- Assess the student's mastery of the factual information, the theoretical concepts, and the methodological approaches in his/her field.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- conduct original research including: Literature review and generation of hypothesis
- CO2- Explain and apply an appropriate technique of research methodology and Statistical analysis of data.
- CO3- Produce final dissertation outcomes of a high professional standard.

**Eligibility Criteria:**

The students securing a minimum of 60% marks in total in I, II and III Semester examination (Subject to clearing all the theory and practical papers) will have an opportunity to select a Dissertation Work (100 Marks) in lieu of only 4<sup>th</sup> paper of IV semester. The student opting for Dissertation will select a topic related to his/her group of specialization (Clinical Psychology) with the help of supervisor (one of the faculty member) and later on submit an application along with relevant information through the supervisor to the Head of the Department within 30 days from the declaration of the result of III semester. The students securing less than 60% marks in total I, II, and III will have prepare project report. The dissertation in typed form (two copies) following APA manual between seventy-five to hundred pages shall be submitted on or before 30<sup>th</sup> April to the Head of the Department along with Supervisor certificate.

**Division of Marks:**

Report Writing	:	70 Marks
Viva Voce	:	30 Marks
Total	:	<hr/> 100 Marks <hr/>

Note: Supervisor will act as an internal examiner. The marks will be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

**Semester- IV**  
Group A: Clinical Psychology  
Code: MAP 405  
**Tour Report**

**Course Objectives:**

A report of the academic tour/survey in mental Health Institution/in clinical situation prepared by the students has following objectives. They are as follows:

- Deepen Social and practical knowledge.
- Develop critical thinking.
- Enhances perspectives

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- Collaborate with teachers, and integrate new perspectives with informal environments to enhance learning initiatives.
- CO2-Apply skills, values and general knowledge in new settings.
- CO3- Explore practical utility of the clinical tour.

**Division of Marks:**

Viva Voce	:	75 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
		_____
Total	:	100 Marks
		_____

Note: The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

**ORDINANCE AND COURSE CURRICULUM FOR**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**

**TWO YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

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**UNIVERSITY OF PATANJALI, HARIDWAR**

**Scheme of Examinations**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**  
**SEMESTER LAYOUT**

<b>Semester-I</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-101</b>	<b>Tourism Concepts and Principles</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -102</b>	<b>Tourism in Uttarakhand</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -103</b>	<b>Yoga Health &amp; Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-104</b>	<b>Adventure Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-105</b>	<b>General Viva-Voce</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-II</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-201</b>	<b>Travel Agency &amp; Tour Operation</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -202</b>	<b>Tourism Resource in India</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -203</b>	<b>Transport Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -204</b>	<b>Computer Applications in Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-205</b>	<b>Educational Tour</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-III</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-301</b>	<b>Culture Heritage and Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -302</b>	<b>Airlines Ticketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -303</b>	<b>Hotel &amp; Resort Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-304</b>	<b>Research Methodology</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-305</b>	<b>Project Report &amp; Presentation</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-IV</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM -401</b>	<b>Major Destinations of world</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --402</b>	<b>Tour Packaging Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --403</b>	<b>Tourism Marketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --404</b>	<b>Tourism Policy &amp; Planning</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --405</b>	<b>On-The Job Training</b>	<b>100</b>	<b>-</b>	<b>100</b>

## Semester -I

### **TOURISM CONCEPTS & PRINCIPLES (MTTM-101)**

#### **Course objectives:**

1. This will be an introductory module giving the basis of tourism studies.
2. This will give an overview of the Tourism Industry and various organisations.
3. Give an insight into how travel and tourism involved over a period of time and reached the modern stage.
4. Enhance the knowledge of students in various areas related to Tourism and how it affects the destination.

**Course Outcomes:** After studying this paper, students will able to

CO 1. assume the elementary concepts of Tourism that are applied in Tourism and Hospitality Industry.

CO 2. classify the role, function and operation in Tourism Industry.

CO 3. divide the concept of Travel and Tourism, the framework of the system, types and form of tourism as well as the impacts of tourism.

CO 4. describe the different types tourism resources of India, there importance in tourism and management.

#### **Unit – I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components
4. Different approaches to the study of tourism.

#### **Unit – II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

#### **Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

#### **Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

#### **Unit- V Tourism Organization:-**

Origin, location, and functions of WTO, IATA,PATA,TAAI, ITDC.

**Suggested Readings:**

- Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.
- Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.
- Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.
- Mill, R.C., (1990), Tourism: The International Business, Pretience Hall, New Jersey.
- Bhatia, A.K., - International Tourism
- Seth, P.N., (1999) Successful Tourism Management (Vol 1 & 2 )

## **Tourism in Uttarakhand (MTTM-102)**

### **Course Objectives:**

1. The module gives information of tourist places of Uttarakhand that helps students to know the background elements of tourism resources of Uttarakhand state.
2. Establishing world class infrastructure, attracting private sector for infrastructure development and identifying new tourism destination.
3. Gives the knowledge of religious and pilgrimage sites.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Enrich about the different Tourism resources of Uttarakhand that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. List of the Tourism prominent role in Uttarakhand. The draw of the Himalayas, the beauty and cool relief of hill stations and the wealth of Hindu religious pilgrimage sites are a part of the attraction.

CO 3. Explore the importance of religious places.

### **Unit 1 Geographical and Historical Background**

Geographical features, divisions, mountain ranges, rivers, main symbol of Uttarakhand Reason , climate, General introduction of History Garhwal and Kumaon region.

### **Unit 2 Social and Cultural Heritage**

Important caste and tribes, Main dances, Fairs and Festival, Handicrafts, Tradition, Main Cusin.

### **Unit 3 Spiritual Tourism in Uttarakhand**

Background of historical tourism, important places -Haridwar, Rishikesh, Jageshwar, Chardham in Uttarakhand, Panch Prayag, Hemkund, panch Badri ,panch kedar.

### **Unit 4 Natural Based Tourism**

Vedani and Dayara Bugyal, Roopkund, Nainital, Devtaryatal, Sahastra tal, Mussiore, Kosani, Ranikhet, Munasyari, ,Kotdwar, Valley of Flowers, Rajaji and Jim Corbett National Park.

### **Unit 5 Adventure Sports**

Trekking, Mountaineering, Skiing, River Rafting and Paragliding, Bungi Jumping - General Introduction.

### **Suggested Readings:**

- - Uttranchal 'the abode of gods'
- - Uttrakand ka smagra darshan – Savita Mohan.
- - Uttrakhand year book – 2010 –Lokesh Navbani
- - Uttranchal- Aitihashik avem Sanskritic Ayam- Uma Prashad Thapaliya
- Uttranchal ke Devalaya – Triloke Chandra Bhatt.
- Uttranchal me Paryatan naye chitize – Dr. Harimohan.

## **Yoga Health and Tourism (MTTM-103)**

### **Course Objectives:**

1. The course intent to upgrade the knowledge of the latest trends in tourism particularly the health tourism in the country.
2. Since health tourism constitute a niche market for the industry and the government as well, it becomes desirable for the students to get in touch with this new segment of tourism industry.
3. After studying this course, the student shall be able to define the trends, issues and challenges in the field of health tourism in India.
4. After reading this subject, students get the knowledge of health and wellness.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Classify the Health and wellness tourism paper can provide opportunities to students to learn new skills or knowledge related to nutrition, fitness, and other aspects of health and wellness.

CO 2. Interpret in enhancing self-awareness among the students by practically taking them in various health & wellness activities, as per the requirements and needs.

CO 3. Classify the importance of health and wellness of the country.

### **Unit 1**

Meaning of word 'Yoga', its definition, Aims & objects, Brief history of yoga, Introduction of Patanjali Yoga Sutra, Relevance of Yoga in relation to Tourism.

### **Unit II**

Health aspects of Yoga: Meaning of Health Yoga, its definition, Aims & objects, its brief history and significance of Hathyoga in Tourism, limbs of Hathyoga.

### **Unit III**

Role of Asanas, Pranayama & Mudra during Travelling. Importance of Yoga while in high Altitudes, Study of Depiction of Yogic love in the places of Pilgrimages.

### **UNIT – IV**

Health and Medical Tourism: Meaning, nature and scope Health and Medical tourism Product

Health and Medical Tourism markets at global level Advantages and disadvantages for India in Global Medical Tourism Market

### **UNIT – V**

Health and Medical Tourism in India Role of Private sector in health and medical tourism

Traditional Health Care system in India Government incentives for health and medical tourism in India

## **References**

1. Asana- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
2. Pranayama- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
3. Ghrand Samhita ----do----
4. Hath Pradipika ----do----
5. Ghrand Samhita-Swami Niranjananda Saraswati, Bihar School of Yoga, Mungher.  
Asana, Pranayama, Bandha and Mudra-: Swami Satyananda Paramhansa Bihar School of  
Yoga, Maugher
6. Smith, Melanie, & Puczko, Laszlo, Health and Wellness Tourism.
7. Conell, John, Medical Tourism.
8. Kumar, Medical Tourism in India (Management and Promotion)
9. Edlin, Gordon & Golanty, Eric, Health and Wellness.

## **Adventure Tourism (MTTM-104)**

### **Course Objectives:**

1. Memorize the concepts related to adventure tourism.
2. Explains the status of the adventure tourism market in India.
3. Illustrate the challenges, opportunities, and future prospects for adventure tourism in India.
4. Examine the various types of adventure sports in India
5. Evaluate the role of government and other stakeholders in adventure tourism.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Relate the adventure tourism.

CO 2. Explain this type of tourism tourists do some adventures activities like as skydiving, hill climbing, scuba diving for their pleasure and fun purposes.

CO 3. Demonstrate the practical & theoretical aspects of Adventure Tourism.

### **Unit –I: Introduction:-**

Definition, Nature and scope of Adventure tourism: Adventure motives through the ages and their contribution to inventions, explorations and discoveries.

Adventure in the present context, contemporary trends in Adventure tourism Geographical diversities and opportunities for A.T.in India. Potential and existing adventure tourism in different states. Planning and development perspective, major thrust areas, promotional steps taken by states and centers. Organization and institutions promoting Adventure Tourism in India.

### **Unit –II: Land based Adventure activities:-**

Mountaineering, Trekking, Rock climbing, skiing, skating; their necessary equipments, techniques and problems. Wildlife tourism: status of wildlife tourism, popular National parks and Wildlife sanctuaries.

### **Unit –III: Water based activities:-**

Water resources of India; rivers, sea and lakes. River reading, nature of white water, silent water and sea water. Rafting, Kayaking canoeing, yachting, water scooter, Hover craft. Surfing, SCUBA diving, under water activities, coastal activities. Places, organizations, equipments associated with above activities.

### **Unit-IV: Air based activities:-**

Air based activities, Atmosphere, seasons, wind pressure and wind movement in India. Hang gliding, Ballooning, Para jumping , Sky diving, Para sailing. Places, organizations and equipments associated with above activities.

**References:-**

1. Ahmad Aizaz : 'General Geography of India, NCERT, New Delhi
2. Goh Cheong long : An Economic Atlas of India, Oxford University
3. National Atlas of India, Govt. of India Publication, Calcutta
4. Atlas of World Oxford
5. Singh, R.L.(ed) India : A Regional Geography National Geographical Society of India (Varansi 1989)
6. Manorama Year Book
7. Indian Year book, Publication Division, Govt. of India, New Delhi
8. Aluwalia H.P.S. and Manfred Garner : Himalayas: A Practical Guide, Himalayan Books ( Delhi, 1985)
9. Bedi, Ramesh and Rajesh : Indian Wildlife, Brijbasi Printers ( New Delhi, 1989)
10. Bose, S.C. Geography of the Himalayas, National Book trust, India ( New Delhi,1976)
11. Chand Gian and Manohar Puri 'Trekking' International publisher India ( new Delhi,1989)
12. Gamma, Karl 'The Handbook of Skiing Pelham Books (London, 1985)
13. Lozawa, Tomoya : Trekking in the Himalayas, Allied published Pvt. Ltd., ( New Delhi, 1980)
14. Law, B.C. (ed) : Mountains and Rivers of India, Calcutta, 1968
15. Rowe, Ray 'White in Water Kayaking', Salamander Books (London, 1987)
16. Saharia, V.B. "Wildlife in India' Natraj Publisher (Dehradun, 1982)

## **General Viva-Voce (MTTM-105)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions studied in current semester.
2. The purpose is to study the destinations followed in different circuits.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will go for the general Viva Voce Examination. The curriculum of this exam is curriculum of MTTM 1<sup>st</sup> sem and the major tourist interest in India.**

The Viva exam and evaluation will jointly taken by the internal & external examiner.

## **Travel Agency & Tour Operation (MTTM-201)**

### **Course Objectives:**

1. The students will understand the conceptual meaning and differentiation between Travel agency and Tour operation. Further they will understand formalities and documentation needed to set up these units.
2. Organize the services being provided to the customer, such as transportation and accommodation.
3. Understand various skills necessary for travel agency and tour operation business
4. Understand various travel terminology.
5. Acquire knowledge on documentation in travel industry.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Explain the travel agencies can be defined as a sector that books, sells, and arranges travel, tour, and accommodation services provided by suppliers of the industry.
- CO 2. Interpret everything possible even with complicated dates.
- CO 3. Infer Some of primarily engaged in making travel arrangements and reservation services.
- CO 4. Outline the skills necessary to identify sales and marketing strategies for travel agencies

### **Unit - I : Travel Agency and Tour Operation business:**

Travel Agencies and Tour Operators- meaning, concept, types and importance Historical growth and development of travel agency and tour operation business. Linkages and integrations in travel agency and tour operation The future role of Travel intermediaries

### **Unit - II: Organizational structure and functions**

Organizational structure of travel agency and tour operator-main operational and managerial staff. Travel agency HR planning and job analysis of major positions Major functions of Travel agency and tour operators

### **Unit - III: How to Set Up a Travel Agency**

Procedure for approval of Travel Agents, Tour Operators by Department of Tourism, Government of India and IATA Ownership structure and revenue source of travel agency and tour operation fiscal and non-fiscal incentives available to travel agencies and tour operators business.

### **Unit - IV: Understanding the role of Government and other organizations in Travel Trade**

Role and contribution of Department of Tourism, Government of India, ITDC and State Government Travel Trade Associations and Organizations- Role and contribution of WTO, IATA, TAAI and IATO. Present business Trends and Future prospects of travel agencies and tour operators business.

**Unit - V: Case Studies**

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**Suggested Readings:**

Holloway, J. c., The Business of Tourism (1983), Mac Donald and Evans, Plymouth.

Syratt Gwenda, Manual of Travel Agency Practice, Butterworth Heinmann, London, 1995

Stevens Laurence, Guide to Starting and Operating Successful Travel Agency, Delmar Publishers Inc., New York. 1990

Gee, Chuck and Y. Makens, Professional Travel Agency Management, Prentice Hall, Nt.: York, 1990.

Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

Foster D.L. The Business Of Travel Agency Operations and Administration

## **Tourism Resource in India (MTTM-202)**

### **Course Objectives:**

1. The module gives information of countries tourist places of national and international importance and it helps students to know the background elements of tourism resource
2. To provide entertainment to tourists, organise tourism related activities such as cultural shows, fairs and festivals etc.
3. To take over and develop and manage places of tourist interest, parks, lakes, avenues, beaches and recreational places, sports etc.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Compare about the different Tourism resources of India that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. Go through the planning of tourists will often gain a greater respect for the lifestyle of the people living in the area they are visiting.

CO 3. Increase tourism that leads to local communities improving their skills and improving their social status.

### **Unit – I Introduction:**

Concept of resource, attraction & product in tourism, meaning & characteristics, Typology & nature of tourism resources. Nature & Scope to tourist places in India.

### **Unit- II Natural Resources:**

Study of wild life Parks, Sanctuaries & Tiger Reserves in India with case studies of Raja Ji National Park, Jim Corbett, Bharatpur Bird Sanctuary, Valley of Flowers & Gir National Park, Kaziranga National Park.

### **Unit-III Pilgrimage Destinations:**

**Hindu-** Char Dham Yatra, Haridwar, Khajuraho, Mahabalipuram, Tirupati, Madurai, Konark.

**Buddhist:** Lumbini, Bodhgaya, Sarnath, Kushinagar, Sanchi, Ajanta.

**Jain:** Mount Abu, Sharavanbelgola.

**Islamic:** Delhi, Agra, Fatehpur Sikri.

**Sikh:** Patna, Nanded, Golden Temple (Amritsar) Hemkund Sahib (Uttarakhand).

### **Unit- IV Socio-Cultural Resource:**

Socio cultural resources - Important fairs and festivals with case studies of Kumbha Mela, Dussehra, Onam, Puri Rath Yatra- & Chhath.

### **Unit - V: Hill Station & Coastal Destination:**

**Hill Station:** Study of Hill Station attractions and their environs with case studies of Mussoorie, Nainital, Shimla, Manali and Ooty.

**Beaches:** Beaches and Islands: Beaches in Goa, Kerala, Andaman & Nicobar Islands.

**Suggested Readings:**

- Gupta, SP, Lal, K, Bhattacharya, M. Cultural Tourism in India (DK Print 2002)
- Dixit, M and Sheela, C. Tourism Products (New Royal Book, 2001)
- Oki Morihiro, Fairs and Festivals, World Friendship Association, Tokyo, 1988.
- Mitra, Devla, Buddhist Architecture, Calcutta.
- Michell, George, Monuments of India, Vol. 1. London.
- Tourists Resource of India- Ram Acharya.
- Tourists Resources of India- Ratandeep Singh.
- Tourists Resources of India-Jagmohan Negi.
- Himachal Pradesh, The Land, the people by S.S. Negi

## **Transport Management (MTTM-203)**

### **Course Objectives:**

1. Transport is a vital component of the travel and tourism industry.
2. It becomes imperative for the students of tourism to learn about different modes of transportation and modern world.
3. It is the most important accessibility in terms of exploring world.
4. Promotes social cohesion, accelerate economic prosperity and insure security and territorial integrity.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Demonstrate Transport helps people to move from tourist generating area to tourist destination area.
- CO 2. Elaborate different modes of transport like road transport, rail transport, water transport and air transport.
- CO 3. Get the knowledge about transport management in tourism.
- CO 4. Shape cities, promoting community and enhance quality of tourism

### **Unit-I: Transport and Tourism**

Transportation as dynamic & visual manifestation of tourism. History of different modes of transportation. Landmarks in the development of transport sector and factors affecting the development of different modes of transport.

### **Unit-II: Air Transport**

Airlines & tourism: history of airlines' in India. Role and contribution of air India, Indian Airlines, private airlines & helicopter services. Infrastructural basis of airlines in India. Role of airlines in tourism promotion: recent policies regarding airlines, problems of airlines business.

### **Unit-III: Surface Transport**

Surface transport & tourism: Growth and development of surface transport in India. Importance of surface transportation. Infrastructural basis for surface transport. Coaches & car rental system in India. Problems faced by surface transport sector. Role and contribution of NHAI.

### **Unit-IV: Railway Transport**

Railway & tourism: history & present status of Indian railway. Zonal distribution, infrastructural basis of Indian Railway. Role of Indian railway in tourism promotion. Special trains & packages for tourists. Problems faced by Indian railway.

### **Unit-V: Water Transport**

Water transport: history & present status of water transport, Waterways of India. Types of water transport: Ocean liners, Cruise liners, ferries, hovercraft, river and canal boats and fly cruise.

**References:**

1. Ahmad Aizaz: ' General Geography of India, NCERT, New Delhi.
2. National Atlas of India, Govt. of India, Publication Calcutta.
3. Atlas of World Oxford.
4. Singh, R.L.(ed) India: A Regional Geography National Geographical Society of India (Varanasi 1989)
5. India year book, Publication Division, Govt. of India, New Delhi.
6. Aggarwal Surinder : 'Travel Agency Management', communication India, New Delhi.
7. Hannel Christine, Robert Harshman and Grahan Draper- Travel and Tourism A world regional geography , john Wiley and Sons, New York
8. Hurst, Elist, 'Transporation Geography' McGraw Hill, New York
9. OAG Airlines time table
10. OAG Cruise lines time table
11. Indian Railway Time table

## Computer Applications in Tourism (MTTM-204)

### **Course Objectives:**

1. This module is to inform the students about the role of Computer Information systems in travel trade.
2. The prescribed unit enhance the skills of students especially when they will be attached for practical.
3. This course provides the knowledge of basics computers.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Demonstrate the term Application refers to Software which is a set of instructions or code written in a program for executing a task or an operation in a Computer.

CO 2. Extent applications play a vital role in a Computer as it is an end-user program that enables the users to do many things in a system.

CO 3. Explain the basic rules of computer science.

### **UNIT-I: Computer System**

Introduction to Computers, Characteristics of computers, Applications of computers, Different units of computer, Component of computers, Input / Output and auxiliary storage Devices. CD/DVD ROM, RAM, ROM, Computer application In Tourism.

### **UNIT-II : Windows & MS Office**

Introduction to windows MS –Office: MS Word, MS Excel, MS Power Point.

### **UNIT – III :Network and Communication**

Networking: Concept, User, Types, Devices Used, LAN, MAN, WAN.

Basic Communication Components: Modems, Routers, Client, Server, Communication processors, Host Computers, Types of Transmission.

### **UNIT – IV: Internet**

Internet: Concept, uses, components, browsing, Search Engines, E-mail: Opening Account. Internet and Tourism. Information and Communication Technology (ICT) ICT: need definition, uses for tourism, and future role. ICT in tourism sector, Strategic and tactical role of ICTs for Tourism.

### **UNIT – V: Hotel & Travel Software:**

What is CRS, How it functions. CRS for Rail Transport, Hotel Bookings, Airlines: Different packages used: Amadeus, Galileo, Sabre etc.

**REFERENCES:**

1. Leon Alexis and Mathews Leon: Introduction to Computers, Vikas Publishing House Pvt Ltd. New Delhi
2. Bhatnagar S C and Ramani K V: Computers and information management. A Primer for Practicing Managers, New Delhi, Prentice Hall of India Pvt. Ltd.
3. Bansundara, S: Computer Today.
4. Goel Ritender and D N Kakkar: Computer Application in Management, New Age International Publishers, New Delhi.
5. Jaggi V P and Jain Sushma: Computers for Every one, New Delhi, Academic India Publishers.
6. Simpson Alan: Your First Computers (2nd Edition) New Delhi-BPB Publications.
7. Saxena S: and Prabhpreet Chopra: Cumputer Applications in Management, Vikas Publishing house Pvt. Ltd. New Delhi.
8. Saxena S: MS Office2000 for Everyone Vikas Publishing house Pvt. Ltd. New Delhi.
9. Internet Sites and resources.

## **Educational Tour MTTM-205**

### **Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

### **COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

### **Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

## **Culture Heritage and Tourism (MTTM-301)**

### **Course objectives**

- 1.This module is important to study because India is rich in heritage properties and its maintenance is necessary.
- 2.This will help to understand the nature of heritage properties and conservation.
- 3.prevention and promotion of tribes and communities of the state.
- 4.It helps in studying traditional culture and preserve with modernity.

**Course Outcomes:** After studying this subject, students will able to

CO 1. Contrast of sustainable tourism is defined as “tourism that respects both local people and the travels.

CO 2. Translate the cultural heritage and the environment” It seeks to provide people with an exciting and knowledgeable fair.

CO 3. Supports culture and helps renewing tourism.

CO 4. Relate the strategies of many organizations regarding cultural heritage

### **Unit 1: Understanding Culture & Tourism**

Concept and Fundamentals of Indian Culture.

Culture – Tourism Relationship; Socio-Cultural Impacts of Tourism.

Spiritual basis of Indian culture

### **Unit-II: UNESCO Heritage Sites**

What is Heritage? Meaning and concept. Criteria for selection as heritage sites, monuments and zone by UNESCO (WHC). Types of heritage property. World famous heritage sites and monument in India and abroad.

### **Unit - III: Living Culture and Performing Art of India**

Major Fairs and festivals of India

Classical dances and Music of India

Indian handicrafts

### **Unit – IV: Heritage Management in India**

Heritage Management, objectives and strategies, Protection, Conservation and Preservation, Heritage Marketing, Destination development.

National and International Organisations engaged in Heritage Management (UNESCO, ICOMOS, ASI, INTACH and NGOs),

### **Unit – V: Museums**

Museums, Concept and classification. (National Museum, New Delhi; Bharat Kala Bhawan, Varanasi; Archaeological Museum, Sarnath, etc.), Heritage Hotels.

**Suggested Readings:**

- Allchin, B., Allchin, F.R. et al. (1989) Conservation of Indian Heritage, Cosmo Publishers, New Delhi.
- New Inskeep, Edward, Tourism Planning: An Integrated and Sustainable Development Approach (1991) VNR, New York.
- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- UNESCO-IUCN (1992) Eds. Masterworks of Man and Nature, Pantoga, Australia.
- IATA Special Mail Manual.

## Airlines Ticketing (MTTM-302)

### **Course Objectives:**

1. This module is intended to prepare the students to enter a travel agency where he will be required to be well-versed with the modalities of air ticketing and the study of air transportation industry.
2. Certificated air carriers, the freight and passenger business, general aviation.
3. Economic impact of aviation, understanding of competition and government regulations, Ownership of airlines.
4. The cyclical nature of the airline business. Distribution of world passenger traffic, etc

**Course Outcomes:** After studying this paper, students will able to

CO 1. Interpret the Airline tickets are important documents that confirm a passenger has a seat on a flight.

CO 2. Summarize the ticket includes important information about the passenger and the flight that they will take.

CO 3. Infer the ticket is exchanged for a boarding pass during the check-in process, and this gives the passengers permission to board the plane from studying this subject.

CO 4. Compare the global world class aircraft manufactures and airport providers.

**Unit-I** Aviation Geography: IATA areas, sub areas, sub regions, Longitude, Latitude, time calculation: GMT variation, concept of standard time and daylight saving time, calculator of elapsed time, flying time and ground time, Global Indicators, Aviation Organisation: IATA & ICAO.

**Unit II** Air Transportation: Concept of Airlines, Domestic and international airlines in India, Private sector and government airlines, types of aircraft, the hub and spoke system, interline agreements, role of DGCA, critical remarks on air transport industry of India, policies, practices.

**Unit III** Understanding of various codes: ABC codes, looking up schedules, flight connections, transfer connections, looking TIM:- Passport, visa, special permits, customs formalities and currency regulations, health regulations and Airport tax, passenger needing special attention. Minimum connecting time, general rules of currency conversion and rounding up of fare, different modes of payments e.g. cash, credit card etc.

**Unit IV** Introduction to fare construction:- Definition and understanding of published fares, various types, normal, child fare, one way, return, excursion etc; commissions, discounts, MCO, PTA, HIP, BHC, looking up MPM, calculating TPM, determining the fare breakup point, surcharges, excess mileage table. Ticketing-Insurance of tickets, Normal, one way, return, round the world, excursion, circle trip, child, etc. cancellation, reissue of tickets.

**Unit V** Documentation: Air way bill, charges correction advice, irregularity report, cargo manifesto, cargo transfer Manifesto, documents concerning postal mails and diplomatic mails. Shippers declaration for dangerous goods. Handling- Cargo capacity of Air and Ships. Cargo needing special attention, introduction to dangerous goods regulations. Some important Cargo companies.

**Suggested Readings:**

- Gupta S.K : International Airfare & Ticketing Methods & Technique UDH Publishers & Distributors (P) Ltd. New Delhi.
- Sinha P.C: Encyclopaedia of Tourism Management
- Jagmohan Negi: Travel Agency & Tour Operation Concepts & principle
- Galileo systems
- ABC World wide Airways Guide (Red & Blue)
- Air Tariff Book 1, Worldwide Fares.
- Air Tariff Book 1, Worldwide Rules, IT Fares etc.
- Air Tariff Book 1, World Wide Maximum Permitted Mileage
- Travel Information Manual ( TIM )
- IATA Ticketing Hand Book

## **Hotel & Resort Management (MTTM-303)**

### **Course Objectives:**

1. This Module is prescribed to appraise students about the important departments of classified hotel.
2. To teach various aspects related to accommodation Industry.
3. To determine various departments according to guests needs and safety.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend The Hotel and Resort Management course is designed for students with a career interest in the lodging and resort industries.
- CO 2. Outline these fields represent a wide range of businesses, from the small country inn or bed and breakfast to multinational chains of hotels and resorts.
- CO 3. Interpret the students regarding different accommodations with their functions.

**Unit – I    Origin and Expansion:** Conversion of Tavern; Inns, Chalets and places into hotels, creation of private, Public and multinational hotel chains in India. Regional, National and International Hotel Associations and their operation.

**Unit – II    Departments of hotel:** Front Office, House Keeping, Food and Beverage, Personnel and Accounts. Role and functions of different departments.

**Unit – III    Type and forms of Hotels:** Classification of hotel on basis of location, size, clientele and range of service, hotel plan, type of room etc.  
Star classification- Criteria and Procedure adopted in India.  
Resort Properties, Heritage Hotels- concept and emerging dimensions.

**Unit – IV    Major Hotel Chain in India:**

Taj Group of Hotels  
Oberoi Hotels & Resorts  
Lalit Group of Hotels  
Ashok Group of Hotels

**Unit – V    Resort Planning:** Preliminary Consideration in Resort Planning and Development and Phases of Resort Planning and Development. Trends and factors in Developed Tourist Markets leading to growth of Resort Concept. Factors affecting rate. Basic Elements of a Resort Complex: Lodging facilities, landscaping, Dining and drinking facilities, Family Oriented Services, shops and services, Entertainment; Use of Community Resources.

**Suggested Readings:**

- Selected case studies from sterling. Delmia, Toshali and R.C.I. International will be managed from concerned organisations.
- Andrews, Sudhir : 1985, Hotel Front Office, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : Hotel House Keeping, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : (1991),Food and Beverage Service,Tata M C Graw–Hill, New Delhi.

## Research Methodology (MTTM-304)

### Course Objectives:

1. The main objective of this course is to introduce the basic concepts in research methodology related to Management & Tourism.
2. This course addresses the issues inherent in selecting a research problem and discuss the techniques and tools to be employed in completing a research project.
3. This will also enable the students to prepare report writing and framing Research proposals.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. contrast and comprehend the basics in research methodology and applying them in research/ project work.

CO 2. take up and implement a research project/ study.

CO 3. develop skills in qualitative and quantitative data analysis and presentation used in Research activities.

**Unit-I: Research:** meaning, characteristics, types and relevance of research; trend and challenges with special reference to tourism and hotel business. Research process. Identification and formulation of research problem. **Research methodology:** meaning and procedural guidelines. **Literature review** – Meaning, Importance and sources of literature

**Unit-II: Research design-** Meaning of research design; need for research design; features of a good Research design; different research designs. **Sampling design:** the concept of sampling; Aims of sampling, census versus sample survey; steps in sampling design; characteristics of a good sample design; criteria for selecting a sampling procedure; sampling techniques/methods: probability sampling and non-probability sampling.

**Unit-III: Measurement and scaling techniques-** Measurement in research; sources of Error in measurement; test of sound measurement; technique of developing measurement tools; measurement scales; meaning of scaling; bases of scales- classification, importance; scaling techniques-rating and ranking; types of scales.

**Unit-IV: Collection of Data-** nature, sources of data; methods of data collection. **Processing of data:** Classification and Tabulation, Interpretation of data.

**Unit-V: Report writing-** meaning functions; types of research report; significance of report writing report.

### Suggested Reading:

1. Research Methodology (Pearson Publication) by Ranjit Kumar
2. Management Research Methodology (Pearson Publication) by Krishna swamy, Sivakumar & Mathirajan
3. Business Research Methods (Tata McGraw Hill Publication) by Cooper & Schindler
4. Research Methodology (New Age Publishers) by C.R. Kothari
5. Methods in Social Research (Surjeet Publications) by William J. Goode & Paul K. Hatt

## **Project Report & Presentation (MTTM-305)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will have to submit a Project Report for Via-Voce of several places of tourist interest in India.**

The students will go for Viva Voce Examination which shall be evaluated jointly by the internal & external examiner.

## **Major Destinations of World (MTTM-401)**

### **Course Objectives:**

1. Though there are so many tourist destinations in the world, there are few most famous among them. The primary objective is to explore the major popular destinations of the world.
2. It is worthwhile to know the tourist products in the lights of their main attractions, existing infrastructure facilities, linkages etc.
3. To study the destinations of whole world which is changing in to a global village and outbound tourism from India is growing at a very fast pace.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Illustrate the different tropical region, natural sites, historical heritage, and accommodation with cultural hospitality.

CO 2. Compare world that tells about major destination business around the world.

CO 3. studies about destination under UNESCO.

**Unit-I Main Destination of Asia and Pacific Region:** - Tokyo, Singapore, Dubai, Thailand, Malaysia.

**Unit-II Main Destination of Europe:** - London, Paris, Madrid, Athens.

**Unit-III Main Destinations of Africa:** - Cairo, Cape Town and Johannes berg, Mauritius, Nairobi.

**Unit -IV Main Destinations of Americas:** - New York, Los Angles, Montreal, Rio de Janeiro, San Francisco.

**Unit -V Other Destinations:** - Sydney, Fiji, Wellington, Buenos Aires.

### **References:**

- Ahmad, Aizaz: General Geography of India, NCERT, New Delhi
- Goh Cheong Long: An Economics Atlas of India, Oxford University.
- World Atlas , Oxford press.
- Singh, R.L. (ed) India: A Regional Geography National Geographical Society of India, Varanasi, 1989.
- □Manorama Year Book 2012
- □Indian Year Book 2012, Publication Division, Govt. of India, New Delhi
- Tourism Planner.
- Tour Brochures of related places.
- Lonely Planet-India and related destinations.
- Kumar Ravi Bhushan: Coastal Tourism and Environment, AOH Publishing Corporation, New Delhi.
- Websites of related destinations.

## **Tour Packaging Management (MTTM-402)**

### **Course Objectives:**

1. In this course tourism students are taught the details of tour packages, planning, framing itineraries and costing.
2. To gain knowledge about tours escorting and
3. To study and examine travel packages of known travel companies, so that the students can learn to prepare and run travel packages independently.
4. The students will set practical knowledge relating to travel and tour operation.

**Course Outcomes:** After studying this paper, students will able to

CO 1: Gain the operational knowledge of tour packaging business.

CO2 Acquire the skill of formulation of tour package.

CO3 Acquire the skill of tour costing and pricing techniques of various types of tour packages.

CO4 Apply the practical knowledge in making various real tour packages

**Unit 1** Meaning, definition, development, types components and significance of tour packages with relation to tourists, destinations and tour companies, role and input of public and private sector tourism organizations in promotion of tour packaging business.

**Unit II** Tour Formulation – Influencing factors, stages involved in tour formulation initial research (destination and market), itinerary development, negotiations, confidential tariff, costing & pricing marketing strategies. Brochure designing, Printing and distribution.

**Unit III** Itinerary preparation- meaning, types, do's and Don'ts of itinerary preparation. Limitations and constraints., Tour costing and pricing-cost concept, types of costs. Tour cost sheet. Procedure of costing; group tour, independent tours, and business tours pricing in tour operation Industry-Tour pricing strategies in India. Pricing of deferent tour packages.

**Unit IV** Detailed study of passport-definition, how to get the passport form, essential documents, photographs & fee for passport, type of passport. Visa- meaning, type of visa issued by India, necessary documents to get visa. Health regulations. Customs and currency regulations, baggage rules and insurance.

**Unit V** Tourists activities based on Mountains, Deserts, Forests and Wildlife, White Water, Marinas, Aero sport etc. and cultural and pilgrimage i.e. place of religions, historical archaeological, architectural and monumental significance, fairs and festivals, Conference and conventions and special events, Case studies of Tour Packages offered by government & private sectors and Thomas Cook and SITA etc.

**Suggested Readings**

1. Marketing of Travel & Tourism by Middleton.
2. International Encyclopaedia of Tourism Management by P.C. Sinha.
3. Dynamics of Tourism by R.N. Kaul.
4. Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

## Tourism Marketing (MTTM-403)

### Course Objectives:

1. The course includes the operation techniques of tourism marketing. The students are expected to attain a basic knowledge of marketing principals.
2. Study to suitability of alternative promotional approaches to and formulate marketing plans and promotional approaches to tourism and other related organizations.
3. It helps the learner to develop an understanding of the nature of different tourism products.
4. Provide insights into the process of developing and managing various tourism products enhance the knowledge of students about various tourism products of India.

**Course Outcomes:** By studying this course, students able to

CO 1. Demonstrate about tourism marketing is the collective name given to the various marketing strategies used by businesses within the tourism industry.

CO 2. Plan the hotels, understand and can identify tourism products that are associated with Marketing.

CO 3. Explain the central, peripheral services and public services in tourism product.

CO 4. Contrast the role of Indian architectural heritage in the tourism industry.

**Unit – I Marketing:** Core concepts in marketing; Needs, Wants, Demands, Products markets. Marketing management philosophies-Production, Product, Selling, Marketing and societal perspectives. Economic importance of marketing.

**Unit –II Analysis and selection of market:** Measuring and forecasting tourism demand; Forecasting methods, Managing capacity and demand. Market segmentation and positioning (STP)

**Unit– III Marketing Strategies:** Developing marketing environment, Consumer buying behaviour, Competitive differentiation and competitive marketing strategies. New product development. product life cycle, Customer satisfaction and related strategies in internal and' external marketing; Interactive and relationship marketing.

**Unit –IV Planning marketing programmes :** Product and product strategies; Product line, Product mix Branding and packaging. Pricing considerations. Approaches and strategies. Distribution channels and strategies.

**Unit –V Tourism Marketing :** Service characteristics of tourism. Unique features of tourist demand and tourism product, Tourism marketing mix. Marketing of Tourism. Services : Marketing of Airlines, Hotel, Resort, Travel Agencies and other tourism related services-Challenges and strategies..

**Suggested readings:**

- Kotler, Philip : Marketing Management & Hospitality and Tourism Marketing
- Sinha, P.C : Tourism marketing
- Vearne, Morrison Alison: Hospitality marketing.
- Crough, Marketing Research for Managers.
- Singh Raghbir, Marketing and Consumer Behaviour. Patel, S.G., Modern Market Research, Himalaya Publishing

## **Tourism Policy & Planning (MTTM-404)**

### **Course Objectives:**

- 1.The module will expose the students about the Tourism policy of India and of a few tourism states of the country.
- 2.To create jobs and entrepreneurial opportunities in the tourism sector and ensure the supply of a skilled labour pool.
- 3.To promote the destination trying to improve internal and external tourism demand.
4. To achieve international tourism growth and increase foreign currency income to support the balance of payments.

**Course Outcomes:** After studying this paper, students will able to

CO 1. To promote sustainable, responsible and inclusive tourism.

CO 2. Relate the policy and planning aims to promote sustainable tourism by minimizing the negative impact of tourism on social, environmental and economic aspects and maximizing the positive impact.

CO 3. outline the tourists to ensure about the propaganda tourism policy and planning.

**Unit – I Tourism Policy & Planning Framework:** Tourism Policy- meaning ,relevance & salient feature. Tourism Planning- meaning, levels & types of tourism planning.

**Unit – II Tourism Policy:** Study of National Tourism Policy 1982 and 2002, National Action Plan on Tourism, 1992: Special Tourism Area Development Programme. The concept of National Tourism Board, National Committee on Tourism, Case study of tourism policies of a few states (Uttar Pradesh, Rajasthan, Kerala, Madhya Pradesh,). Investment opportunities and government policy for investment in hotel/tourism industry. Sources of funding.

**Unit – III Destination Planning:** Destination Mix- concept and components. Step and stage in Destination Planning. Tourism Project Feasibility Study.

**Unit – IV Approaches to Tourism Planning:** Eco-centric or environment approach of tourism planning. Community approach of tourism planning. Concept of Tourism Complex Planning & its relevance in India context.

**Unit – V Tourism Policy & Planning:** Case Studies: Place of Tourism in India's Five Year Plan. Tourism Policy of india and contribution of NCT to this effect. Organizational structure of tourism in India at Central and State Level.

### **Suggested Readings:**

- New Inskeep, Edward, Tourism Planning : An Integrated and Sustainable Development Approach ( 1991) VNR, New York.

- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- Dept. of Tourism, GOI Investment Opportunities in Tourism (Brochure).
- Sharma, J. K. (2000), Tourism Development. Design for ecological sustainability, Kaniska Publication, New Delhi.

## **On-Job Training & Report (MTTM-405)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources from the industry experts based on primary and/or secondary analysis.
2. To collect the data available from outside sources such as stake holders and tourists can help the students in fulfilling the project's operations.
3. Connecting what the student has undergone till above semesters.
4. To build a harmony of theoretical and practical knowledge with actual work experience, in order to compliment field specific skills and learn new ones.

**Course Outcomes:** After undergone this training, students will able to

CO 1. Analyse the current obstacles that are occurred in Tourism/Travel related business also they'll able to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Develop skills in the application of theory to practical work situations.

CO 4. Develop skills and techniques directly applicable to their careers.

CO 5. Internships will increase a student's sense of responsibility and good work habits.

### **Course Details:**

The Training is based upon the 45 days practical training with any recognised Travel Agency/Tour Operating Company/Hotel. The Department will circulate the placement brochure / letter to various organisations prior to the joining in the same. During the organisational work (training period), each student is required to prepare practical report of day to day activities to be submitted for evaluation.

The students will have to submit the Job Training Report after completion of their Job Training before Viva-voce examination.

### **Viva – Voce**

The Viva-Voce examination will be conducted on the basis of the Tour Package Prepared, Tour and Job Training Reports and other theory papers taught.

# **ORDINANCE AND COURSE CURRICULUM FOR**

**P.G. DIPLOMA YOGA HEALTH & CULTURAL TOURISM**

**ONE YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

[www.universityofpatanjali.com](http://www.universityofpatanjali.com)

**UNIVERSITY OF PATANJALI, HARIDWAR**  
**Course Syllabus**

**PGD (YH&CT) Semester-I**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-101	Fundamentals of Yoga	70	30	100
YH-102	Principles of Hath Yoga	70	30	100
YH-103	Tourism Theory and Practice	70	30	100
YH -104	Hospitality Management	70	30	100
YH-105	Yoga Practicum	70	30	100
YH -106	Project Report (Tourism)	100	-	100
YH CE 01	Communicative English (Non Credit)	70	30	100

**PGD (YH&CT) Semester-II**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-201	Patanjal Yoga Darshan	70	30	100
YH-202	Yoga Therapy	70	30	100
YH-203	Cultural Tourism Resources	70	30	100
YH -204	Itinerary Planning, Marketing, Tour Packaging and Costing	70	30	100
YH-205	Yoga Practicum	70	30	100
YH -206	Educational Tour	100	-	100
YH CE 02	Communicative English (Non Credit)	70	30	100

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-101)**  
**FUNDAMENTALS OF YOGA**

**Course Objectives:**

1. The main objective of this course is to attain higher level of consciousness and mental hygiene.
2. To possess emotional stability and integrate moral values.
3. To enable the student to have good physical and mental health.
4. To prepare students for spiritual journey and to become healthier.

**Course Outcomes:** After studying this course, students will able to

CO 1. Demonstrate basic skills associated with yoga activities including strength and flexibility, balance and coordination.

CO 2. Demonstrate the ability to perform yoga movements in various combination and forms.

CO 3. Explain and apply the knowledge of basic sequencing, and effective group management.

**Unit-1: General Introduction to Yoga**

Origin of Yoga, Psychological basis for origin of Yoga, History and development of Yoga (Vedic period, Darshan period, Commentary period, Bhakti Yoga and Hatha Yoga period, Modern period), Etymological meaning and definition of Yoga, Purpose of yoga, Current misconceptions regarding yoga, Major principles of yoga, Yoga practices for healthy life, Importance of yoga in present age.

**Unit - 2: Basis of Yoga and Tradition of Yoga**

General introduction of Vedas, Upanishads and Ayurveda in yogic context, General introduction of Samkhya, Yoga and Vedanta philosophy (in yogic context), General introduction of Bhagavadgita (in yogic context), General introduction of Puranas (in yogic context), Yoga in Yog Vashishtha and Narada Bhakti Sutra, Brief Introduction to Yoga in Jain Philosophy and Buddhist Philosophy, Bhakti Yoga of Medieval Saints (Kabir, Nanak and Sufism)

**Unit - 3: Basis of Yoga and Tradition of Yoga - II**

General introduction of Tantra and its currents (Shaiva, Shakta, Vaishnava, Buddhist Tantra), Concept of Shiva and Shakti, Yoga in Shaivite and Shakta Tantras, Concept of Nadi and Prana, Kundalini, Kundalini Shakti and Shatchakra Sadhana, Impact of Tantra in Hatha Yoga Tradition and Sadhana.

## **Unit - 4: Major Streams of Yoga**

Concepts of major streams of yoga and introduction of their limbs with the effects - Gyan Yoga, Bhakti Yoga, Karma Yoga, Ashtanga Yoga, Kriya Yoga, Hatha Yoga and Mantra Yoga

## **Unit - 5: Introduction to Renowned Yogis**

Introduction (life & works) of the great yogis of India - Maharishi Patanjali, Maharishi Vyas, Maharishi Kapil Muni, Adi Shankaracharya, Maharishi Dayanand Saraswati, Swami Vivekananda, Maharishi Arvind, Swami Kuvalayananda, Maharishi Raman, Yogarishi Swami Ramdev

### **Prescribed text book**

1. योगदर्शनम्- स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
2. दर्शनप्रवेश- दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
3. योगकेमूलभूतसिद्धांत - आचार्यबालकृष्णजी. दिव्यप्रकाशन, पतंजलियोगपीठ.हरिद्वार
4. गीतारहस्य (निर्धारितपाठ्यांश)- लोकमान्यतिलक
5. भारतकेमहानयोगी- विश्वनाथमुखर्जी
6. तंत्रदर्शन - स्वामीनिरंजनानंदपरमहंस - पंचदशनामअलखबाड़ा, देवघर, बिहार
7. Sharma, Chandradhar: A Critical Survey of Indian Philosophy. Motilal Banarasi Das, Delhi, 2013

### **BOOKS FOR REFERENCE:**

1. Agarwal MM: Six systems of Indian Philosophy, Chowkhambha Vidya Bhawan, Varanai, 2010
2. Swami Bhuteshananda: Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
3. Hiriyanna M.: Outlines of Indian Philosophy, Motilal Banarsidas, Delhi, 2009
4. Bhat, Krishnak.: The Power of Yoga: Suyoga Publications Mangalore, 2006
5. Swami Prabhavananda: Spiritual Heritage of India (English). Sri Ramkrishna Math, Madras, 2004
6. Swami Vivekananda: Jnana Yoga, Bhakti Yoga, Karma Yoga, Raja Yoga. Advaita Ashrama, Calcutta, 2000
7. Pandit, M.P.: Introduction to Upanishads: Theosophical Society of India, Adyar, Madras, 1976

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-102)**  
**Principles of Hath Yoga**

**Course Objectives:**

1. To Maintain a youthful body, develop physical and psychic powers, awakening the potential energy and finally attaining enlightenment.
2. To build asanas related Hatha yoga are practiced to bring health and energy to body and mind by opening the nadis.
3. It includes physical techniques to preserve and channel the vital force or energy.

**Course Outcomes:** After studying this course, students will able to

CO 1. Go through the mastery of the prana, or energy of the body, we can then easily master the control of the mind and obtain success.

CO 2. Gain self-control and self-discipline and an energetic body with the help of hath yoga.

CO 3. Get strengthen and purify physical body and cultivate prana and activate kundalini.

**Unit-1: General Introduction to Hatha Yoga**

Hatha Yoga - Meaning, Definition, Origin, Tradition and Purpose. Prevailing misconceptions regarding Hatha Yoga. Helping and obstructing elements of Hatha Yoga. The Hatha Yogic practice described in Hathayoga pradipika. Concept of Math, Manuals for the practitioner of Hatha Yoga, Concept of Mitahar, Pathya & Apathya. Tradition of Hatha Yoga. A brief introduction and contribution of the major yogis of the Nath Yoga tradition. Relations in Hatha Yoga and Raja Yoga.

**Unit-2: Practices of Hatha Yoga - Purification and Asanas**

Introduction to purification practices - Purification actions described in Hatha Yoga Pradipika and Gherand Samhita and their method, benefits and precautions. The role of purification practices in yoga sadhana and the importance of purification practices in modern life. Yogasana: Definition, characteristics and importance in yoga practice. Method, benefits, precautions and importance of asanas in Hatha Yoga Pradipika and Gherand Samhita.

**Unit-3: Practices of Hatha Yoga - Pranayama, Bandha and Mudras**

*Pranayama* : Introduction. Method of Proper Respiration, Yogic Deep Breathing. Concept of Inhale (*Purak*), Retention (*Kumbhak*) and Exhale (*Rechak*). Prana, types of prana and sub-

prana. Importance of Pranayama in *Hatha Yoga Sadhana*. Method and importance of *Nadishodhana* Pranayama. Preparation for Pranayama. Method, benefits and precautions of Pranayamas in *Hatha Yoga Pradipika* and *Gherand Samhita*. Signs of *Hatha siddhi* (success in hatha yoga). Bandha :introduction, the importance of bandha-triad in yoga sadhana. Main *mudras* in *Hatha Yoga Pradipika* and *Gherand Samhita* - their methods, benefits and precautions.

#### **Unit-4: Practices of Hatha Yoga - *Pratyahar, Nadanusandhana and Swarodaya Gyan***

*Pratyahara, Dharna and Dhyana* in *Gherand Samhita*, their methods, benefits and precautions. *Samadhi*, signs of *samadhi* in *Hatha Yoga Pradipika*. *Nāda*, the four stages of *Nadānusandhana* and their accomplishments (*siddhis*). Concept of *Swara*, the importance of *Swarodaya Gyan* in *Yoga Sadhana* (with special reference to *Gyan Swarodaya* and *Shiva Swarodaya*).

#### **Unit-5: Introduction and Importance of Major Texts of Hatha Yoga**

Introduction, Purpose and Importance of major texts of Hatha Yoga: *Siddha- Siddhantha Paddhati*, *Goraksha Samhita*, *Shiva Samhita*, *Hatha Yoga Pradipika*, *Gherand Samhita*. *Hatha Ratnavali*: Main applications of hatha yogic activities- preparation of *Raja Yoga Practice*, achieving holistic health, prevention of diseases, rejuvenation, healing and slow aging.

#### **Prescribed text book**

1. हठयोगप्रदीपिका - कैवल्यधाम, लोनावला
2. घेरंडसंहिता - कैवल्यधाम, लोनावला
3. गोरक्षसंहिता - डॉ. चमनलालगौतम (1985)
4. प्राणायामरहस्य - स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
5. Research Publication, P.R.I. Patanjali Yogpeeth

#### **BOOKS FOR REFERENCE:**

1. Woodroffe, Sir John: *The serpent power*, Ganesh & Company, Madras, 2000
2. Woods, J. H.: *The Yoga system of Patanjali*, M.L.B.D., Delhi, 1988
3. Swami Vivekananda: *Rajayoga*, Advaita Ashram, Culcutta, 2000
4. Burley, Mikel: *Hatha Yoga, its' Context Theory and Practice* (M.L.B.D. Delhi, 2000)
5. Burnier, Radha: *Hathayoga Pradipika of Svatanmarama*, The Adyar Library publications, Chennai

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-103)**

**TOURISM THEORY AND PRACTICE**

**Course Objectives:**

1. To deal with various aspects of sustainable tourism, ecotourism and responsible tourism.
2. To deal with all the fundamental aspects of tourism that are to be learnt by students of tourism, air transport, travel and hospitality disciplines.
3. To give an insight into the concept of tourism from different perspectives.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Gather various types of tourism aspects such as sustainable tourism etc.
- CO 2. Explain fundamental aspects of tourism such as air transport, tourism disciplines etc.
- CO 3. Classify full understanding of the challenges, assumptions, solutions and indicators for tourism.

**Unit - I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product and concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components

**Unit - II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

**Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

**Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

**Unit- V Tourism Organization:-**

Origin, location, and functions of WTO / UNWTO, IATA, UFTAA, ASTA, PATA, TAAL, ITDC.

**Suggested Readings:**

Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.

Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.

Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.

Mill, R.C., (1990), Tourism: The International Business, Prentice Hall, New Jersey.

Bhatia, A.K., - International Tourism

Seth, P.N., (1999) Successful Tourism Management (Vol 1 &2)

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-104)**  
**HOSPITALITY MANAGEMENT**

**Course Objectives:**

1. To appraise students about the important departments of a hotel.
2. To teach various aspects related to accommodation Industry.
3. To provide training, skill development and education, hospitality, tourism and entertainment industries.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Analyze information and make decisions using critical thinking and problem solving skills.
- CO 2. Describe and apply the fundamental principles of leadership and effective communication skills.
- CO 3. Evaluate diversity and ethical considerations relevant to the hospitality industry.

**Unit-I: Hospitality: Meaning, Nature and Typologies**

Defining Hospitality: Nature and its Meaning.

Age old Institution of Hospitality with the Spirit of 'Atithi Devo Bhav' in India and its present status.

Typology of Accommodation, Origin and growth of Hostel industry with special Reference to India.

**Unit-II: Organization and Functions of Various Department in Hotels.**

Front Office, Food Production, F& B Service, House Keeping, Back office and other Ancillary Departments.

**Unit-III: Type and Forms of Hotels**

Classification of Hotel on Basis of Location, Size, Clientele and Range of Service etc

Star Classification - Criteria and Procedure Adopted in India.

Resort Properties, Heritage Hotel and Ecotels- Concept and Emerging Dimensions.

**Unit-IV: Hospitality Institutions & Manpower Requirements.**

Manpower Requirement in Hotel Sector: designations, qualifications & remunerations.

Role and Contribution of I.T.D.C. and State Tourism Corporations in Development of Hotel Sector in India, Hospitality Educations of India-Growth & Development, Hospitality Associations (HAI, FHRAI)

**Unit-V: Major Hotel Chains in India**

The Taj Group of Hotels

Oberai Hotel & Resorts

Lalit Hotels

The Ashok Group of Hotels

**Suggested books**

Introduction to Hospitality Industry-Bagri &Dahiya

Introduction to Hospitality- J. Walker

Managing Hosopitality- D. Rutherford

Hotel Front Office Mannual-Sudhir Andrew

Housekeeping Maual-Sudhir Andrew

Hotel and Lodging Management and Introduction: by Alan T. Stutis & James F. Wortman, John Willy & Sons.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-105)**  
**YOGA PRACTICUM**

**Course Objectives:**

1. To understand the benefits, contraindications and procedure of all practices.
2. To demonstrate each practice with confidence and skill.
3. To explain the procedure and subtle points involved.
4. To teach the yoga practices to any given group.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Rephrase the benefits, contradictions and procedure of all practices.  
CO 2. Demonstrate each practice with confidence and skill.  
CO 3. Explain the procedure and subtle points involved.  
CO 4. Teach the yoga practices to any given group.

**Shatkarma:** Jalneti, Rabarneti, Vamana Dhauti / Kunjar Kriya, Vat karma, Kapalbhathi. - 15marks  
**Asana** - 25 marks

SukshmaVyayam (Pawan mukta Asana) -1, Yogic Jogging, 12 Asanas (Mandukasana, Shashakasana, Gomukhasana, Vakrasana, Makarasana, Bhujangasana, Shalabhasana, Markatasana, Pawanmuktasana, Halasana, Padvrittasana, Dwi-Chakrikasana and Shavasana)

Siddhasana, Kati chakrasana, Ardhalasana, Padmasana, Vajrasana, Swastikasana, Veerasana, Udarakarsanasana, Bhadrasana, Janushirasana, Ardhamatsyendrasana, Gomukhasana, Ustrasana, Uttanapadasana, Naukasana, Sarvangasana, Halasana, Matsyasana, Suptavajrasana, Chakrasana, Tadasana, TiryakTadasana, Ek paadpranamasana, Vrikshasana, Garudasana, Hastotansana, Padahastasana, Trikonasana, Ardhadhanurasana, Marjari asana, Ardhashalabhasana, Bhujangasana, Makarasan, Shavasana, Samakonasana, Bakasana, Sarpasana, Hanumanasana, Sukhasana, Ardhpadmasana, Ek Pada Halasana, Setubandhasana, Markatasana, Shashankaran, Vipreetnaukasana, Dwikonasana, Parshvatanasana, Singhasana.

**Pranayama**-10 marks

Diaphragmatic Breathing, Pranayama: Kapalbhathi, Bhastrika, Bahya, Ujjayi, Anulom-Vilom, NadiShodhan, Bhramari and Udghith

**Mudra & Bandha:** Jnana Mudra, Chin Mudra, Vipreet Karni Mudra, Yoga Mudra, Jalandhar Bandh, Uddiyan Bandh, Moolbandha - 10 marks

**Viva:** Ishwar Stuti Prarthnopasana-10marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-106)**  
**PROJECT REPORT (TOURISM)**

**Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

**Course Detail**

**The students will have to submit a Project Report for Via-Voce of several places of tourist destinations in India.**

The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce Examination.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH- CE 01)**  
**Communicative English (Non Credit)**

**Course Objectives:**

1. To improve the English communication of the students.
2. To analyze and restate the meaning of a text in English.
3. To develop the ability to speak English language with right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Will be able to use literary techniques in literary texts.
- CO 2. Will be able to gain confidence by speaking English in real life aspects.
- CO 3. Gain the skill to write English without grammatical errors.

**Communication:**

Communication definition and concept, Process of Communication. Elements of Communication steps/phase of Communication. Means, Methods, Mode of Communication. Verbal-oral-written Communication. Nonverbal-sign language, Body Language. Flow of Communication: Formal/Informal. Barriers of Communication- Intrapersonal, interpersonal and organizational barriers.

Recapitulation Linguistic Communication Patter of Communication Group Discussion (GD), History of print Media in India.

**Grammar and usage:**

- i. Noun
- ii. Pronoun
- iii. Verb, modal, Tenses
- iv. Adjective
- v. Adverb
- vi. Preposition
- vii. Conjunction
- viii. Interjection
- ix. Rules of Translation
- x. Punctuation
- xi. Capitalization and Abbreviation
- xii. Subject Verb Agreement
- xiii. Sentences Correction Rules

- XIV. One word substitution
- XV. Active and Passive voice xvi.
- XVI. Direct and Indirect Speech
- XVII. Direct and Indirect Speech Suffixes and prefixes  
Antonyms and synonyms  
Homophones and Homonyms Letters  
Writing

Gift of the Magi-O Henry

ShrinivasaRamanujan

MuktaDhara-R.N.Tagore

### **Readings (References)**

Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead effectively, by Helio Fred Garcia, 2012

Pone Communicates, Few Connect: 'What the Most Effective People Do Differently, haC. Maxwell, 2010

Interviewing: A Programmed Approach to Effective Communication, by David Dans, Margaret T. Hearn, Max R. Uhlemann and Allen E. Ivey, 2010

Art and Science of Communication: Tools for Effective Communication in the place, by P. S. Perkins and Les Brown, 2008  
Listening Effective Groups: The Art of Small Group Communication, by Randy Fujishin,

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-201)**  
**Patanjal Yoga Darshan**

**Course Objectives:**

1. To create yoga experts with in-depth knowledge based on yogic texts.
2. To establish holistic health, social harmony and world peace by training them to be good.
3. To teach citizens who can offer yogic way of right living.

**Course Outcomes:** After studying this paper, students will able to:

CO 1 Acquire and be equipped with skills in the application of theoretical & practical knowledge of Yoga.

CO 2. Practice for real life problem solving, in an increasing complex also for the corporate world.

CO 3. Maximize spiritual knowledge and various aspects of yoga with the help of yoga darshan.

**Unit 1: - Introduction of Yogasutra and Samadhi Pada**

Yoga Sutra :Introduction, Definition and Purpose of Yoga, Importance of Yoga Sutra as compared to other Yogic texts, Concept of *Chitta*, *Chitta Bhoomi*, *Chittavrittis* and their types, *Chitta Vritti Nidrodhopaya (Abhyas- Vairagya)*, *Chitta Vikshep (Antaraya)*, *Antarayabhava*, *Chitta Prasad* and its helpers, The metaphysics of Sankhyadarshana and its relation with Patanjali Yogadarshan.

**Unit-2: - Samadhi Pada-II and Sadhan Pada**

Ishwar: Swaroop, Pranava chanting and its results, Ashtanga Yoga - 1 (Bahirang Yoga- Yama, Niyam, Asana, Pranayama, Pratyahara), Importance and Relevance of Ashtanga Yoga and Kriya Yoga, Concept of Kriya Yoga, Describing *Klesha*, Measures of *Klesha* elimination, *Vivek Khyati*, *Chaturvyuhavaad*, the character of *Drishhta & Drishya*, , the form and types of samadhi - *samprajnata*, *asamprajnata*, *sabijand nirvij Samadhi*, *RitambharaPragya* and *Adhyatma Prasad*.

**Unit 3: - Vibhuti Pada**

Ashtanga Yoga - II (*Antaranga* Yoga - Dharna, Dhyana, Samadhi), Concept of *Sanyama - Sanyama* and its three consequences, Concept of *Vibhuti* and introduction of main vibhutis, Describing Ashtasiddhi.

## **Unit-4: - Kaivalya Pada**

Five types of Siddhis (birth, medicine, mantra, penance and samadhija), Nirmaanchitta.  
Types of Karma, *Vaasna*, *Vivek Gyan*, *Dharma Megha Samadhi*, *Kaivalya*

### **Prescribed text books**

योग दर्शनम् - स्वामी रामदेव, दिव्य प्रकाशन, पतंजलि योग पीठ, हरिद्वार

दर्शन प्रवेशदिव्य प्रकाशन-, पतंजलि योग पीठ, हरिद्वार

सहायक पुस्तक -

भोज वृत्ति

योगदर्शनम्-गीताप्रेस

### **BOOKS FOR REFERENCE**

BKS Iyengar: Introduction of Patanjali Yogasutra-s: MDNIY, New Delhi, 2011.

Swami Ved Bharti: Yogasutra of Patanjali (with the Exposition of Vyasa) M.L.B.D. New Delhi, 2004,  
Vol I & II.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-202)**  
**Yoga Therapy**

**Course Objectives:**

1. To promote positive awareness for the healthy body and healthy mind
2. To inculcate the teaching ability for conducting yoga sessions and offer various techniques.
3. To create yoga professionals of high caliber who know the concepts, techniques and can do the practical as well.
4. To create yoga experts with in-depth knowledge based on yogic texts.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Develop understanding of different yogic techniques.

CO 2. Attain perfection to perform different yogic practices and shat karmas.

CO3. Explain techniques of Pratyahara, Dharana, Dhyana and conduct practical sessions.

**Unit-1 Yoga Etiology, Diagnosis and Therapy**

Yogic Anatomy and Physiology: Concept of Psychic Centers, Pancha Kosha and three planes of human being; and effects of their activation and impairment over somatic, psychic and psycho-somatic levels of human existence. Yogic diagnostic techniques: Connections of SwarScience, Prana and Breathing Patterns over somatic, mental and psycho-somatic levels. Association of Psychic centers over nerve plexus and endocrine glands; Concept of health and wellness in terms of WHO, Ayurveda and Yoga; Concept of Yoga Therapy: Meaning, Definition, Aims, Principles, Factors Impacts and Limitations; Qualities of a yoga therapist.

**Unit-2: Musculo-Skeletal Disorders**

Back Pain: Classification of back pain: organic and functional: Lumbar Spondylosis, Intervertebral disc prolapse (IVDP), Spondylolisthesis, Spondylitis, Psychogenic- Lumbago, Medical and Yogic management; Neck pain: Classification- Cervical Spondylosis, radiculopathy, Functional neck pain; Medical and Yogic management, All forms of Arthritis: Rheumatoid Arthritis, Osteoarthritis, Medical and Yogic management.

**Unit- 3: Gastro Intestinal and Excretory Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Acid peptic disease - Indigestion Hyperacidity, Ulcer, Flatulence, Gastritis, Bowel problems - chronic Constipation and hemorrhoids, Irritable Bowel Syndrome, Ulcerative colitis or inflammatory bowel disease, Crohn's disease, gluten intolerance, food allergies; Excretory System: irritable bladder syndrome, stress incontinence, Chronic renal failure, Renal hypertension, Renal stones.

## **Unit- 4: Cardio-Pulmonary Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Hypertension and Hypotension, Ischemic heart diseases, Varicose veins, Peripheral vascular disease, Autoimmune Arteritis. Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management (rationale for the disease specific yoga protocol, scientific evidence if available, probable healing mechanisms, practices of choice and contra indications). Allergic, autoimmune respiratory conditions -Allergic Rhinitis & Sinusitis, Bronchial Asthma, COPD & Emphysema- Occupational pulmonary disease.

## **Unit-5: Neurological and Psychiatric Disorders**

Headaches: Migraine: Causes, Classification, clinical features, Medical and Yogic management, Tension headache: Causes and its symptoms and Medical and Yogic management; Cerebro vascular accidents: Causes, clinical features, Medical and Yogic management, Epilepsy, pain; Parkinson's disease: Causes, clinical features, Medical and Yogic management

Introduction to psychiatric disorders, classification - Neurosis, Psychosis: Neurosis: Anxiety disorders: Generalized anxiety disorder, Panic Anxiety, Obsessive Compulsive Disorder, Phobias: Medical and Yogic management: Depression: Dysthymia, Major depression, Medical and Yogic management; Psychosis: Schizophrenia, Bipolar affective disorder, Medical and Yogic management

### **TEXT BOOKS**

1. Nagarathna R and Nagendra HR, Yoga therapy for common ailments series, SVYPPublications, 2010
2. Swami Karmananda, Yoga therapy for common diseases, Yoga publication trust, Munger,2001
3. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers

### **REFERENCE BOOKS**

1. Shivanand Saraswati: Yoga Therapy (Hindi & English)
2. Rai, Lajpat: Discovering Human Potential energy: A Physiological Approach to Yoga (Anubhava Rai Publications, 1998)
3. Nagarathna, R and Nagendra, H.R.: Promotion of Positive Health, Swami Vivekananda Yoga Prakashana, Bangalore, 2002
4. Ramesh Bijlani: Back to Health through Yoga, Rupa Publications India Pvt. Ltd, 2011
5. MONIY publications: 10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi,2009
6. Swami SatyanandaSaraswati: Yoga and Cardio Vascular Management, Yoga PublicationTrust, Munger, 2005
7. Nagarathna R and Nagendra H R:Yoga for Arthritis, Back pain, Diabetes, Pregnancy Breathing Practices, Swami Vivekananda Yoga Prakashana, Bangalore, 2000

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-203)**  
**CULTURAL TOURISM RESOURCES**

**Course Objectives:**

1. To give information of countries Tourist places of India importance.
2. To help students to know the background elements of Cultural Tourism Resources.
3. To Discuss the importance of cultural and heritage tourism to national development.
4. To evaluate the culture and heritage of the Region.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Classify the concept of culture and its place in the tourism market.
- CO 2. Illustrate the impact of the cultures of visitors of the Caribbean cultures.
- CO 3. Identify the multiple cultures and its impact on its economic development.
- CO 4. Evaluate the study of folk dances, traditional music accessible in India.

**Unit - I**

Art Heritage of India- Indus valley architecture- Mauryan Architecture-Buddist Architecture, Temple Architecture through the ages-Islamic Architecture.

**Unit - II**

Pre historic paintings- Tribal and Folk-Indian manual painting-Ajanta, Ellora-Early western Chalukya-Pallava-Pandaya-early Chera-Rashtrakuta, Chola- Vijayanagar-Nayak School-Rajasthani- Mughal and Pahadi Schools-Modern paintings.

**Unit- III**

Classical dances and dances styles- (BharathaNatya, Kathakali, Mohiniattam. Kuchipudi, Oddisies, Manipuir) centers of learning and performances Indian folk dances.

**Unit- IV**

Music-Different types of Indian Music- Status of Vocal and instrumental music--various types- new experiments.

**Unit- V**

Handicrafts- Iconometry and Iconography- Metal works-stone ware wood carving-furniture-jewellery - dools- musical instrument

**Suggested Readings:**

- Banerjee, J.N.-The development of Hindu Iconography
- HamayanaKahan-Indian Heritage
- Percy Brawen-Indian Architecture
- Ragini Devi-Dance Dialects of India
- Sarswathi, S- Indian Sculpture
- Sivaramamoorthy –Indian painting
- Sunith V.A.- History of fine art in Indian and Cylon.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-204)**

**ITINERARY PLANNING, MARKETING, TOUR PACKAGING AND  
COSTING**

**Course Objectives:**

1. To develop an understanding of the creation of the inclusive tour product in the leisure travel market.
2. To develop interactive and communication skills.
3. To examine human behavior as it relation to the purchase of tours Learning outcomes upon completion of this course.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. offer wide exposure to the students to handle issues in tourism related businesses professionally.
- CO 2. develop knowledge to be an explorer he will set practical knowledge relating to travel and tour operation.
- CO 3. bridge the gap between theoretical and practical knowledge of the students by adopting tourism significance.
- CO 4. develop socially, ethically responsible business leaders and innovative teaching pedagogy.

**Unit - I**

What is marketing? Marketing Management, Marketing Management Philosophies, Marketing Mix, Marketing challenges into the next century.

**Unit - II**

Concept of Tour-Itinerary, Steps in preparation of tour Itinerary, Effective principles in making tour itinerary, steps in doing tour costing, FIT & GIT.

**Unit- III**

Some itinerary planning of north and west India: Example: Agra, Khjuraho and Varanasi circuit, Naintal, Deharadun, Shimla and Leh Circuit. Jaipur, Jodhpur and Udaipur Circuit.

Selected out bound package tour: Salient feature of outbound package tour, package tour of far east and South East Asian countries like Singapore, Hong Kong, Thailand and Malayasia, package tour of South Asia Countries like Nepal, Srilanka, Bhutan etc.

**Unit- IV**

Factors to consider when setting prices, General pricing approaches, Nature of distribution channels, Channel behavior & organization, Channel Management decisions.

**Unit- V**

The marketing communication mix, Communication process, Steps in developing effective communication, Setting total promotional budget and mix, Advertising, Sales promotion, Public relation, Personal selling.

**Suggested Readings:**

1. Navin Berry: Travel Planner
2. Eric Law: Managing Packaged Tourism
3. Philip Kotler & Gray Armstrong: Principles of Marketing
4. S. Neelamegham: Marketing in India-Cases & Readings
5. Rama Swamy & Mamakumari: Marketing Management- Planning Implementation & Control

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-205)**

**Yoga Practicum**

**Course Objectives:**

1. To Enable the student to have good health.
2. To Practice mental hygiene and possess emotional stability.
3. To Attain higher level of consciousness and integrate moral values.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. get to know more about physical and mental exercise.  
CO 2. witness many changes accordingly with flexibility.  
CO 3. attain higher moral ethics and learning about spiritual path.

**Shatakarma:**Danddhauti,Vastrdhauti, Nauli, Trataka. -5 marks

**Aasana:** -15marks

Dvipada Skandhasana, Purna Bhujangasana, Purna  
Matsyendrasana,Pakshee Aasan, Vrishchik Aasana, Padma  
Mayurasana,  
Purna Vrishchikasana, Takiya Aasana, Padma Sheershasana,  
Karnapidasana, PurnaDhanurasana, Gorakshasana,  
Purna Chakrasana, Purna Shalabhasana, Ek Pada Bakasana,  
Omkar Aasana, Purna Natarajasana  
And all the practices of previous semesters.

**Pranayama –**

10 marks

Udgeeth, Moorchha.

**Dhyana & Viva:** Vijnanamaya & Anandamaya Kosha - 20marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-206)**  
**EDUCATIONAL TOUR**

**Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

**COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

**Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH CE 02)**

**Communicative English (Non Credit)**

**Course Objectives:**

1. To analyze and restate the meaning of a text in English.
2. To demonstrate the skill to write in English without grammatical error.
3. To practice listening effectively to communication in English.
4. To develop the ability to speak English language with the right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Express the viewpoints with confidence in English with right pronunciation.
- CO 2. Outline values and skills gained through effective communication to other disciplines.
- CO 3. Compose articles and compositions in English and discuss about English effectively.

**Communication:**

- i. Recapitulation
- ii. Face to Face Communication
- iii. Telephonic Conversation
- iv. Reading Techniques
- v. Letter writing
- vi. Creative Writing
- vii. Accent
- viii. Stress
- ix. Rhythm
- X. Intonation
- Xi. Seeking Introduction/Introduce oneself
- Xii. Making Enquires
- xiii. Asking Questions and Discussion

## **Literature**

- i. The Kite Maker by Ruskin Bond
- ii. RabindraNath Tagore-Chandalika
- iii. Autumn by Kalidasa(Translated by Arthur W.Ryoler)
- iv. While the Auto Waits O Henry(Adapted for the stage by walter wykes)
- v. The Loss by Anjali Shukla.

## **Suggested Readings**

- The Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead Effectively, by Helio Fred Garcia, 2012
- Crucial Conversations Tools for Talking When Stakes Are High, by Kerry Patterson, Joseph Grenny, Ron McMillan and AlSwitzler, 2011
- Everyone Communicates, Few Connect: What the Most Effective People Do Differently, by John C. Maxwell, 2010
- Messages: The Communication Skills Book, by MatthewMcKay, Martha Davis and Patrick Fanning, 2009
- Communication: The Key to Effective Leadership, by Judith A.Pauley, 2009
- The Art and Science of Communication: Tools for EffectiveCommunication in the Workplace, by P.S. Perkins and Les Brown, 2008

पतञ्जलि विश्वविद्यालय, ( हरिद्वार )

पाठ्यक्रम - B.A. - दर्शन ( ऑनर्स )

वर्ष- 2019-20



# पतञ्जलि विश्वविद्यालय, हरिद्वार

## B.A. Darshan

2019 - 20

### Program Educational Objectives (PEOs)

- **PEO 1** – To inculcate human and moral life values in the student by learning the principles of Indian shaddarshan philosophies
- **PEO 2** – By imparting a proper sense of history, social science and political science to the student, by equipping the student with the glory of the past and the resolve of the golden future, to inculcate humanity in the family, social and political life.
- **PEO 3** – By giving understanding of Shrimadbhagwadgita and Upanishads, to equip the student with right devotion and right work.
- **PEO 4** – To awaken within the student the feeling of oneness, coexistence and universal brotherhood with self-realization by establishing individual and collective harmony by integrating the knowledge of body and universe with the understanding of Yoga science and Yajna science.
- **PEO 5** – To develop proficiency in English language along with national language and mother tongue.

### Program Specific Outcomes (PSOs)

After completing of the program, the students will be able to

- **PSO 1** – Build a divine personality and divine character by attaining the right understanding of the scriptures such as philosophy, political science, social science, Gita Upanishad, etc.
- **PSO 2** – Avoid (retire from) ignorance, mistrust and bad deeds, and gets engaged in good deeds and self-religion by being equipped with good knowledge and goodwill with the theoretical understanding of Vedic Philosophical schools.
- **PSO 3** – Become skilled and proficient in his overall physical, mental, intellectual and spiritual development while being equal in all dialectical situations with the knowledge and faith described in Shrimad Bhagvad Gita.
- **PSO 4** – Realise the Brahmavidya described in Upanishads and strong detachment from worldly attractions and complete loyalty and faith towards Guru and God.
- **PSO 5** – Destroy all the diseases and troubles present in himself and the society with the understanding of the science behind Yoga and Yagya.

**पाठ्यक्रम - B.A. - दर्शन**  
**प्रथम, द्वितीय एवं तृतीय वर्ष**  
**के कुछ सामान्य नियम**

- ❖ परीक्षा में 50% अंक प्राप्त करने वाले छात्र को ही उत्तीर्ण माना जायेगा।
- ❖ प्रस्तुत पाठ्यक्रम तीन वर्ष का होगा।
- ❖ प्रत्येक वर्ष 2 सत्र (Semester) में, 2 बार परीक्षाएं होंगी।
- ❖ प्रत्येक परीक्षा में छः प्रश्न-पत्र होंगे।
- ❖ दो प्रश्नपत्र दर्शनों से सम्बन्धित, तृतीय व चतुर्थ संस्कृत व्याकरण तथा पञ्चम पत्र संस्कृत साहित्य व छठा अंग्रेजी भाषा का होगा।
- ❖ अन्तिम सत्र में पर्यावरण विज्ञान विषय अनिवार्य होगा।
- ❖ सभी प्रश्न-पत्र 100-100 अंक के होंगे।
- ❖ प्रत्येक प्रश्न-पत्र में 30 अंकों की आन्तरिक परीक्षा एवं 70 अंकों की बाह्य परीक्षा होगी।
- ❖ कुल अंक प्रत्येक सत्र में 600, एक वर्ष में 1200 तथा तीनों वर्ष के मिलाकर - 3600 अंक होंगे।
- ❖ परीक्षा का माध्यम English Paper को छोड़कर शेष सभी पत्रों में हिन्दी या संस्कृत होगा।
- ❖ प्रत्येक परीक्षा का निर्धारित समय 3 घण्टे होगा।

**Subject: Modern Indian Language – English**

Note: The subject shall be taught in all the six semesters. In each semester the paper shall be of 100 marks – 70 marks for semester-end examination and 30 marks for sessional examination. The Paper is divided into five units. In semesters V and VI there shall not be any written examination for 70 marks in semester-end examination. There shall be a Practical examination in these semesters in place of theory papers.

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, प्रथम वर्ष**  
**Semester -I**

**Paper – 1 yogadarśana**

**Paper Code - BD-101**

(70+30=100)

**Course Objectives-**

- *samādhipāda-abhyāsa va vairāgya se prāpta hone vālī samādhi kā bodha*
- *sādhanaābhūta-aṣṭāṅgayoga kā jñāna* /
- *vibhūtipāda- dhāraṇā-dhyāna-samādhi evaṃ vibhinna siddhiyoṃ kā bodha* /
- *kaivalyapāda- dharmamedha samādhi tathā kaivalya kā jñāna* /

पातञ्जल योगसूत्र

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *samādhipāda:- abhyāsa evaṃ vairāgya pūrvaka samādhi kā paricaya* /
- *sādhana pāda:- aṣṭāṅga yoga kā paricaya* /
- *vibhūti pāda:- dhāraṇā - dhyāna - samādhi evaṃ vibhinna siddhiyoṃ kā paricaya* /
- *kaivalya pāda:- dharmamegha samādhi kā phala evaṃ kevalya svarūpa kā paricaya* /

**Paper - 2**

**sāṃkhyadarśana Paper Code - BD-102**

(70+30=100)

**Course Objectives-**

- *duḥkhatraya kā svarūpa evaṃ mukti kā jñāna* /
- *śṛṣṭi prakriyā evaṃ mahādādi ke svarūpa kā bodha* /
- *viśeṣoṃ kī utpatti evaṃ sūkṣma śarīra kā jñāna* /
- *buddhisarga evaṃ mukti kā bodha* /

सांख्यसूत्र-(1-3 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *duḥkhatraya kā svarūpa evaṃ mukti paricaya* /
- *suṣṭi prakriyā evaṃ mahadādi kā svarūpa* /
- *viśeṣoṃ kī utpatti evaṃ sūkṣma śarīra paricaya* /
- *buddhisarga evaṃ mukti kī yukti* /

**निर्धारित पाठ्यपुस्तक-** सांख्यदर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

**सहायक ग्रन्थ-** आचार्य आनन्दप्रकाश जी, विद्योदयभाष्य सहित, सांख्यदर्शन (आचार्य उदयवीर शास्त्री जी)

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

## Paper - 3

### *saṃskṛta vyākaraṇa- I* Paper Code - BD-103

(70+30=100)

#### Course Objectives-

- varṇāṅ ke sthānoṃ kā bodha।
- saṃjñā-saṃjñī kā jñāna।
- sāmānya (ac-saṃdhi) kā bodha।
- śabdarūpa evaṃ dhātu-rūpa kā jñāna।

प्रथम इकाई- वर्णोच्चारण शिक्षासूत्राणि,	- 14 अंक
द्वितीय इकाई- संज्ञाप्रकरणम्,	- 14 अंक
तृतीय इकाई- सन्धिप्रकरणम्,	- 14 अंक
चतुर्थ इकाई- शब्दरूप, धातुरूप (1-15 अभ्यास पर्यन्त)	- 14 अंक
पञ्चम इकाई- अनुवाद, संख्याएँ (1-100)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- varṇo ke sthānoṃ kā paricaya।
- saṃjñā - saṃjñī paricaya।
- sāmānya (aca-saṃdhi) paricaya।
- śabda rūpa - dhāturūpa paricaya।

निर्धारित पाठ्यपुस्तक- व्याकरण प्रवेश, प्रारम्भिक रचानुवाद कौमुदी।

प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

## Paper - 4

### *saṃskṛta vyākaraṇa - II* Paper Code - BD-104

(70+30=100)

#### Course Objectives-

- abhyāntara evaṃ bāhya prayatnoṃ kā bodha।
- viśiṣṭa saṃjñāoṃ kā jñāna।
- paribhāṣāoṃ kā sāmānya bodha।
- pūrva-para rūpa saṃdhi kā jñāna।

प्रथम इकाई- शिक्षा प्रकरणम्	- 14 अंक
द्वितीय इकाई- संज्ञाप्रकरणम्	- 14 अंक
तृतीय इकाई- 1-15 परिभाषायें	- 14 अंक
चतुर्थ इकाई- संहिता (सन्धि) प्रकरणम्- अच् सन्धि	- 14 अंक
पञ्चम इकाई- संहिता (सन्धि) प्रकरणम्- हल् सन्धि	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- ābhyāntara evaṃ bāhyāntara prayatnoṃ kā paricaya।

- viśiṣṭa saṃjñāṃ kā paricaya।
- paribhāṣāṃ kā sāmānya jñāna।
- pūrva - para rūpa saṃdhi paricaya।

**निर्धारित पाठ्यपुस्तक-** व्याकरण चन्द्रोदय-पञ्चम खण्ड (श्री चारुदेव शास्त्री)  
 प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
 वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

### Paper - 5

**saṃskṛta sāhitya Paper Code - BD-105**

(70+30=100)

#### Course Objectives-

- upaniṣadoṃ kā sāmānya bodha।
- kenopaniṣad kā sāmānya bodha।
- kaṭhopeniṣad -naciketā ke dvārā pūche gaye tīna praśnoṃ kī jānakārī।
- gītā-dvītīya adhyāya sāmkhya siddhāntoṃ kā jñāna।

प्रथम इकाई- ईशोपनिषद्,	-15 अंक
द्वितीय इकाई- केनोपनिषद्,	-15 अंक
तृतीय इकाई- कठोपनिषद् प्रथम वल्ली	-15 अंक
चतुर्थ इकाई- गीता-द्वितीय अध्याय	-15 अंक
पञ्चम इकाई- गीता-तृतीय अध्याय	-10 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- upaniṣadoṃ kā samānya paricaya।
- kenopaniṣad kā samānya paricaya।
- kaṭhopeniṣad (naciketā ke yama se pūche gae tīna praśno)
- gītā dvītīya adhyāya sāmkhya siddhāntoṃ kā paricaya।

**निर्धारित पाठ्य ग्रन्थ-** उपनिषद्- एकादशोपनिषद् - डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
 प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
 गीता- श्रीमद्भगवद्गीता गीतामृत- स्वामी रामदेव जी, दिव्य प्रकाश, पतंजलि योगपीठ, हरिद्वार  
**सहायक ग्रन्थ** - उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

**Paper - 6**  
**ENGLISH LITERATURE -1**  
**Paper Code - BD-106**

(70+30=100)

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

**1. Reading and Communication Skills:**

- 1.1 An Introduction to the International Phonetic Alphabet for English  
(Phonetic Symbols, Phonemes, Monophthongs, Diphthongs, Accent, Intonation, Stress etc.)
- 1.2 Use of Punctuations in Reading
- 1.3 Theory of Communication
- 1.4 Types and Modes of Communication

**Suggested Reading & Resources for Practice:**

- Dictionaries—
  - Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
  - Oxford English-Hindi Dictionary (Oxford University Press)
  - Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)
- Communication Skills —Sanjay Kumar & Pushpa Lata (Oxford University Press, New Delhi)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055, ISBN: 81-219-0009-3)
- Useful You Tube Channels and Other Helpful Mobile Applications

**2. Listening Skills :**

- 2.1 To Listen to the Good Speakers of English Language Having Good Contents

**Resources for Practice:**

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru
  - BK Shivani

**3. Grammar Skills:**

- 3.1 Parts of Speech
- 3.2 Articles
- 3.3 Vocabulary (Synonyms & Antonyms)
- 3.4 The Sentence—Parts, Types, Forms, Question Tags and Sentence Chart (Based on Structures)
- 3.6 Punctuations
- 3.5 Simple Present, Past and Future Tenses (Without Main Verbs—SHO i.e. *is, am, are, was, were, will/shall be; has/have/had/will/shall have* Type Sentences), Imperative Sentences

### 3.6 Simple Translation (Hindi to English and Vice-Versa)

#### **Suggested Reading & Resources for Practice:**

- Aao Saral Angrezi Seekhein Volume-1—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055)
- How to Write Correct English (Anglo-Hindi) —R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002)
- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **4. Writing Skills:**

##### 4.1 Short and Simple Messages

#### **Suggested Reading & Resources for Practice:**

- Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **5. Speaking Skills:**

##### 5.1 General Conversation & Expressions used in Day-to-Day Life

#### **Suggested Reading & Resources for Practice:**

- Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### **Course Outcomes-**

- Course Specific Outcomes
- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

#### **वैकल्पिक प्रश्न-पत्र**

**विषय :** मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, प्रथम वर्ष**  
**Semester -II**

**Paper - 1**

***sāṃkhyakārikā* Paper Code - BD-201**

(70+30=100)

**Course Objectives-**

- duḥkhatraya kī ātyantika nivṛtti kā bodha।
- vyakta-avyakta evaṃ puruṣa ke paraspara meṃ sādharma -vaidharma kā bodha।
- 50 prakāra ke buddhisarga kā jñāna।
- jīvanamukti ke bāda bhī prārabdha karmāśaya ke bhoga kā jñāna।

सम्पूर्ण सांख्यकारिका

(कण्ठस्थीकरण, कारिकार्थ एवं विषय परिचय)

**Course Outcomes-**

- duḥkha traya kī ātyāntika nivṛtti kā upāya।
- vyakta avyakta evaṃ puruṣa ke paraspara meṃ sādharma - vaidharma kā paricaya।
- 50 prakāra ke baddhi sarga kā paraciya।
- jīvanamukta bhī śarīra dhāraṇa kaise rakhate hai? kā paricaya।

निर्धारित पाठ्यपुस्तक - सांख्यकारिका- गौडपादभाष्य सहित - आचार्य जगन्नाथशास्त्री।

प्रकाशक- 41 यू.ए. बंगलो रोड, जवाहर नगर, दिल्ली-110007

**Paper - 2**

***sāṃkhyadarśana* Paper Code - BD-202**

(70+30=100)

**Course Objectives-**

- vivekajñāna hetu vibhinna ākhyāpikāṃ kā bodha।
- dehātirikta caitanyavāda kā jñāna।
- dharmādharma kī siddhi kā bodha।
- prakṛti kī pravṛtti va puruṣa kī mukti kā jñāna।

सांख्यसूत्र (4-6 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- viveka-jñāna ke sādhana hetu vibhinna ākhyāmāyikāṃ।
- dehātirikta caitanyavāda kā paricaya।
- dharmādharma kī siddhi kā paricaya।
- prakṛti kī pravṛtti evaṃ puruṣa kī nivṛti kā kāraṇa।

निर्धारित पाठ्य ग्रन्थ - सांख्यदर्शनम्, दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - सांख्यदर्शन- आचार्य उदयवीर शास्त्री जी।

प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 3**

***saṃskṛta vyākaraṇa - I* Paper Code - BD-203**

(70+30=100)

### Course Objectives-

- vākyaracanā kā jñāna।
- ac-hala va visarga saṁdhi kā bodha।
- anuvāda kā jñāna।
- kāraka kā sāmānya evaṁ viśeṣa bodha।

प्रथम इकाई- रचनानुवादकौमुदी (अध्याय 1-30 अभ्यास),	- 14 अंक
द्वितीय इकाई- सन्धि प्रकरण,	- 14 अंक
तृतीय इकाई- अनुवाद,	- 14 अंक
चतुर्थ इकाई- शब्दरूप, धातुरूप (1-30 अभ्यास पर्यन्त),	- 14 अंक
पञ्चम इकाई- कारक परिचय,	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक
<b>निर्धारित पाठ्यपुस्तक</b> - रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)	
प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001	

### Course Outcomes-

- vākya racanā kā paricaya।
- ac - hal - visarga saṁdhi kā paricaya।
- anuvāda kā svarūpa।
- kāraka kā sāmānya evaṁ viśeṣa paricaya।

### Paper - 4

#### samśkrta vyākaraṇa – II Paper Code - BD-204

(70+30=100)

### Course Objectives-

- prathamā evaṁ dvitīyā vibhakti kā bodha।
- tṛtīyā, caturthī evaṁ pacamī vibhakti kā jñāna।
- ṣaṣṭhī, saptamī tathā upapada kā bodha।
- samāsa kā sāmānya jñāna।

प्रथम इकाई- विभक्ति प्रकरण (पृष्ठ 1-26 पर्यन्त),	- 14 अंक
द्वितीय इकाई- विभक्ति प्रकरण (पृष्ठ 27-53 पर्यन्त),	- 14 अंक
तृतीय इकाई- विभक्ति प्रकरण (पृष्ठ 54-78 पर्यन्त),	- 14 अंक
चतुर्थ इकाई- समास प्रकरण (अव्ययीभाव समास, तत्पुरुष समास)	- 14 अंक
पञ्चम इकाई- समास प्रकरण (बहुब्रीहि समास, द्वन्द्व समास)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

### Course Outcomes-

- prathamā, dvitīya, vibhakti paricaya।
- tṛtīyā caturthī, pacamī vibhakti paricaya।
- ṣaṣṭhī, saptamī, upapada vibhakti paricaya।
- samāsa kā sāmānya paricaya।

निर्धारित पाठ्यपुस्तक - व्याकरण चन्द्रोदय-प्रथम खण्ड (श्री चारुदेव शास्त्री)

प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

### Paper - 5

**samskr̥ta s̥ahitya Paper Code - BD-205**

(70+30=100)

#### Course Objectives-

- śreya-preya tathā vidyā-avidyā kā bodha।
- ratha evaṃ rathī ke rūpaka se paramātmā kī prāpti kā jñāna।
- iṃdriyoṃ kī barhimukhatā kā bodha tathā yogī iṃdriyoṃ ko rokakara ātmajñāna prāpta karānā hai।
- jīvamukti evaṃ videhamukti kā jñāna ।

प्रथम इकाई- उपनिषद् - कठोपनिषद् (2-3 वल्ली)	-14 अंक
द्वितीय इकाई- उपनिषद् - कठोपनिषद् (तृतीय वल्ली)	-14 अंक
तृतीय इकाई- कठोपनिषद् (चतुर्थ वल्ली)	-14 अंक
चतुर्थ इकाई- कठोपनिषद् (पञ्चम, षष्ठ वल्ली)	-14 अंक
पञ्चम इकाई- गीता - चतुर्थ अध्याय (ज्ञानकर्मसंन्यासयोग), पञ्चम अध्याय (कर्मसंन्यासयोग)-14 अंक	
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	-30 अंक

#### Course Outcomes-

- śreya-preya, vidyā-avidyā kā jñāna।
- ratha evaṃ rathī ke rūpaka se paramātmā prāpti upāya kathana।
- iṃdriyoṃ kī bahirmukhatā kā vivaraṇa।
- jīvanamukti evaṃ videhamukti nirūpaṇa।

निर्धारित पाठ्य ग्रन्थ - उपनिषद्- एकादशोपनिषद् - डॉ. सत्यव्रत सिद्धान्तालंकार जी,

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48

गीता- श्रीमद्भगवद्गीता गीतामृत - स्वामी रामदेव जी, दिव्य प्रकाश, पतंजलि योगपीठ, हरिद्वार

सहायक ग्रन्थ- उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

### Paper - 6

**ENGLISH LITERATURE -2 Paper Code - BD-206**

(70+30=100)

#### Course Objectives-

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading

- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

### 1. Reading and Comprehension Skills :

- 1.1 Transliteration
- 1.2 Word Formation by Adding Prefixes & Suffixes with their Correct Pronunciation
- 1.3 Reading Strategies & Abilities (Intensive, Extensive, Skimming and Scanning etc.)
- 1.4 Comprehension

#### Suggested Reading & Resources for Practice:

- Glossaries—
  - The Practical Approach to Divinity—Pujya Chandra Swami Udasin ji (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
  - Bhagavad-gita As It Is (The Bhaktivedanta Book Trust, Hare Krishna Land, Juhu, Mumbai 400049, India)
- Dictionaries—
  - Oxford Advanced Learner’s Dictionary of Current English (Oxford University Press)
  - Oxford English-Hindi Dictionary (Oxford University Press)
- Communication Skills —Sanjay Kumar & Pushpa Lata (Oxford University Press, New Delhi)
- Effective Strategies for Teaching Reading—Allyn and Bacon
- Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, Ist Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)
- Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)

### 2. Listening Skills:

- 2.1 To Listen to the Good Speakers of English Language Having Good Contents

#### Resources for Practice:

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru
  - BK Shivani

### 3. Grammar Skills:

- 3.1 Non-finites (Infinitives, Gerunds & Participles)
- 3.2 Modals (will, shall, can, could, may, must, might, would, ought to, should, dare, need)—Active Voice
- 3.3 Tenses—Active Voice
- 3.4 Passive Voice of Tenses & Modals
- 3.5 Vocabulary (Synonyms & Antonyms)
- 3.6 One Word Substitution
- 3.7 Translation (Hindi to English and Vice-Versa)

#### Suggested Reading & Resources for Practice:

- Aao Saral Angrezi Seekhein Volume-I & II—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125, ISBN: 978-81-89764-25-8)
- High School English Grammar and Composition — P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055, ISBN: 81-219-0009-3)
- How to Write Correct English (Anglo-Hindi) —R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New

Delhi 110002, ISBN: 978-81-7709-107-6)

- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### 4. Writing Skills:

- 4.1 Short Paragraph/Story Writing
- 4.2 E-mail Writing
- 4.3 Letter & Application Writing
- 4.4 Notice Writing

##### **Suggested Reading & Resources for Practice:**

- Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### 5. Speaking Skills:

- 5.1 Conversations in Various Situations (e.g. Conversation between saint and his disciple, Conversation at Railway Station, Bank, Post Office etc.)
- 5.2 Telephonic Conversation

##### **Suggested Reading & Resources for Practice:**

- Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)
- Useful You Tube Channels and Other Helpful Mobile Applications

#### 6. Literature:

##### **(Prose)**

6.1 The Last Lesson—*Alphonse Daudet*

6.2 A Truly Beautiful Mind—*Albert Einstein*

##### **(Rishis, Mystics and Heroes of Ancient Bharat)**

6.3 Maharishi Patanjali

6.4 Aryabhata

##### **(Poetry)**

6.5 Mercy—*William Shakespeare*

6.6 Where the Mind is Without Fear—*Rabindra Nath Tagore.*

##### **Suggested Reading & Resources for Practice:**

- Rishis, Mystics and Heroes of India, Volume I—Sadhu Mukundcharandas ( *Swaminarayan Asharpith, Shahibaug, Amdavad-4, India*)
- Selected Works of William Shakespeare (*Mundus Media, ISBN 978-1587260179, 1587260174*)
- Rabindra Nath Tagore Selected Poems (*Penguin India, ISBN 0140183663, 978-0140183665*)
- Collected Works of Alphonse Daudet (*Scholar's Choice, ISBN 1297056477, 978-1297056475*)
- Albert Einstein—the story of a genius (*Viva Books, ISBN 9789386243973, 978-9386243973*)

#### **Course Outcomes-**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.

- Ability to speak and write clearly in standard, academic English

### वैकल्पिक प्रश्न-पत्र

विषय : मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, द्वितीय वर्ष**  
**Semester 3**  
**Paper – 1 *nyāya darśana-1***  
**Paper Code - BD-301**

(70+30=100)

#### Course Objectives-

- pramāṇādi ṣoḍśa padārthoṃ kā jñāna।
- saṃśaya evaṃ śabda śakti kā bodha।
- śabda parimāṇa prakaraṇa kā jñāna।
- jāti evaṃ nigraha sthāna kā bodha।

न्याय सूत्र (प्रथम व द्वितीय अध्याय)  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

#### Course Outcomes-

- pramāṇa - prameyādi ṣoḍśa padārtha vivaraṇa।
- saṃśaya evaṃ śabda śakti parīkṣā।
- śabda pariṇāma prakaraṇa।
- jāti evaṃ nigraha sthāna ke svarūpa evaṃ prabheda।

निर्धारित पाठ्यपुस्तक - न्यायदर्शनम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - विद्योदय भाष्य सहित न्यायदर्शन (आचार्य उदयवीर शास्त्री जी)  
प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 2**  
***vaiśeṣika darśana-1* Paper Code - BD-302**

(70+30=100)

#### Course Objectives-

- niḥśreyasa ke sādhanoṃ kā bodha।
  - pañcamahābhūtoṃ kā jñāna।
  - ātmā evaṃ mana kā bodha।
  - nitya evaṃ anitya padārthoṃ kā jñāna।
- वैशेषिक सूत्र- (1-5 अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- niḥśreyas ke sādhanom kā vivaraṇa।
- paṃcamahābhūtoṃ kī parīkṣā।
- ātmā evaṃ mana kā paricaya।
- nitya evaṃ anitya padārtha svarūpa  
निर्धारित पाठ्य ग्रन्थ - वैशेषिक दर्शनम्- दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
सहायक ग्रन्थ - वैशेषिक दर्शन - आचार्य उदयवीर शास्त्री।  
प्रकाशक-विजयकुमार, गोविन्दराम हासानन्द, 4408, नई सड़क, दिल्ली- 110006

**Paper - 3**

**samskr̥ta vyākaraṇa- I Paper Code - BD-303**

(70+30=100)

**Course Objectives-**

- viśeṣa vākya racanā kā bodha।
- samāsa kā viśiṣṭa kā jñāna।
- śabdarūpa evaṃ dhāturūpa kā bodha।
- jaṭīla anuvāda kā jñāna।  
प्रथम इकाई- रचनानुवादकौमुदी (अध्याय 31-60 अभ्यास), - 20 अंक  
द्वितीय इकाई- समास परिचय, - 20 अंक  
तृतीय इकाई- शब्दरूप (31-64 अभ्यास), धातुरूप (36-60 अभ्यास) - 20 अंक  
चतुर्थ इकाई- अनुवाद, - 10 अंक  
पञ्चम इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

**Course Outcomes-**

- viśeṣa vākya racanā paricaya।
- samāsa kā viśiṣṭa vivaraṇa।
- śabdarūpa evaṃ dhātu kā viśeṣa vivaraṇa।
- jaṭīla anuvāda kā paricaya।  
निर्धारित पाठ्यपुस्तक- रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)  
प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

## Paper - 4

### *saṃskṛta vyākaraṇa- II* Paper Code - BD-304

#### Course Objectives-

- pāṇinīya liṅgānuśāsana meṃ strīliṅga sūtreṃ kā bodha।
- pāṇinīya liṅgānuśāsana meṃ pulligādhikāra kā jñāna।
- pāṇinīya liṅgānuśāsana meṃ napuṃsakaliṅgādhikāra kā bodha।
- strīpuṃsādhikāra evaṃ puṃnapuṃsādhikāra kā jñāna।

प्रथम इकाई-	पाणिनीय लिङ्गानुशासनं स्त्रीलिङ्गाधिकारः	- 14 अंक
द्वितीय इकाई-	पाणिनीय लिङ्गानुशासनं पुल्लिङ्गाधिकारः	- 14 अंक
तृतीय इकाई-	पाणिनीय लिङ्गानुशासनं नपुंसकलिङ्गाधिकारः	- 14 अंक
चतुर्थ इकाई-	स्त्रीपुंसाधिकारः एवं पुंनपुंसकाधिकारः	- 14 अंक
पञ्चम इकाई-	रामो हरिःकरी भूभृद् भानुःकर्ता च चन्द्रमाः। तस्थिवान् भगवानात्मा दशैते पुंसि नायकाः॥ (शब्दरूप)	- 14 अंक
षष्ठ इकाई-	शास्त्र स्मरण एवं लेखन	- 30 अंक
<b>निर्धारित पाठ्यपुस्तक-</b> व्याकरण चन्द्रोदय-पञ्चम खण्ड (श्री चारुदेव शास्त्री) प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक, वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।		

#### Course Outcomes-

- pāṇinīya liṅgānuśāsana meṃ strīliṅga sūtra paricaya।
- pāṇinīya liṅgānuśāsana meṃ pulliṅgādhikāra sūtra paricaya।
- pāṇinīya liṅgānuśāsana meṃ napuṃsakaliṅgādhikāra sūtra paricaya।
- strīpuṃsādhikāra evaṃ puṃnapuṃsādhikāra vivaraṇa।

## Paper - 5

### *saṃskṛta sāhitya* Paper Code - BD-305

(70+30=100)

#### Course Objectives-

- kabandhī ādi ṭṭaṣiyom ke chaḥ praśnoṃ kā bodha।
- parā evaṃ aparā vidyā kā jñāna।
- ātmasaṃyamayoga kā bodha।
- bhaktiyoga kā jñāna।

प्रथम इकाई-	प्रश्नोपनिषद्	- 20 अंक
द्वितीय इकाई-	मुण्डकोपनिषद्	- 20 अंक
तृतीय इकाई-	गीता - षष्ठोऽध्याय (आत्मसंयमयोग)	- 20 अंक
चतुर्थ इकाई-	द्वादश अध्याय (भक्तियोग)	- 10 अंक
पञ्चम इकाई-	शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- kabandhī ādi ṛṣiyom ke chaḥ praśnom kā vivaraṇa।
- parā-aparā vidyā kā upadeśa।
- ātmasaṃyamayoga kā paricaya।
- bhaktiyoga kā paricaya।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
 प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
 गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
 सहायक ग्रन्थ- उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

## Paper - 6

### ENGLISH LITERATURE -3 Paper Code - BD-306

(70+30=100)

#### Course Objectives-

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### 1. Reading and Comprehension Skills:

1.1 Words Which Commonly Confuse (Homophones, Homonyms)

1.2 Words that are Pronounced Differently than Spelled (e.g. bouquet, lieutenant, knife, knowledge, doubt, tough etc.)

1.3 Comprehension

#### Suggested Reading & Resources for Practice:

➤ Dictionaries—

- Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
- Oxford English-Hindi Dictionary (Oxford University Press)
- Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)

➤ General English for All Classes—U.R. Mediratta (Jiwan Publishing House Pvt Ltd India, F-227, Mansarover Garden, Main Market, New Delhi-110015)

- Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, 1st Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)
- Useful You Tube Channels and Other Helpful Mobile Applications

## 2. Listening Skills:

- 2.1 To Listen to the Good Speakers of English Language Having Good Contents

### Resources for Practice:

- Useful You Tube Channels and Other Helpful Mobile Applications—
  - Sadhguru
  - BK Shivani

## 3. Grammar Skills:

- 3.1 Modals Perfect—Active Voice & Passive Voice
- 3.2 Clauses
- 3.3 Narration
- 3.4 Syntax
- 3.5 Synthesis
- 3.6 Vocabulary (Synonyms & Antonyms)
- 3.7 One Word Substitution
- 3.8 Translation (Hindi to English and Vice-Versa)

### Suggested Reading & Resources for Practice:

- Aao Saral Angrezi Seekhein Volume-II—Swami Prem Vivekanand Ji, (Seekers Trust, Sadhana Kendra Ashram, Domet, Dehradun, Uttarakhand-248125)
- High School English Grammar and Composition—P.C. Wren & H. Martin (S. Chand & Company Ltd., Ram Nagar, New Delhi-110055)
- How to Write Correct English (Anglo-Hindi)—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002)
- How to Translate into English—R P Sinha (Bharti Bhawan Publication, Ansari Road, Daryaganj, New Delhi 110002— ISBN: 9788177091083, 8177091085)
- Useful You Tube Channels and Other Helpful Mobile Applications

## 4. Writing Skills:

- 4.1 Advertisements
- 4.2 Reports
- 4.3 Articles
- 4.4 Posters

### Suggested Reading & Resources for Practice:

➤ Advanced Writing Skills—D.S. Paul (Goodwill Publishing House, ISBN: 9788172455385, 8172455380)

➤ Useful You Tube Channels and Other Helpful Mobile Applications

## 5. Speaking Skills:

5.1 Monologue/Extempore

5.2 Group Discussion

5.3 Public Speech

### Suggested Reading & Resources for Practice:

➤ Conversation Skills—S.C. Gupta (Arihant Publications Pvt. Ltd., Meerut, ISBN: 978-81-8348-135-9)

➤ Useful You Tube Channels and Other Helpful Mobile Applications

## 6. Literature:

### (Prose)

5.1 The Last Leaf—O. Henry

5.2 The Blue Umbrella—Ruskin Bond

### (Rishis, Mystics and Heroes of Ancient Bharat)

5.3 Panini

5.4 Sushrut

### (Poetry)

5.5 Brahma—*R.W. Emerson*

5.6

### Suggested Reading & Resources for Practice:

➤ Rishis, Mystics and Heroes of India, Volume I—Sadhu Mukundcharandas (Swaminarayan Asharpith, Shahibaug, Amdavad-4, India)

➤ Selected Works of O. Henry

➤ Selected Works of R.W. Emerson

➤ Selected Short Stories by Ruskin Bond

➤ Albert Einstein—the story of a genius (Viva Books, ISBN 9789386243973, 978-9386243973)

## Course Outcomes-

- Course Specific Outcomes
- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

वैकल्पिक प्रश्न-पत्र

विषय : मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

परिणाम-

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, द्वितीय वर्ष**  
**Semester -IV**

**Paper – 1 *nyāya darśana-2***

**Paper Code - BD-401**

(70+30=100)

**Course Objectives-**

- śarīrādi vyatirikta ātmavāda kā bodha।
- śūnyavāda ādi matom kī jānakārī।
- phala, duḥkha evaṃ apavarga kī parīkṣā se unake svarūpa kā bodha।
- tattvajñāna kī prapti ke sādhanom kā jñāna।

न्याय सूत्र- तृतीय, चतुर्थ एवं पञ्चम अध्याय-

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

निर्धारित पाठ्य ग्रन्थ - न्यायदर्शनम्- दिव्य प्रकाशन, दिव्ययोग मंदिर (ट्रस्ट)

सहायक ग्रन्थ - विद्योदयभाष्य सहित न्यायदर्शन (आचार्य आनन्दप्रकाश जी)

**Course Outcomes-**

- śarīravvyatirikta ātmavāda kā paricaya।
- śūnyavāda ādi matom kā nirākaraṇa।
- phala-duḥkha apavarga kī parīkṣā।
- tattvajñāna prāpti ke sādhana।

## Paper - 2

### *vaiśeṣika darśana-2* Paper Code - BD-402

(70+30=100)

#### Course Objectives-

- veda kī pauruṣeyatā kā bodha।
- 24 guṇom kī jānakārī।
- abhāva ke svarūpa evaṃ usake bhedom kā jñāna।
- samavāyikāraṇa, asamvāyī evaṃ nimitta kāraṇa kā bodha।

वैशेषिक सूत्र -(6-10 अध्याय)-

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

#### Course Outcomes-

- veda kī pauruṣeyatā kā paricaya।
- 24 guṇom kī parīkṣā।
- abhāva ke svarūpa evaṃ bheda vivaraṇa।
- samavāyī-asamavāyī nimitta kāraṇa paricaya।

निर्धारित पाठ्य ग्रन्थ - वैशेषिक दर्शनम्- दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - वैशेषिक दर्शन- आचार्य उदयवीर शास्त्री।

## Paper - 3

### *saṃskṛta vyākaraṇa- I* Paper Code - BD-403

(70+30=100)

#### Course Objectives-

- śatādi pratyayom kā bodha।
- 65 dhātuom kā jñāna।
- nibandha ke rūpom kā jñāna।
- alaṃkāra ke rūpāem kā jñāna।

प्रथम इकाई- प्रत्यय परिचय

- 14 अंक

द्वितीय इकाई- 65 धातुएं

- 14 अंक

तृतीय इकाई- पत्रलेखन

- 14 अंक

चतुर्थ इकाई- निबन्धलेखन

- 14 अंक

पञ्चम इकाई- काव्यदीपिका, अष्टमशिखा-I

- 14 अंक

(अलंकार स्वरूपम्-व्यतिरेक अलंकार पर्यन्त)

षष्ठ इकाई- शास्त्र स्मरण एवं लेखन

- 30 अंक

#### Course Outcomes-

- sanādi pratyayom kā vivaraṇa।
- 65 dhātuom kā paricaya।
- nibandha lekhana paricaya।
- alaṃkāra svarūpa paricaya।

निर्धारित पाठ्यपुस्तक - रचनानुवादकौमुदी (डॉ. कपिल द्विवेदी)

प्रकाशक- विश्वविद्यालय प्रकाशन, चौक, वाराणसी-221001

काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)-

प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,

पो. बाक्स नं.- 1129, वाराणसी-221001

**Paper - 4**

**sam̐skṛta vyākaraṇa- II Paper Code - BD-404**

(70+30=100)

**Course Objectives-**

- kāraka sam̐bandha kā sāmānya jñāna।
- kāraka sam̐bandha viśeṣa bodha।
- kāraka sam̐bandha kī vākya racanā kā jñāna।
- kāraka sam̐bandha kā sampūrṇa jñāna।  
प्रथम इकाई- कारकसम्बन्धोद्घोतःकारिका - (1-3) - 14 अंक  
द्वितीय इकाई- कारकसम्बन्धोद्घोतःकारिका - (4-6) - 14 अंक  
तृतीय इकाई- कारकसम्बन्धोद्घोतःकारिका - (7-9) - 14 अंक  
चतुर्थ इकाई- कारकसम्बन्धोद्घोतःकारिका - (10-12) - 14 अंक  
पञ्चम इकाई- कारकसम्बन्धोद्घोतःकारिका - (13-15) - 14 अंक  
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

**Course Outcomes-**

- kāraka sambandha sāmānya paricaya।
- kāraka sambandha viśeṣa paricaya।
- kāraka sambandha vākya racanā paricaya।
- kāraka sambandha sūtra paricaya।

**निर्धारित पाठ्यपुस्तक-** कारकसम्बन्धोद्घोतःकारिका (रभसनन्दि)  
प्रकाशक- राजस्थानी ग्रन्थागार, सोजती गेट, जोधपुर (राजस्थान)।

**Paper - 5**

**sam̐skṛta sāhitya Paper Code - BD-405**

(70+30=100)

**Course Objectives-**

- śikṣāvallī kā bodha।
- sṛṣṭi racanā krama kā jñāna।
- guṇatraya vibhāga yoga kā bodha।
- puruṣottama yoga kā jñāna।  
प्रथम इकाई - तैत्तिरीयोपनिषद्, - 20 अंक  
द्वितीय इकाई - ऐतरेय उपनिषद् - 20 अंक  
तृतीय इकाई - गीता- चतुर्दशोऽध्याय (गुणत्रयविभागयोगः) - 20 अंक  
चतुर्थ इकाई - गीता- पञ्चदशोऽध्याय (पुरुषोत्तमयोग) - 10 अंक  
पञ्चम इकाई - शास्त्र स्मरण एवं लेखन - 30 अंक

**Course Outcomes-**

- śikṣā vallī kā paricaya।
- sṛṣṭi racanā krama kā vivaraṇa।
- guṇatrayavibhāga yoga kā paricaya।
- puruṣottama yoga kā paricaya।

**निर्धारित पाठ्यपुस्तक-** उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
सहायक ग्रन्थ- उपनिषद् रहस्य - पण्डित भीमसेन शर्मा

**Paper - 6**  
**ENGLISH LITERATURE-4 Paper Code - BD-406**

(70+30=100)

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

**1. Reading and Communication Skills:**

- 1.1 Words Which Commonly Confuse (Homographs, Heteronyms)
- 1.2 Word Formation by Adding Prefixes & Suffixes with their Correct Pronunciation
- 1.3 Newspaper and Magazine Reading
- 1.4 Comprehension

**Suggested Reading & Resources for Practice:**

- Dictionaries—
  - Oxford Advanced Learner's Dictionary of Current English (Oxford University Press)
  - Oxford English-Hindi Dictionary (Oxford University Press)
  - Some Useful Mobile Dictionaries Applications (Can be Downloaded from Google Play Store)
- General English for All Classes—U.R. Mediratta (Jiwan Publishing House Pvt Ltd India, F-227, Mansarover Garden, Main Market, New Delhi-110015)
- Proficiency in Reading Comprehension—Ajay Singh (Arihant Publications, Plot No. 181, 1st Floor, Patparganj, Industrial Area, New Delhi-110092. ISBN: 9789312145746)
- Useful You Tube Channels and Other Helpful Mobile Applications

**2. Listening Skills:**

- 2.1 To Listen to the Good Speakers of English Language Having Good Contents

**Resources for Practice:**

- Useful You Tube Channels and Other Helpful Mobile Applications—

- Sadhguru
- BK Shivani

### 3. Grammar Skills:

- 3.1 Transformation
- 3.2 Idioms & Phrasal Verbs
- 3.3 Figures of Speech
- 3.4 Proverbs/Sayings/Famous Quotes
- 3.5 Vocabulary (Synonyms & Antonyms)
- 3.6 One Word Substitution
- 3.7 Translation (Hindi to English and Vice-Versa)

### 4. Speaking Skills:

- 4.1 Anchoring
- 4.2 Telling Good Jokes
- 4.3 Telling Recipies
- 4.4 Singing English Songs

### Course Outcomes-

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

### वैकल्पिक प्रश्न-पत्र

विषय : मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, तृतीय वर्ष**  
**Semester -V**

**Paper - 1**

**vedānta darśana-1 Paper Code - BD-501**

(70+30=100)

**Course Objectives-**

- brahma ke nimitta kāraṇatva kā jñāna।
- jagat-utpatti meṃ prakṛti kā upādāna kāraṇatva kā bodha।
- smṛti-gran̥thoṃ meṃ ubhayakāraṇavāda kā jñāna।
- prāṇoṃ kī utpatti evaṃ svarūpa kā bodha।

वेदान्त सूत्र (प्रथम व द्वितीय अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- brahma ke nimitta kāraṇatva kā vivaraṇa।
- jagattotpatti ke prakṛti kā upādāna kāraṇatva vivaraṇa।
- smṛti gran̥thoṃ meṃ pratipādita ubhayakāraṇavāda kā samanvaya।
- prāṇoṃ kī utpatti evaṃ svarūpa paricaya।

निर्धारित पाठ्यपुस्तक - ब्रह्मसूत्रम्- दिव्य प्रकाशन, पतञ्जलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ- वैदिक मुनिभाष्य

**Paper - 2**

**mīmāṃsā darśana-1 Paper Code - BD-502**

(70+30=100)

**Course Objectives-**

- tarkavāda evaṃ arthavāda prakaraṇa kā bodha।
- dharma ke svarūpa kā jñāna।
- dharma ke sādḥaka pramāṇoṃ kā bodha।
- veda apauruṣeya evaṃ arthavāda prakaraṇa kā jñāna।

मीमांसा सूत्र-

चतुस्सूत्री + 46 सूत्र, (कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- tarkavāda evaṃ arthavāda prakaraṇa paricaya।
- dharma svarūpa kā vivaraṇa।
- dharma ke sādḥaka pramāṇoṃ kā paricaya।
- veda apauruṣeya evaṃ arthavāda prakaraṇa paricaya।

निर्धारित पाठ्यपुस्तक - मीमांसा दर्शन (शाबरभाष्य)

प्रकाशक- युधिष्ठिर मीमांसक, बहालगढ़, जिला- सोनीपत, हरियाणा।

Paper - 3

*saṃskṛta vyākaraṇa - I* Paper Code - BD-503

(70+30=100)

**Course Objectives-**

- akārānta śabdarūparūpa kī siddhi kā bodha।
- ikārānta ukārānta rūpa kī siddhi kā jñāna।
- ṭṭakārānta śabdarūpa kī siddhi kā bodha।
- halanta śabdarūpa kī siddhi kā jñāna।

प्रथम इकाई- नामिक-I (अजन्त शब्दरूप) - 35 अंक

द्वितीय इकाई- काव्यदीपिका, अष्टमशिखा-II, - 35 अंक

(प्रतिवस्तूपमा अलंकार से व्याजस्तुति अलंकार पर्यन्त)

तृतीय इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

**Course Outcomes-**

- akāranta śabdarūpa siddhi vivaraṇa।
- ikāranta-ukāranta ādi vivaraṇa।
- ṛkārānta- ukāranta ādi vivaraṇa।
- halanta- ukāranta ādi vivaraṇa।

निर्धारित पाठ्यपुस्तक - नामिकम् (महर्षि दयानन्द सरस्वतीकृत)

प्रकाशक- वैदिक पुस्तकालय, केसरगंज, अजमेर-305001, राजस्थान।

काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)

प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,

पो. बाक्स नं.- 1129, वाराणसी-221001

Paper - 4

*saṃskṛta vyākaraṇa - II* Paper Code - BD-504

(70+30=100)

**Course Objectives-**

- kṛdanta sāmānya kā bodha।
- kṛdanta siddhi kā jñāna।
- kṛta pratyaṇom kī jānakārī।
- kṛdanta śabdōm kī siddhi kā bodha।

**व्याकरण चन्द्रोदय**

प्रथम इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-1-30) - 14 अंक

द्वितीय इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-31-60) - 14 अंक

तृतीय इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-61-90) - 14 अंक

चतुर्थ इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-91-120) - 14 अंक

पञ्चम इकाई- कृदन्त प्रकरण (पृष्ठ संख्या-215-249) - 14 अंक

षष्ठ इकाई- शास्त्र स्मरण एवं लेखन - 30 अंक

**Course Outcomes-**

- kṛdanta sāmānya kā paricaya।
- kṛdanta siddhi vivaraṇa।

- kṛta pratyayom̐ kā paricaya।
- kṛt pratyayom̐ se banane vāle śabdom̐ kī siddhi।

निर्धारित पाठ्यपुस्तक - व्याकरण चन्द्रोदय-द्वितीय खण्ड (श्री चारुदेव शास्त्री)  
प्रकाशक

### Paper - 5

*samskr̥ta sāhitya* Paper Code - BD-505

(70+30=100)

#### Course Objectives-

- om̐kāra upāsanā kā bodha।
- raikvaṭṭaṣi evaṃ rājā jānaśruti saṃvāda kā jñāna।
- jābāli ṭṭaṣise śvetaketu ke 5 praśnom̐ kā jñāna।
- nārada-sanatkumāra saṃvāda kā bodha।

प्रथम इकाई-	छान्दोग्योपनिषद्-	प्रथम प्रपाठक (1-5 खण्ड), तृतीय प्रपाठक (खण्ड-13,16)	- 15 अंक
द्वितीय इकाई-		तृतीय प्रपाठक (खण्ड-18,19), चतुर्थ प्रपाठक (खण्ड-1-9, 16,17),	- 15 अंक
तृतीय इकाई-		पञ्चम प्रपाठक (खण्ड-1, 11-14), षष्ठ प्रपाठक (1-16 खण्ड)	- 15 अंक
चतुर्थ इकाई-		सप्तम प्रपाठक (1-26 खण्ड), अष्टम प्रपाठक (1-2 खण्ड)	- 15 अंक
पञ्चम इकाई-	गीता-	षोडश अध्याय (दैवासुरसम्पद् विभागयोग)सप्तदश अध्याय (श्रद्धात्रयविभागयोग)	- 10 अंक
षष्ठ इकाई-		शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- om̐kāra upāsanā vivaraṇa।
- rekva ṛṣi evaṃ rājā janaśruti saṃvāda।
- śvetaketu ke jābāli se 5 praśnom̐ kā vivaraṇa।
- nārada ko sanatkumāra kā upadeśa।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,

प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48

गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ- उपनिषद् रहस्य - पण्डित भीमसेन शर्मा।

**ENGLISH LITERATURE-5****Paper Code - BD-506**

(70+30=100)

**Course Objectives-**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

S.NO.	Story Name	English Literature	Page No.
1	My Mother	Prose	1-3
2	PP Acharya Balkrishan ji	Prose	4-20
3	The Doctors Word	Prose	21-24
4	The Spell	Prose	25-32
5	Helen Keller	Prose	33-35
6	Major Dhyan Chand	Prose	36-38
7	Aryabhatt	Prose	39-42
8	The Last Lesson	Prose	43-47

**Course Outcomes-**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**वैकल्पिक प्रश्न-पत्र**

विषय : मनोविज्ञान, भारतीय ज्ञान परम्परा,  
धर्मशास्त्र, प्राचीन भारतीय इतिहास,  
अर्थशास्त्र, राजनीतिशास्त्र।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. - दर्शन, तृतीय वर्ष**  
**Semester -VI**

**Paper - 1**

**vedānta darśana-2 Paper Code - BD-601**

(70+30=100)

**Course Objectives-**

- jīvātmā kā sūkṣmaśarīra dvārā gamanāgamana kā jñāna।
- jīvātmā evaṃ paramātmā ke saṃbandha kā bodha।
- pratikopāsanā ke pratiśedha kā jñāna।
- devayāna mārga kī jānakārī।

वेदान्त सूत्र- (तृतीय व चतुर्थ अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- jīvātmā kā sūkṣma śarīra dvārā gamana-āgamana paricaya।
- jīvātmā evaṃ paramātmā ke madhya saṃbandha vivaraṇa
- pratikopāsanā kā pratiśedha।
- devayāna mārga paricaya।

निर्धारित पाठ्यपुस्तक- ब्रह्मसूत्रम्- दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।

सहायक ग्रन्थ - वैदिक मुनि भाष्य

**Paper - 2**

**nighaṇṭu Paper Code - BD-602**

(70+30=100)

**Course Objectives-**

- ācārya vāvyayiṇī ke ṣaḍbhāva vikāroṃ kā bodha।
- audumbarāmaṇa ke śabda anityatva ke mata ko bodha।
- kutsa ācārya mantra anarthakatva khaṇḍana kā jñāna।
- ācārya gārgya ke upasargom kī sārthakatā kā bodha।

प्रथम इकाई - निघण्टु- प्रथम व द्वितीय अध्याय (कण्ठस्थीकरण)

- 70 अंक

द्वितीय इकाई - निरुक्त-यास्क-भूमिका

- 30 अंक

**Course Outcomes-**

- ācārya vārṣyāyaṇī ke ṣaḍ bhāva vikāra kā paricaya।
- audumbarāyaṇa kā śabda anityatva mata khaṇḍana।
- kutsa ācārya kā mantra anarthakatva khaṇḍana।
- ācārya gārgya kā upasargom kā sārthaka batānā।

निर्धारित पाठ्य ग्रन्थ- निरुक्त (चन्द्रमणि-व्याख्यायुक्त संस्करण)

प्रकाशक-हरयाणा साहित्य संस्थान, गुरुकुल झज्जर (हरयाणा)

**Paper - 3**  
**samṣkr̥ta vyākaraṇa- I Paper Code - BD-603**

(70+30=100)

**Course Objectives-**

- halanta śabda rūpa kā bodha।
- halanta śabdarūpa siddhi kā jñāna।
- arthāpatti ādi alaṃkāroṃ kā bodha।
- vācana evaṃ lekhaṇa kā jñāna।

प्रथम इकाई- नामिक-II (हलन्त शब्दरूप)	- 35 अंक
द्वितीय इकाई- काव्यदीपिका, अष्टमशिखा-III, (प्रतिपमलंकार अलंकार से अर्थापत्ति अलंकार पर्यन्त)	- 35 अंक
तृतीय इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

**Course Outcomes-**

- halanta śabdarūpa paricaya।
- halanta śabdarūpa gūḍ siddhi।
- pratipamalaṃkāra se arthāpatti alaṃkāra paryanta paricaya।
- vācana evaṃ lekhaṇa paricaya।

**निर्धारित पाठ्यपुस्तक-** नामिकम् (महर्षि दयानन्द सरस्वतीकृत)

प्रकाशक- वैदिक पुस्तकालय, केसरगंज, अजमेर-305001, राजस्थान।

काव्यदीपिका (श्रीकान्तिचन्द्रभट्टाचार्यसङ्कलिता)

प्रकाशक- चौखम्बा, सुरभारती प्रकाशन, के. 37/117, गोपालमन्दिर लेन,

पो. बाक्स नं.- 1129, वाराणसी-221001

## Paper - 4

### samṣkṛta vyākaraṇa- II Paper Code - BD-604

(70+30=100)

#### Course Objectives-

- apatyā prakaraṇa kā bodha।
- cāturārthika pratyayom kā jñāna।
- samāsānta pratyayom kā bodha।
- matvarthāya prakaraṇa kā jñāna।

#### व्याकरण चन्द्रोदय- तद्धित प्रकरण

प्रथम इकाई- (पृष्ठ संख्या-251 से 273)	- 14 अंक
द्वितीय इकाई- (पृष्ठ संख्या-274 से 295)	- 14 अंक
तृतीय इकाई- (पृष्ठ संख्या-296 से 317)	- 14 अंक
चतुर्थ इकाई- (पृष्ठ संख्या-318 से 339)	- 14 अंक
पञ्चम इकाई- (पृष्ठ संख्या-340 से 364)	- 14 अंक
षष्ठ इकाई- शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- apatyā prakaraṇa bodha kā vivaraṇa।
- cāturārthika pratyaya paricaya।
- samāsānta paricaya।
- matvarthīya prakaraṇa।

निर्धारित पाठ्यपुस्तक- व्याकरण चन्द्रोदय-द्वितीय खण्ड (श्री चारुदेव शास्त्री)

प्रकाशक- मोतीलाल बनारसीदास, बंगलो रोड, जवाहर नगर, दिल्ली-7, चौक,  
वाराणसी (उ. प्र.) एवं अशोक राजपथ, पटना, बिहार।

## Paper - 5

### samskrta sāhitya Paper Code - BD-605

(70+30=100)

#### Course Objectives-

- prāṇa saṃbandhī devāsura kathā kā bodha।
- ahaṃ brahmāsmi' mahā vākya kā bodha।
- yājñayavalkya- maitreyī saṃvāda kā bodha।
- jagata karaṇatva evaṃ traitavāda tathā śarīra rūpī nagarī kā bodha।

- उद्देश्य- 1. प्राण संबंधी देवासुर कथा का बोध।  
2. 'अहं ब्रह्मास्मि' महा वाक्य का बोध।  
3. याज्ञवल्क्य- मैत्रेयी संवाद का बोध।  
4. जगत करणत्व एवं त्रैतवाद तथा शरीर रूपी नगरी का बोध।

#### बृहदारण्यकोपनिषद्

प्रथम इकाई-	प्रथम अध्याय- प्राण सम्बन्धी देवासुर कथा, अहं ब्रह्मास्मि	- 14 अंक
द्वितीय इकाई-	द्वितीय अध्याय- याज्ञवल्क्य-मैत्रेयी संवाद	- 14 अंक
तृतीय इकाई-	पञ्चम अध्याय- सम्पूर्ण	- 14 अंक
चतुर्थ इकाई-	श्वेताश्वतर- 1-4 अध्याय	- 14 अंक
पञ्चम इकाई-	गीता- अष्टदशोऽध्याय (मोक्षसंन्यासयोग)	- 14 अंक
षष्ठ इकाई-	शास्त्र स्मरण एवं लेखन	- 30 अंक

#### Course Outcomes-

- prāṇa saṃvadhi devāsura kathā vivaraṇa।
- ahaṃ brahmāsmi, vākya svarūpa jñāna।
- yājñavalkya maitreyī saṃvāda।
- nau dvāra rūpī śarīra kā varṇana।

निर्धारित पाठ्यपुस्तक- उपनिषद्- एकादशोपनिषद्- डॉ. सत्यव्रत सिद्धान्तालंकार जी,  
प्रकाशक- विजयकृष्ण लखनपाल-डब्ल्यू-77 ए, ग्रेटर कैलाश-1, नई दिल्ली-48  
गीता- श्रीमद्भगवद्गीता गीतामृत - दिव्य प्रकाशन, पतंजलि योगपीठ, हरिद्वार।  
सहायक ग्रन्थ- उपनिषद् रहस्य- पण्डित भीमसेन शर्मा

## Paper - 6

### ENGLISH LITERATURE-6 Paper Code - BD-606

(70+30=100)

#### Course Objectives-

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

S.NO.	Story Name	English Literature	Page No.
1	The Solitary Reaper	Poetry	1-3
2	Mercy (Poem)	Poetry	4-20
3	Sardar Ballabh-Bhai Patel	Prose	21-24
4	The Last Leaf	Poetry	25-32
5	P.P.Swami RamDev Ji	Prose	33-35
6	The Exemplary Characters of Mahabharat	Need to Added	36-38
7	The Exemplary Characters of Ramayan	Need to Added	39-42

#### Course Outcomes-

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**प्रश्नपत्र- ( 7 ) पर्यावरण विज्ञान**

**Paper Code - BD-607**

(100)

**वैकल्पिक प्रश्न-पत्र**

**विषय :** मनोविज्ञान,  
भारतीय ज्ञान परम्परा,  
धर्मशास्त्र,  
प्राचीन भारतीय इतिहास,  
अर्थशास्त्र,  
राजनीतिशास्त्र।

**UNIVERSITY OF PATANJALI  
HARIDWAR**



**DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS  
UNDER GRADUATE PROGRAM  
Bachelor in Physical Education and Sports  
(B.P.E.S)  
SYLLABUS 2019-20**



**Preamble:**

Physical Education is a form of one of the most effective means of education imparted through physical exercises, recreational activities and sports. It is an integral part of education. Which by mere participation in it gives the outcomes? These outcomes are both instant as well as have strong carry over values in the life. The children as well as the adults and the old enjoy physical activities & sports and gets benefit in the form of stronger muscles and bones, increased energy, coordination level and most importantly the decreased risk of developing chronic diseases. The UNESCO in its General Conference in 1978 was convinced that, everyone should be free to develop and preserve his or her physical, intellectual and moral powers. Physical Education and Sport should consequently be assured and guaranteed for all human beings. Physical Education is now a regular feature in the primary and secondary schools as well as it is gaining popularity in the higher education. The course opted for this is elective as well as the core at the college and the university level in India. The graduate level course in Physical Education and Sports contains subjects varying from foundation of Physical Education to Anatomy, Physiology, Kinesiology, Officiating & coaching, Test & Measurement, Nutrition, Rehabilitation, Psychology, Sports Training, Sports Biomechanics, Methods of Teachings etc. which are aimed to give thorough knowledge and skills to the students. Students perusing physical education courses are fit to join the jobs as physical trainers, coaches, game officials, referees, umpires, curators, gym trainers, lifeguards, personal trainers etc. During their course of education the students also develops the expertise to establish their own business as entrepreneurs in the field of sports, fitness, recreation, adventure sports, Camping, event management etc.

## **Aims of the Bachelor's degree program in Physical Education**

Physical education is not only concerned with the physical outcome that accrue from participation in physical activities but also the development of knowledge and attitude conducive to lifelong learning and participation in motor activities. The overall aim of bachelor's degree program in Physical Education is;

1. The acquisition and refinement of motor skills,
2. To equip the students with the scientific knowledge of body response to various types of exercise.
3. Maintenance of fitness for optimal health and well being,
4. Attainment of knowledge and the growth of positive attitude towards physical activity and sports.

## **Nature and extent of the B.P.E.S degree program**

Physical Education is normally referred to as the science that aims to develop all-inclusive aspects of human personality through physical and sports activities. Physical education practical, Is a Multidisciplinary subject that cannot be studied in seclusion under the scope of one or two subjects. The scope of Physical Education as a subject is very broad. It caters to the need for developing capability of the students on physical, mental and social aspects. Physical education also aims to develop activity as an alternate and prophylactic medicine. The key areas of study within the Physical Education are 'Exercise Physiology, Sports Psychology, Sports Sociology, Sports Management, Sports Journalism, Kinesiology- Biomechanics, Sports Training, Sports Medicine, Kinanthropometry, yoga etc.

Degree program in Physical Education covers topics that overlap with the areas outlined above and that address the interfaces of Physical Education with other subjects such as Physiology, Bio- Chemistry, Physics, Physiotherapy, Psychology, Management, and Sociology along with training pedagogy employed for enhancing the functional status of individuals with varied needs. As a part of the effort, to enhance the employability of graduates of Physical Education, programs include learning experiences that

offer opportunities in various spheres of human.

## **Program Outcomes:**

### **Program Specific Outcomes of Bachelor's Degree Program in Physical Education**

After successful completion of the program, an individual will be able to :

- PO-1** Interpret practical and sports skills required for physical education Development
- PO-2** Able to officiate in the tournaments
- PO-3** Able to understand functioning of various internal organs of the human body.
- PO-4** Appraise food safety and prevention of injury to maintain a safe and health Environment
- PO-5** Able to applicant and interpret ant of applied psychology
- PO-6** Develop long write goals and strategies that the action needed to each year to meet the objectives
- PO-7** To conduct the rehabilitation program for the players and society
- PO-8** Able to take anthropometric measurement in the field of sports and physical Education
- PO-9** Able to help responsible authorities during natural disaster in their Management.

## **Program Specific Objectives**

### **Program Specific Objectives of Bachelor's Degree Program in Physical Education.**

- To enable students to understand history, philosophy, values, ethics and functions of Physical Education profession, and its linkages with other social science& science disciplines;
- To equip students with knowledge on core and ancillary methods of professional work, and its practice base;
- To inculcate in the student's values of enquiry and research; and thereby develop problem solving and decision making abilities;

- To prepare professionals to practice in diverse field settings and also address contemporary issues and concerns such as of games and sports;
- To make learners- the young professionals sensitive to the needs of the people at individuals, group and community levels and to social problems in changing social, cultural and techno-economic context;
- To develop young professionals with good communication skills and quest for a self-motivated life-long learning, focusing on skilling and re-skilling in their respective field of Physical Education.

### **Program Specific Outcomes (PSOs)**

## **Program Specific Outcomes of Bachelor's Degree Program in Physical Education.**

The learning and abilities or skills that a student would have developed by the end of three-year **B.P.E.S. (three Year Degree Program):**

- PSO-1** Remembering and Understanding the concepts, theories, functions, structures, terminology and skills of physical education and sports sciences.
- PSO-2** Applying and demonstrating various concepts, theories, procedures and skills in different sports situations.
- PSO-3** Analyzing and relating the valuable knowledge about the Health, related issues various communicable disease, its preventive measures, Nutrition, its role in weight management and healthy life..
- PSO-4** Evaluating and measuring the important methods used for teaching in Physical Education.
- PSO-5** Creating and designing research problem, training sessions, diet plans.

**I. ELIGIBILITY:**

1. Candidate who has passed +2 Examination with minimum 50% any other examination as equivalent thereto.
2. Preference will be given to those candidates who are sportsman or had participated in Co-curricular Activities.

**II. AGE:**

- i) No student who has crossed the age of 23 years as on 1<sup>st</sup> July of the relevant year will be allowed admission to B.P.E.S. (Bachelor of Physical Education & Sports 3 Years Course) However, the vice-chancellor, University of Patanjali, Haridwar has the power to relax the upper age limit by 6 months on the recommendation of the Head of the Institution.
- ii) The upper age limit can be relaxed by 3 years in the case of SC and ST candidates.

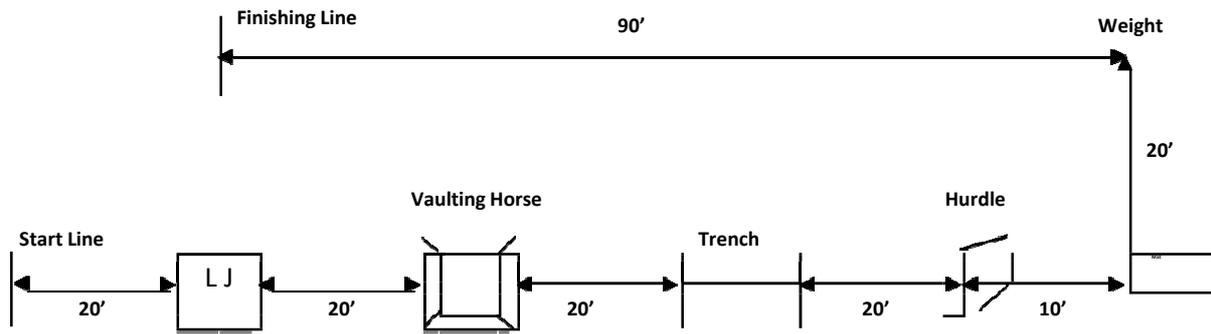
**III. PHYSICAL EFFICIENCY TEST:**

The candidate for admission to B.P.E.S shall have to qualify the physical efficiency test conducted by the concerned college through the Principal. The details of the test are given as under:

ITEM	MEN	WOMEN	
Long Jump	10'	8'	Report against the end line within 35 seconds. Carrying weight equal to half of his/her own body weight in buckets
Vaulting horse	5'	4'	
Trench (7 Times)	5'	4'	
Hurdle	3'	2'	
Mat (1-Front Roll)			

# The candidate will start running from the starting line, cover the distance/obstacles as per the requirements of the chart. In case the candidate does not cover the required distance/obstacles within 35 seconds, he will be declared unfit for qualifying the Physical Efficiency Test. Not more than two chances will be given to clear Physical Efficiency Test.

## DIAGRAM OF PHYSICAL EFFICIENCY TEST



**Note:-** i) Any candidate who has appeared in qualifying examination can appear in the Physical Efficiency Test but his/her candidature for admission will be considered only if the candidate produces the qualifying examination original certificate at the time of personal interview in addition to other Academic/Sports Certificates authenticated by the concerned state agencies/authorities.

ii) The physical efficiency test is only qualifying test for the admission in BPES No marks will be awarded for this test.

### IV. ADMISSION PROCEDURE:

After qualifying physical efficiency test being conducted by concerned by The H.O.D. of The University of Patanjali'

The admission will be made on merit to be determined on the basis of total percentage of marks in qualifying examination + the weight age of the overall achievement in different sports/games given as under:

#### 1. Senior National:

1 <sup>st</sup> Position	50 Points
2 <sup>nd</sup> Position	45 Points
3 <sup>rd</sup> Position	40 Points
Participation	30 Points

#### 2. Junior National/School National:

1 <sup>st</sup> Position	35 Points
2 <sup>nd</sup> Position	30 Points
3 <sup>rd</sup> Position	25 Points
Participation	20 Points

### 3. State Level:

1 <sup>st</sup> Position	25 Points
2 <sup>nd</sup> Position	20 Points
3 <sup>rd</sup> Position	15 Points
Participation	10 Points

### 4. District/School Level:

1 <sup>st</sup> Position	20 Points
2 <sup>nd</sup> Position	15 Points
3 <sup>rd</sup> Position	10 Points
Participation	5 Points

**Note:-** The weightage of achievement in sports/games shall be given to only those sports/games which are approved and recognized by University of Patanjali, Haridwar Sports and Co-Curricular Activity Council.

## V. EXAMINATION

### 1. Duration (Time Frame):

The UG (TDC) program for a regular student shall be for a minimum period of three years and a maximum of five years from the date of admission of the candidate. Each academic year shall comprise of two semesters, viz. Odd and Even semesters. Odd Semesters shall be from June / July to October / November and the Even Semester shall be from November / December to April / May on the dates to be notified by the Controller of Examinations.

### 2. Evaluation

Evaluation system has the following two components:-

- A. **Continuous Comprehensive Assessment (CCA)** accounting for 50% of the final grade that a student gets in a course; and
- B. **End-Semester Examination (ESE)** accounting for the remaining 50% of the final grade that the student gets in a course.

A. Continuous **Comprehensive Assessment (CCA)**: This would have the following components:

(i) **Classroom Attendance** – Each student will have to attend a minimum of 75%

Lectures / Tutorials / Practicals. A student having less than 75% attendance will not be allowed to appear in the End-Semester Examination (ESE).

- γ Provided that those having between 74% and 65% attendance will apply for exemption in a prescribed form accompanied by clear reason(s) for absence to the authorized functionaries.
- γ Provided that those having between 64% and 50% attendance will apply for exemption in a prescribed form accompanied by a Medical Certificate from a Government Hospital.
- γ Provided that exemption from 75% attendance will be given to those participating in prescribed co-curricular activities (e.g. NCC, NSS, Youth Festivals, Sports etc.) to the extent of 25% (making the necessary attendance as 50% in these cases). However, the claim for this exemption should be supported by authenticated certificate from the concerned college authorities.
- γ Provided further that those getting the exemptions, except for those getting exemptions for co-curricular activities, will not be entitled for getting the CCA marks for classroom attendance as given below.

(ii) **Classroom Attendance Incentive**: Those having greater than 75% attendance

(for those participating in Co-curricular activities, 25% will be added to per cent attendance) will be awarded CCA marks as follows:-

≥ 75% but < 80%	1 marks
≥ 80% but <85%	2 marks
≥ 85 but <90%	3 marks
≥ 90% but < 95%	4 marks
≥95%	5 marks

(iii) **Mid-Term (Minor) Tests** – There will be two mid-term tests, first after 48 teaching days (8 weeks) covering the syllabus covered so far, and second after 90 teaching

days (15 weeks) covering the syllabus after the first minor test. **Each of these mid-term tests will be for 15 marks.**

(iv) **Seminar / Assignment / Term Paper** – The remaining 15 marks of the CCA will be awarded on the basis of seminar / assignment / term paper etc. that the course teacher might give to the students.

(v) **End-Semester Examination (ESE)**: The remaining 50% of the final grade of the student in a course will be on the basis of an end-semester examination (ESE) that will be for three hours duration and will be covering the whole syllabus of the course.

γ For the Odd Semesters the ESE will be in the month of October / November and for Even Semesters it will be in the month of April / May.

γ A candidate who does not pass the examination (ESE) in any course(s) (or due to some reason is not able to appear in the ESE, other conditions being fulfilled, and so is considered as 'Fail'), shall be permitted to appear in such failed course(s)' ESE in the subsequent ESE to be held in the following October / November or April / May as the case may be.

γ The registration for the ESE will be done at the time of the enrollment for the course at the beginning of the semester. The fee for the ESE will also be collected at that time as decided by the university from time to time.

γ If a student is not permitted to appear in the ESE due to shortage of attendance beyond the exemption limit (< 50% attendance) shall be deemed to have 'dropped' the course. However such candidate, on his / her written request to be made immediately, can be permitted to redo the missed semester after completing the rest of the programme or whenever the course is offered subsequently. This redoing would mean complete course including CCA and ESE.

The question paper for the ESE will have the following pattern:

γ **Part A**

Compulsory of 18 marks consisting of 10 objective type questions (in MCQ/True False/Fill in the blanks or such type) and four short answer questions of 2 marks each covering whole of the syllabus.

γ **Part B (UNIT I)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part C (UNIT II)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part D (UNIT III)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part E (UNIT IV)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be of long type

**Total marks (A + B + C + D+E)**

**18 + 8 + 8 + 8 + 8 = 50 marks.**

### OUTLINES OF SEMESTER WISE COURSES

SEMESTER-I					
S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course I	Compulsory Course Hindi	CC 101	4	Compulsory – 4  Major Core – 8  Elective – 16  <b>Total = 4 + 8 + 16 = 28</b>
2.	Major Core Course I	Human Anatomy and Physiology-I	BPE 102	4	
3.	Major Core Course II	History of Physical Education and Sports	BPE 103	4	
4.	Elective Course I	(i) Foundation of Yoga	BPE 104	4	
		Or (ii) Sports Journalism	BPE 105		
5.	Elective Ground Course I	Games Practicals : (on any one of the following games) 1. Volleyball 2. Kabaddi 3. Woodball 4. Badminton	BPE-P-106	4	
6.	Elective Ground Course II	General Lessons Practicals : (on any one of the following activities) 1. Marching 2. Calisthenics 3. Dumb-Bell 4. Band & Flute	BPE-P-107	4	
7.	Minor Elective Course I	Yog Practical	BPE-P-108	4	

## SEMESTER-II

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course II	Compulsory Course English	CC 201	4	Compulsory – 4
2.	Major Core Course III	Yoga and Holistic Health	BPE 202	4	Major Core – 8
3.	Major Core Course IV	Introduction to Physical Education	BPE 203	4	
4.	Elective Course II	(i) Health Education and Nutrition Or (ii) Exercise Physiology (Any One)	BPE 204 BPE 205	4	Elective – 16
5.	Elective Ground Course III	Athletics Practicals : (on any one of the following athletic events) 1. Discus Throw 2. Triple Jump 3. Hurdles 4. Middle and Long distance races	BPE-P-206	4	<b>Total = 4 +8 + 16 = 28</b>
6.	Elective Ground Course IV	Athletics Practicals : (on any one of the following athletic events) 1. Sprints 2. Long Jump 3. Shot Put 4. Relay	BPE-P-207	4	
7.	Minor Elective Course II	Yoga Practical	BPE-P-208	4	

SEMESTER-III					
S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course III	Environmental Science (Self Study Mode)	CC 301	4	Compulsory – 4
2.	Major Core Course V	Methods of Teaching Yoga	BPE 302	4	
3.	Major Core Course VI	Methods in Physical Education	BPE 303	4	Major Core – 8
4.	Elective Course III	(i) Fundamentals of Biomechanics in Sports Or (ii) Adapted Physical Education	BPE 304 BPE 305	4	
5.	Elective Ground Course V	Games Practicals : (on any one of the following games) 1. Kho-Kho 2. Basketball 3. Judo 4. Boxing 5. Table Tennis	BPE-P- 306	4	Elective – 16
6.	Elective Ground Course VI	Gymnastics Practicals : (on any one of the following activity) 1. Floor Exercises 2. Vaulting Horse 3. Parallel Bar 4. Balancing	BPE-P- 307	4	
4 7.	Minor Elective Course III	Yoga Practical	BPE-P- 308	4	<b>Total = 4 + 8 + 16 = 28</b>

### SEMESTER-IV

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course VII	Remedial and Massage	BPE 401	4	Major Core – 8  Elective – 20  <b>Total = 8 + 20 = 28</b>
2.	Major Core Course VIII	Organization and Administration of Phy. Edu.	BPE 402	4	
3.	Elective Course IV	(i) Basis of Yoga Therapy Or (ii) Officiating and Coaching (Any One)	BPE 403  BPE 404	4	
4.	Elective Course V	Specialization in the Games : (on any one of the following games) 1. Woodball 2. Kabaddi 3. Judo 4. Badminton	BPE 405 BPE 406 BPE 407 BPE 408	4	
5.	Elective Ground Course VII	General Lessons Practicals : (on any one of the following athletic events) 1. Class Formation 2. Lazium 3. Indian Clubs & Rings 4. Aerobics	BPE-P- 409	4	
6.	Elective Ground Course VIII	Gymnastics Practicals : (on any one of the following athletic events) 1. Uneven Bar (for Women) 2. Rhythmic Gymnastics (for Women) 3. Horizontal Bar (for Men) 4. Pomell Horse (for Men)	BPE-P-410	4	

7.	Minor Elective Course IV	Yoga Practical	BPE-P-411	4
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<b>SEMESTER-V</b>					
<b>S.N.</b>	<b>Course</b>	<b>Course Name</b>	<b>Course Code</b>	<b>Credit</b>	<b>Cumulated Credits Category wise</b>
1.	Major Core Course IX	Kinesiology	BPE 501	4	Major Core – 12
2.	Major Core Course X	Fundamental of Sports Training	BPE 502	4	
3.	Major Core Course XI	Common Sports Injuries Prevention and Cure	BPE 503	4	Elective – 16
4.	Elective Course VI	Specialization in the Game : (on any one of the following games) 1. Kho-Kho 2. Basketball 3. Boxing 4. Taekwondo	BPE 504 BPE 505 BPE 506 BPE 507	4	
5.	Elective Ground Course IX	Games Practical : (on any one of the following games) 1. Cricket 2. Handball 3. Taekwondo 4. Weightlifting 5. Football	BPE-P- 508	4	<b>Total = 12 + 16 = 28</b>
6.	Elective Ground Course X	Athletics Practicals : (on any one of the following athletic events) 1. High Jump 2. Hammer Throw 3. Javelin 4. Competitive walking	BPE-P- 509	4	
7.	Minor Elective Course V	Yoga Practical	BPE-P- 510	4	

**SEMESTER-VI**

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course XII	Fundamental of Computer Application in Physical Education	BPE 601	4	Major Core – 12 Elective – 16 <b>Total = 12 + 16 = 28</b>
2.	Major Core Course XIII	Sports Psychology	BPE 602	4	
3.	Major Core Course XIV	Test, Measurement & Evaluation	BPE 603	4	
4.	Elective Course VII	Specialization in the Games : (on any one of the following games) 1. Yoga 2. Hand Ball 3. Volley Ball 4. Foot Ball	BPE 604 BPE 605 BPE 606 BPE 607	4	
5.	Elective Ground Course XI	Marking & Officiating in any Two Games (Covered in course contents of Semester I-V)	BPE-P- 608	4	
6.	Elective Ground Course XII	Marking & Officiating in Athletics  (i.e. one track event & one field event covered in course contents of Semester I-V)	BPE-P- 609	4	
7.	Minor Elective Course VI	Fundamental of Computer Application in Physical Education Practical	BPE-P- 610	4	

## **COURSE CONTENTS IN DETAIL**

### **SEMESTER-1**

**COURSE CODE:CC101**

**(COMPULSORY COURSE-I)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **HINDI**

#### **COURSE OBJECTIVES:**

1. Understand the aspects of linguistic behavior in Hindi language.
2. Understand the position and content of Hindi language taught at secondary level.
3. Understand the constitutional provisions and historical preview of Hindi language.
4. Understand the role of Hindi in India; in nation and in International arena.
5. Understand and develop linguistic systems and other language skills of Hindi language used in classroom teaching.
6. Understand the use of different strategies used in Hindi teaching.

#### **THE COURSE LEARNING OUTCOMES (COs):**

**CO-1.**The students are able to get an in-depth knowledge of this ancient Indian language and its literature.

**CO-2.**The students must get an overview about the poetry grammar and history of its literature.

### हिंदी भाषा और साहित्य :

- क. आधुनिक भारतीय भाषाओं का उद्भव और विकास
- ख. हिंदी भाषा का परिचय एवं विकास
- ग. हिंदी साहित्य का इतिहास, आदिकाल, मध्यकाल : सामान्य परिचय
- घ. हिंदी साहित्य का इतिहास, आधुनिक काल : सामान्य परिचय

### पाठ्य-विषय -

#### 01. हिन्दी ध्वनियों का स्वरूप -

- क. स्वर और व्यंजन
- ख. संज्ञा, सर्वनाम, क्रिया, विशेषण
- ग. वाक्य संरचना

#### 02. उपसर्ग, प्रत्यय

03. हिन्दी शब्द संरचना - पर्यायवाची, समानार्थक, विलोमार्थक, अनेक शब्दों के स्थान पर एक शब्द समूहार्थक शब्दों के प्रयोग, निकटार्थी शब्दों के सूक्ष्म अर्थ-भेद, समानार्थक शब्दों के भेद।

#### 04. लिंग विधान और कारक प्रयोग -

- क. वर्तनी।
- ख. विरामादि चिन्हों के प्रयोग।
- ग. मुहावरे और लोकोत्तियों तथा उनके रचनात्मक प्रयोग।

05. निबन्ध - निबन्ध की परिभाषा, हिन्दी निबन्ध लेखन महत्व, निबन्ध का अंग, निबन्ध के प्रकार, निबन्ध की विशेषता।

#### सन्दर्भ

- 01. राजभाषा हिंदी - गोविन्ददास - हिन्दी साहित्य सम्मेलन, प्रयाग।
- 02. राष्ट्रभाषा आन्दोलन- गोपाल परशुराम- महाराष्ट्र सभा।
- 03. आधुनिक हिन्दी व्याकरण एवं रचना- वासुदेव नन्दन प्रसाद, पटना।
- 04. हिन्दी शब्द मीमांसा- किशोरी प्रसाद बाजपेयी।
- 05. हिन्दी का सामान्य ज्ञान भाग-2, हरदेव बाहरी, लोकभारती, इलाहाबाद।
- 06. शुद्ध हिन्दी- जगदीश प्रसाद कौशिक।
- 07. अच्छी हिन्दी- रामचन्द्र वर्मा।
- 08. निबन्ध के रूप और तत्व- देवमित्र।
- 09. हिन्दी साहित्य का इतिहास- आचार्य रामचन्द्र शुक्ल।
- 10. सामान्य हिन्दी- अरिहन्त पब्लिकेशन पृथ्वीनाथ सिंह।

**COURSE CODE: BPE102**

**(MAJOR COURSE-I)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **HUMAN ANATOMY AND PHYSIOLOGY-I**

#### **Objectives:-**

- Fundamentals of Anatomy & Physiology gives students in-depth instruction in the organization, structures, and functions of the human body.
- Students will learn the terminology, anatomy and physiology, and pathology of each body system and how they interrelate to maintain homeostasis.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will

be learning and able to do/perform the following.....

**CO-1.**Describing the concept, need and importance of anatomy and physiology in physical education.

**CO-2.**Describing and define the cell, tissue, organs and systems.

**CO-3.**Explaining the circulatory systems and its functions.

**CO-4.**Describing the respiratory systems and its functions.

**CO-5.**Explainingthe digestive systems and its functions.

#### **Unit-I Introduction: (14 Hours)**

1. Meaning and Concept of Anatomy & Physiology.
2. Its importance in the field of physical education and sports.
3. Meaning and definition of cell, tissue, organ and system.
4. Microscopic structure and functions of cell.
5. Properties of living cell.

#### **Unit-II Skeletal System: (16 Hours)**

1. General structure of bone, classification of bones and functions of the bones.
2. Location of various bones in skeleton.
3. Joints, their structure and classification.

#### **Unit-III Muscular System: (15 Hours)**

1. Meaning of muscle.
2. Various types of muscle, their structure and functions.

3. Microscopic structure of skeletal muscle.
4. Mechanism of muscular contraction of skeletal muscle.

**Unit-IV      Cardiovascular System:    (15 Hours)**

1. Heart, its location, structure and function.
2. Major blood vessels of the body.
3. Mechanism of blood circulation.
4. Systemic, pulmonary and coronary circulatory.
5. Blood pressure, cardiac output, cardiac cycle, heart rate, pulse rate and athletes heart.

**Reference Books:**

1. Pearce E., "Anatomy and Physiology for Nurses." Delhi Oxford University Press 1989.
2. Parrot, J.W. , "Anatomy for the students and teachers of Physical Education." London Edward Arnold Ltd. 1973.
3. Miller, A. and Leavel L.C., "Kimber-Grey-Stack pole's, Anatomy and Physiology." Amerind Publishing Co. Pvt. Ltd. New Delhi, Bombay, Calcutta, new York 1973.
4. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers Ludhiana Second revised addition 2008.
5. Grays Anatomy.
6. Characids, B.D., " Handbook of General Anatomy." CAS Publication, New Delhi.
7. Fox, E.L, "Physiological Basis of Physical Education and Athletic" Brown Publication, 1989.

## SEMESTER-I

COURSE CODE:BPE103

(MAJOR COURSE-II)

Credit:

4Marks:(ESE=70+CCA=30)=100

### HISTORY OF PHYSICAL EDUCATION AND SPORTS

#### Learning Objectives

- -This aims to develop the students into better-rounded, balanced individuals.
- -Including martial arts and self-defense.
- -Not only do these activities capture the interest of the students
- They also promote their safety and well-being.
- -This is a practical improvement on the usual Physical Education program.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Describing the meaning, definition, need, scope, and historical perspective of physical education.

**CO-2.** Describe and define the aims and objectives of physical education.

**CO-3.** Explaining the development of physical education at the global level.

**CO-4.** Interpreting the philosophical aspect of physical education.

**CO-5.** Explaining the sports institution in India before and after independence.

**CO-6.** Classifying the different committees and schemes in the field of physical education.

**CO-7.** Discussing the different awards and honors.

#### **Unit-I History of Physical Education in India in Ancient Period: (13 Hours)**

1. Physical education in Indus Valley civilization (3250BC – 2500 BC).
2. Physical Education in Vedic Period (2500 BC – 600 BC).
3. Physical Education in Early Hindu Period (600 BC – 320 AD).
4. Physical Education in Later Hindu Period (320 AD – 1000 AD).
5. Physical Education in Medieval Period (100 AD – 1757 AD).

#### **Unit-II History of Physical Education in Pre & Post Independence Era in India:**

(15 Hours)

1. Physical Education during British Period (till 1947).
2. Physical Education in India after independence.

3. Kothari Commission and its recommendation.
4. National policy on Education (1986).
5. Role of the following organization in promoting Physical Education and Sports:
  - a. Y.M.C.A.
  - b. S.N.I.P.E.S.
  - c. L.N.I.P.E.
  - d. N.S.N.I.S.
  - e. S.A.I.

**Unit-III Historical Perspective of Physical Education World Wide: (15 Hours)**

1. Physical Education in Rome.
2. Physical Education in Germany.
3. Physical Education in USA.
4. Physical Education IN English.
5. Physical Education in Japan.
6. Physical Education in China.

#### **Unit-IV Historical Perspective of Physical Education with special reference to Greece**

(17 Hours)

1. Physical Education in Athens.
2. Ancient Olympic Movement.
3. Modern Olympic Games.
  - a. Olympic Motto
  - b. Governing body
  - c. Olympic torch and flag
  - d. Opening ceremony
  - e. Awards
  - f. Closing ceremony

#### **Reference Books:**

1. Kamlesh M.L., "Physical Education, Facts and foundations" Faridabad P.B. Publications.
2. Barrow Harold M., "Man and movements principles of Physical Education" 1978.
3. Ravanes R.S., "Foundation of Physical Education" Houghton Millin Co. Boston USA(1978)
4. Krishana Murthy V. and Paramesara Ram, N., "Educational Dimensions of Physical Education", 2<sup>nd</sup> Revised edition, Print India, New Delhi 1990.
5. Singh Ajmer et.al., "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised Addition 2008.
6. Deleh V.A., "World History of Physical Education", prentice Hall Inc.
7. HallInc.

## SEMESTER-I

COURSECODE:BPE-104

(ELECTIVECOURSE-I)

Credit: 4Marks:(ESE=70+CCA=30)=100

### Foundation of Yoga

**Objectives:** Following the completion of this course, students shall be able to..

- Understand the basic principles of Teaching Methods.
- Have knowledge of different aspects of teaching methods used in Yoga.

#### **Learning outcomes :**

**CO-1** Demonstrate basic skills associated with yoga and Pilates.

**CO-2** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3** Apply the knowledge of basic choreography, and effective group management.

**CO-4** Demonstrate the ability to create and present various yoga activities.

**Unit-I: General introduction to yoga [15Hrs.]**

1. Brief about origin of Yoga: Psychological aspects and Mythological concepts;
2. History and Development of Yoga: prior to the Vedic period, Vedic period, Medieval period, modern era;
3. Etymology and Definitions of Yoga, Aim and Objectives of Yoga,
4. Misconceptions of Yoga; Brief about Streams of Yoga; Principles of Yoga, Importance of Yoga.

**Unit - II: General introduction to Indian philosophy [15Hrs.]**

1. Philosophy: meaning, definitions and scope;
2. Indian Philosophy: Salient features, Branches (Astika and Nastika Darshanas),
3. Distinction from Religion and Science,
4. Brief introduction to Prasthanatrayee and Purushartha Chatushtaya;
5. Relationship between Yoga and Indian Philosophy.

**Unit - III: Brief about Yoga in texts – I [15Hrs.]**

1. Brief to Upanishads and Yoga in Principal Upanishads,
2. Yoga in Yogopanishad; Yogic perspective of Epics: Ramayana, Adhyatma Ramayana and Mahabharata;
3. Yogic perspective: Bhagavad Gita, Yoga Vasishtha, Narada Bhakti Sutras.

**Unit-IV: Brief about Yoga in texts – II [15 Hrs.]**

1. Yogic perspective: Smritis, Puranas with emphasis to Bhagavat Purana;
2. Yogic perspective to Shad-darshanas;
3. Emphasis to Vedantic approach of Shankara, Ramanuja, Madhva and Vallabha;
4. Brief: Agamas, Tantras, Shaiva Siddhanta.

**TEXT BOOKS**

1. Lal Basant Kumar : Contemporary Indian Philosophy, Motilal Banarsidas Publishers Pvt. Ltd, Delhi, 2013
2. Dasgupta S. N : History of Indian Philosophy, Motilal Banarsidas, Delhi, 2012
3. Singh S. P : History of Yoga, PHISPC, Centre for Studies in Civilization Ist, 2010
4. Singh S. P & Yogi Mukesh: Foundation of Yoga, Standard Publication, New Delhi, 2010.

## SEMESTER 1

COURSE CODE: BPE105

(ELECTIVE COURSE-I)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPORTS JOURNALISM

#### Objective:-

- Basically, the primary objective of sports journalism is not to know about the environment of games or sports, but to present the facts. A sports enthusiast's first concern is the statistics related to a sporting event.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Describing the Meaning and Definition of Journalism.

**CO-2.** Explaining the role of Sports News agencies.

**CO-3.** Determining the Concept of Sports Bulletin.

**CO-4.** Comparing the General news reporting and sports reporting.

**CO-5.** Editorializing and evaluating of Reported News.

#### Unit-I (15 Hours)

1. Introduction to Mass Media.
2. Purpose of Mass Media for the propagation/promotion of sports.
3. Growth of sports communication.
4. Coverage of sports:
  - a. In daily newspapers.
  - b. General magazines and sports magazines.
  - c. Radio and Television.

#### Unit-II (12 Hours)

1. Space allocation for sports sections in a daily news paper.
2. News agency.
3. Magazine office.
4. Sports personalities, their pictures and thumbnail sketches in news papers.

#### Unit-III (17 Hours)

1. Journalistic techniques:
  - a. News writing and news story.
  - b. Reporting various schemes.

- c. Editing and headings of news.
  - d. Picture section and editing sports page makeup
- 2. Characteristics of News
- 3. Writing a sports features:
  - a. Types of sports features.
  - b. Exclusive picture feature

**Unit-IV** (16 Hours)

1. Ethics of sports writing.
2. Sportsman's gratuities.
3. Amateurism V/s Professionalism.
4. Invasion of private life.
5. Sports for charity.
6. Writing a weekly or fortnightly common.
7. Writing sports editorials.

**Reference Books:**

1. Health. Jr. Gelfand: How to cover, write and edit sports, Ames Lowe USA, 1951
2. Woodward, S: Sports page Simon a and Schuster, New York, 1949.
3. Juries, John R: This writing game, New York, Columbia University, Press, 1969.
4. "Sports" by Bhola Singh Thakur (pp 1124) in the Indain reports Guide by Richard Critchfield, Allied Pacific Pvt. Ltd. Bombay, 1962.
5. Nea, Robest," News Gathering and new writing, New York, Prentice Hall, inc., 1949.



**SEMESTER I**  
**PRACTICAL**  
**GAMES LESSON**

**COURSE CODE: BPE-P-106**

**(ELECTIVE GROUND COURSE-I)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Change management. ...
- Problem solving. ...
- Morale building. ...

**The Course learning outcomes :**

- Experiencing the General & Specific warming up for games.
- Acquiring the Basic skills of games
- Demonstration and application of various techniques of games Warming up: - General & Specific
- Specific conditioning program for games
- Basic skills- offensive & defensive.

Lesson on any one of the following games:-

1. VolleyBall
2. Kabaddi
3. Hockey
4. Badminton

**SEMESTER-I**  
**PRACTICAL**  
**GENERAL LESSONS PRACTICAL**

**(ELECTIVE GROUND COURSE-II)**

**COURSE CODE: BPE-P-107**

**Credit:4**

**Marks=100**

(120Hours)

Objectives:-

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Communication. ...
- Change management. ...
- Problem solving. ...
- Flexible thinking. ...

Morale building

**Course learning outcomes :**

**CO-1.** Define the meaning and general principles of Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

General Lessons Practical:

(on any one of the following activities)

1. Marching
2. Calisthenics
3. Dumb-Bell
4. Band&Flute

## **SEMESTER I**

### **PRACTICAL**

### **YOGA**

### **PRACTICAL**

**COURSE CODE: BPE-P-0107**

**(MINOR ELECTIVE COURSE-I)**

**Credit:4**

**Marks=100**

**(120Hours)**

#### **Objectives:-**

- 1) **To enable the student to have good health.**
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

### **Course learning outcomes :**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Understand and apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

### **ASANA**

Siddhasana , Vajrasana , Veerasana , Udarakarshanasana , Janushirasana , Gomukhasana , Ushtrasana , Naukasana , Katichraasana , Tadasana , Vrikshasana , Garudasana , Padhastasana , Ardhhdhanurasana , Marjari asana , Ardhshalabhasana , Bhujangasana , Shavasana , Samkonasana , Setubandasana , Shashankasana , Mandukasana , Ardhhallasana, Ardhpadmasana

### **PRANAYAMA**

Deep Breath Inhale – Exhale  
Diaphragm Breathing  
Nadi Shodhan Pranayama  
Suryabhedhi Pranayam

## **SATKARMA**

Jal Neti  
Rubber Neti

## **MUDHRA AND BANDH**

Gyan Mudra  
Viparita Karani Mudra

## **DHYAN**



## SEMESTER-II

**COURSE CODE:CC201**

**(COMPULSORY COURSE-II)**

**Credit:4(T+P)**

**Marks:(ESE=70+CCA=30)=100**

## ENGLISH

### Objectives:

- Improve pronunciation and Use English Grammar worksheets and exercises to improve grammatical knowledge for competitive exams
- Enhance reading, understanding and writing abilities in English
- Develop the ability to read, understand and improve English vocabulary
- Demonstrate conversational skills, Asking Questions

### The Course Learning Outcomes (COs):

**CO-1.** Improve and widen employment prospects.

**CO-2.** Explore the world with confidence

**CO-3.** Increase cognitive ability.

**CO-4.** Access world-class education system and establishment.

**Method of Teaching & Assessment-** Videos, Audio clippings, discussion, written and oral exercises

### UNIT-I VOCABULARY BUILDING (12 Hours)

1. Vocabulary Building / Synonyms / Antonyms
2. Syntax (Spell Correction & Sentence Correction)
3. Formation of Words

### UNIT-II READING COMPREHENSION (12 Hours)

#### Unseen Long Passage

The total length of the passage will be between 800 - 900 words. The passage will include following questions:

- 5 - MCQs
- 9 - Short answer type questions

#### Unseen Short Passage

A second passage of 400-500 words. There will be two Descriptive questions

### UNIT-III WRITING (16 Hours)

1. Paragraphs / Essays / Composition
2. Application Letter / Personal Letter

3. Make a Notice, Report, Newspaper Article, Project Front Page Making

**UNIT-IV      SPEAKING & PRESENTATION SKILLS      (20 Hours)**

1. How to improve Speaking Skills
2. Different types of Speaking
3. Different types of Speech
4. Spoken English in British Style
5. Spoken English in American Style
6. Types of Presentation
7. How to improve Presentation Skills
8. How to prepare presentation
9. Prepare Presentation any one topic of Yoga & Sports

## References

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1. Wren, P.C. & Martin, H.; (Edition 2015). High School English Grammar & Composition; S. Chand Publishing.
2. Wren, P.C. & Martin, H.& Prasada Rao, N.D.V. ; (Edition 2015). High School English Grammar & Composition; Blackie.
3. Eastwood, John (2003). Oxford Guide to English Grammar; Oxford.
4. Biber, Douglas ; Finegan, Edward ; Johansson, Stig ; Conrad, Susan ; Leech, Geoffrey (1999) Longman Grammar Spoken & Written English Cased; Longman.
5. Aarts, Bas (2011) Oxford Modern English Grammar; OUP Oxford
6. Orion, Gertrude (2<sup>nd</sup> Edition 1999) Pronouncing American English: Sounds, Stress, and Intonation; Heinle & Heinle Pub.
7. Carter, Ronald & McCarthy, Michael (2006) Cambridge Grammar of English: A Comprehensive Guide; Cambridge University Press.
8. Huddleston, Rodney & K. Pullum ,Geoffrey (2002) The Cambridge Grammar of the English Language; Cambridge University Press.
9. Dictionaries, Oxford (1884) Oxford English Dictionary; Oxford University Press, United Kingdom.
10. Simpson, John & Weiner, Edmund (2<sup>nd</sup> Edition 1989) The Oxford English Dictionary (Oxford English Dictionary (20 Vols.)); Clarendon Press.
11. Stevenson, Angus (3<sup>rd</sup> Revised ed. Edition 2010) Oxford Dictionary of English; Oxford University Press, USA.
12. Dictionaries (7<sup>th</sup> Edition 2011 ) Oxford English Mini Dictionary - Indian Edition; Oxford.

## SEMESTER-II

**COURSE CODE: BPE202**

**(MAJOR COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **YOGA AND HOLISTIC HEALTH**

#### **Objective:-**

- **Yoga is a holistic science that embodies the union of our physical, mental and spiritual health. It can help us achieve mental equilibrium, as well as providing numerous health benefits for our body.**
- **Yoga as a practice encourages a lifestyle that focuses on balance, harmony, positive thinking and health**

#### **The Course learning outcomes (COs):**

**CO-1.**Approach of holistic health in physical education.

**CO-2.** Five components of holistic health.

**CO-3.** Principles of holistic health.

**CO-4.** To promote health living and to facilitate prevention early detection and management of disease.

**CO-5.**Explore transfer and career opportunity in health related profession.

**Unit-I: Concept of Body, Health and Disease [15 Hrs.]**

1. Definition & Importance of Health According to WHO.
2. Dimension of Health: Physical, Mental, Social and Spiritual.
3. Concept of Body, Health & Disease in Yoga-Yogic concept of Body from Taittiriya Upanishad.
4. Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi according Yoga Vasistha and remedial measures; Holistic health care through Yoga.
5. Concept of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing.
6. Concept of Pancha-koshas & Shat-chakra and their role in Health & Healing.

**Unit - II: Causes of Ill Health & Remedial Measures as per Patanjali [15 Hrs.]**

1. Potential causes of Ill-health: Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Dukkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva;
2. Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi).

**Unit - III: Yogic Principles & Practices of Healthy Living - I [15 Hrs.]**

1. Dietary regulation according to Hatha yoga and Bhagavadgitha;
2. shatkriyas and tatva shuddhi;
3. Asana for mind body and spirit;
4. Practice for pranamaya kosha– pranayama;
5. Definition of Mental Health & Mental Hygiene & Total Health ;
6. Indian approach to personality and personality integration Psycho-Social Implications of yoga;
7. Adjustment Personal and interpersonal adjustment through yogic methods Niyamas & Yamas.

**Unit - IV: Yogic Principles & Practices of Healthy Living - II [15 Hrs.]**

1. Attitude change towards yoga through individualized counselling.
2. Psychological & yogic method Tackling ill effects of conflict and Frustration;
3. Yogic methods Yoga Psychology for Adjustment: Psychological, philosophical and yogic counselling;
4. the remedial measures; Action in relaxation-the secret of Karma Yoga;
5. Unattached action, not to the fruits of action, equanimity in success and failure.

**TEXT BOOK**

1. Ghosh. Shyam : The Original Yoga Munshiram Manoharlal, New Delhi. 1999)
2. Jnanananda Bharati : Essence of Yoga Vasishta Pub: Sanata Books, Chennai
3. Hatha Ratnavali: Tirumala Tirupathi Devasthanam, Andhra Pradesh.

## SEMESTER-II

COURSE CODE: BPE203

(MAJOR COURSE-IV)

Credit:4

Marks:(ESE=70+CCA=30)=100

### INTRODUCTION TO PHYSICAL EDUCATION

#### Objective:-

Develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.

#### The Course Learning outcomes (COs):

**CO-1.** The pass out would be able to compare the relationship between general education and

Physical education.

**CO-2.** He/she would be able to identify and relate with the History of Physical Education.

**CO-3.** He/she would be able to comprehend the relationship between Philosophy, Education and

Physical Education.

**CO-4.** He/she would able to identify the works of Philosophers of Education and Physical

Education.

**CO-5.** He /she would know recent developments and academic foundation of Physical Education.

#### Unit-I Introduction: (15 Hours)

1. Definition, aim and objectives of Physical Education.
2. Principles of Physical Education.
3. Relationship of Physical Education with general education.
4. Misconception, regarding Physical Education.
5. Personality development of an individual.

#### Unit-II Philosophical aspect of Physical Education (17 Hours)

1. Meaning of Philosophy.
2. Different philosophies applied to Physical Education:
  - a. Idealism.
  - b. Pragmatism.
  - c. Realism.
  - d. Naturalism.

- e. Existentialism.
3. Need and importance of different philosophies in modern Physical Education program.

**Unit-III      Biological Concept of Physical Education:**                      (14 Hours)

- 1. Biological principles of Physical Education.
  - a. Growth and development.
  - b. Heredity and environment.
  - c. Somatic types.
  - d. Sex differences.
  - e. Use, disuse and over use.
  - f. Chronological, physiological and anatomical ages

**Unit-IV      Emerging Trends in Physical Education      (14 Hours)**

1. Career opportunities in Physical Education and Sports:
  - a. As a Physical Education teacher.
  - b. Coach / trainee.
  - c. Gym instructor.
  - d. Physiotherapist.
  - e. Psychologist.
  - f. Dietitian.
  - g. Sports administrator/manager
  - h. Rehabilitator
2. Adventure Sports
3. Water Sports
4. Worldwide therapeutic acceptance of Yoga
5. Fast growing professional in sports

**Reference Books:**

1. Kamlesh M.L., “Physical Education, Facts and foundations”, Faridabad P.B. Publications.
2. Barrow Harold M., “Man and movements principles of Physical Education”, 1978.
3. Ravanes R.S., “Foundation of Physical Education”, Houghton Millin Co. Boston USA(1978)
4. Krishana Murthy V. and Paramesara Ram, N. “Educational Dimensions of Physical Education”, 2<sup>nd</sup> Revised edition, Print India, New Delhi 1990.
5. Singh Ajmer et.al., “Essentials of Physical Education”, Kalyani Publishers LudhianaSecond revised Addition 2008.
6. Deleh V.A., “World History of Physical Education”, prentice Hall Inc.

## SEMESTER-II

**COURSECODE: BPE204**

**(ELECTIVE COURSE-II)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### HEALTH EDUCATION AND NUTRITION

#### Objective:-

- They are to promote health and reduce the risk of developing chronic diseases by encouraging Americans to consume healthful diets and to achieve and maintain healthy body weights. Nutrition criteria are reflective of a solid scientific foundation for health and weight management

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Defining the concepts and principles of health education.

**CO-2.** Explaining the meaning, definition, and importance of health education.

**CO-3.**Classifying hygiene and its types.

**CO-4.** Writing about the role and uses of pollution.

**CO-5.** Discussing the types of natural resources.

#### **Unit-I Introduction: (12 Hours)**

1. Concept of health, meaning, definition and scope of health education.
2. Objective of health education.
3. Principles of health education.
4. Need and significance of health education.

#### **Unit-II Personal health and Hygiene: (17 Hours)**

1. Meaning of personal hygiene.
2. Personal care of:
  - a. Skin.
  - b. Hair.
  - c. Ear.
  - d. Eyes.
  - e. Nose.
  - f. Teeth.
  - g. Feet.



- c. Centers of communicable disease.

**3. Health instructions related to:**

- a. Personal care.
- b. Communicable disease.
- c. Nutrition.
- d. Healthful living.

**4. Nutrition:**

- a. Balanced diet and its elements:
  - i. Carbohydrates, proteins, fats, vitamins, minerals, salts and water.
- b. Daily energy/calorie requirements of healthy person.

**Unit-IV Communicable Disease: (15 Hours)**

1. Meaning and definition of communicable disease.
2. Mode of transmission, prevention and cure and sanitation of communicable disease.
3. Common Communicable Diseases:
  - a. Influenza.
  - b. Malaria.
  - c. Small pox.
  - d. Tuberculosis.
  - e. Typhoid.
  - f. Cholera.
  - g. Measles.

**Reference Books**

1. Klander H.F., "School Health Education", The Mac Million Co. 1962.
2. Pande P.K. and Gango Padhyay S.R., "Health Education for School Children."
3. S. Dheer and Others, "Introduction to Health Education, AP Publishers 9, Books Market Chowk Adda, Tande, Jalandhar 1989.
4. Nebmir. A. "The school Health Education, New York: Harper and Brothers.
5. Park, JE and park, K., "Text Books of Preventive and Social medicine" Tenth Edition, Banarsi Dass Bhanot, Habalpur 1985.



## SEMESTER-II

COURSE CODE:BPE205

(ELECTIVECOURSE-II)

Credit:4

Marks:(ESE=70+CCA=30)=100

### EXERCISEPHYSIOLOGY

#### Objective:-

- Exercise physiology serves to **empower individuals to understand how to safely move their body, how frequently they should exercise and how to measure their outcomes to see the improvement over time.**

#### The Course Learning Outcomes (COs):

**CO-1.** He/she would be able to Relate and interpret the role of exercise on body systems and its relation

to well being, through literature reviews and physical conditioning exercises.

**CO-2.** Adapt the art to apply the knowledge of physiology in physical activity classes at school level.

Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

#### Unit-I (14 Hours)

1. Meaning and definition of exercise physiology
2. Need and importance of exercise physiology in the field of Physical Education.
3. Energy sources
  - a. Definition of energy
  - b. Adenocine triphosphete (ATP)
  - c. Creative phosphate
  - d. Metabolism

#### Unit-II (17 Hours)

1. Structure of skeletal muscle
2. Sliding filament theory of skeletal muscle
3. Effect of exercises of muscular system
4. Fatigue

5. Symptoms of fatigue
6. Factors responsible for fatigue

**Unit-III** (14 Hours)

1. Effect of exercise on circulatory system
2. Effect of exercise on respiratory system
3. Effect of exercise on digestive system
4. Cardiac output, heart rate, vital capacity, second wind, oxygen debt, dead space & tidal volume.

**Unit-IV** (15 Hours)

**1. Balance between heat loss and heat production**

- a. Radiation
- b. Convection
- c. Evaporation
- d. Conduction

**2. Measurement of body temperature**

- a. Effects of high altitude on sports performance, heat cramps
- b. Dehydration, heat stroke and shivering
- c. Acclimatization with hot and cold temperature

**Reference Books:**

1. Brooks, G. Fahey, T. and Baldwin, K. (2004). Exercise physiology, MC Graw Hill. USA
2. McArdle, WD, Katch, FI and Katch VL (2000), Essentials of Exercise physiology 2<sup>nd</sup> edition Lippincott Williams and Wilkins, USA.
3. Powers, S. and Howley, E. (2006), "Exercise Physiology" MC Graw Hill. USA.
4. Wilmore Hack Hand Costil David L. (2004), "Physiology of sports and exercise Human Kinetics.
5. Rowland Thomas W. Children's (2005), "Exercise Physiology" 2<sup>nd</sup> edition Human Kinetics.

## **SEMESTER II**

### **PRACTICAL**

### **ATHLETICS**

#### **LESSON**

**COURSE CODE: BPE-P-206**

**(ELECTIVE GROUND COURSE-III)**

**Credit:4**

**Marks=100**

Objective:-

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

- Demonstrate an expert knowledge of the strategies and skills of the sport and use critical thinking skills to apply this knowledge in competitive situations in order to participate to the best of one's ability in competition.
- Demonstrate traits of good sportsmanship and teamwork in both competition and practice.

On any one of the following athletic activities:-

(120 Hours)

1. Discus Throw
2. Triple Jump
3. Hurdles
4. Middle and Long distance races

## **SEMESTER-II**

### **PRACTICAL**

### **ATHLETICS LESSON**

**COURSE CODE: BPE-P-0206**

**(ELECTIVE GROUND COURSE-IV)**

**Credit:4**

**Marks=100**

Objective:-

- **To enhance the sports performance:** It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

**CO-1** Demonstrate an expert knowledge of the strategies and skills of the sport and use critical thinking skills to apply this knowledge in

competitive situations in order to participate to the best of one's ability in competition.

**CO-2** Demonstrate traits of good sportsmanship and teamwork in both competition and practice.

Lessons on any one of the following athletic events:-

(120 Hours)

1. Sprints
2. Long Jump
3. Shot put
4. Relay

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in athletics and general lesson activities (5 lessons each in athletics and general lesson). In addition each trainee shall complete 1 assignment each in athletics and general lesson.
2. For the purpose of examination in practicals, one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weightage.

The contents of teaching for each activity are as follows:-

1. History of athletics.

2. Measurements of track & field events.
3. Equipments & specification of equipments.
4. Fundamental skills and lead up activities.
5. Rules and regulations of athletic events.
6. Tournaments at national and international level.
7. Records (World, Olympics, Asian and National games)
8. Awards in athletics.
9. Related books and magazines.
10. Officiating: -
  - a. Duties of official
  - b. Knowledge of score sheet
  - c. Officiating signals
  - d. Technical equipment for officiating.

## **SEMESTER-II**

### **PRACTICAL**

#### **YOGA PRACTICAL**

**COURSE CODE: BPE-P-208**

**(MINOR ELECTIVE COURSE-II)**

**Credit:4**

**Marks=100**

(120Hours)

(120Hours)

#### **Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

#### **The Course Learning Outcomes:**

**CO-1** Demonstrate basic skills associated with yoga and Pilates.

**CO-2** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3** Apply the knowledge of basic choreography, and effective group management.

**CO-4** Demonstrate the ability to create and present various yoga activities.

#### **ASANA**

Pawanuktasana, Padmasana, Swastik Asanas, Bhadrasana, Uttanpadasana, Sarvangasana, Halasana, Matsyasana, Suptvajasana, Chakrasana, TiryakaTadasana, EkPadPranamasana, Hastottanasana, Makarasana, Balasana, Sarpasana, Hanumanasana, Sukhasana, Markatasana, VipritNaukasana, ParshvaTadasana, Sinhasana

**PRANAYAMA**

Chandra Bhedi Pranayama  
UjjayiPranayam

**SATKARMA**

Vaman Dhauti / Kunjal  
KriyaVatkram/Kapalbhati

**MUDHRAAND BANDH**

Jalandhar  
BandhaUddiyana  
BandhaMulbandha  
Yog Murda

## SEMESTER-III

**COURSE CODE:CC-301**

**(COMPULSORY COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### ENVIRONMENTAL SCIENCE

#### Objectives:

- Students will integrate knowledge from multiple disciplines representing physical and life sciences perspectives, political and economic perspectives, and social and cultural perspectives on humans' interactions with their environments;
- Students will contribute to and facilitate interdisciplinary research and problem solving, through independent and collaborative work; and
- Students will use quantitative and qualitative research tools and techniques to analyze, implement, envision, assess, and report sustainability efforts.

#### The Course Learning Outcomes (COs):

- CO-1.** Articulate the interconnected and interdisciplinary nature of environmental studies;
- CO-2.** Demonstrate an integrative approach to environmental issues with a focus on sustainability;
- CO-3.** Use critical thinking, problem solving, and the methodological approaches of the social sciences, natural sciences, and humanities in environmental problem solving;
- CO-4.** Communicate complex environmental information to both technical and non-technical audiences;
- CO-5.** Understand and evaluate the global scale of environmental issues & problems; and
- CO-6.** Reflect critically on their roles, responsibilities, and identities as citizens, consumers and environmental actors in a complex, interconnected world.

#### **Unit- 1: Introduction to environmental studies and Ecosystem**

**[15 Hrs.]**

Multidisciplinary nature of environmental studies; Scope and importance; Need for public awareness; What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

#### **Unit-2: Natural Resources: Renewable & Non-renewable Resources**

**[15 Hrs.]**

Land resources and land use change; Land degradation, soil erosion and desertification; Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations; Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state); Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

**Unit-3: Biodiversity & Conservation****[15 Hrs.]**

Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots; India as a mega-biodiversity nation; Endangered and endemic species of India; Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity; Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

**Unit 4: Environmental Pollution, policies & practices****[15 Hrs.]**

Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution; Nuclear hazards and human health risks; Solid waste management: Control measures of urban and industrial waste; Environmental Policies & Practices; Sustainability and sustainable development; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture; Environment Laws: environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

## **TEXT BOOKS**

1. Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.
2. Carson, Rachel. 1962. Silent Spring (Boston: Houghton Mifflin, 1962), Mariner Books, 2002.
3. Economy, Elizabeth. 2010. The River Runs Black: The Environmental Challenge to China's Future.
4. Gadgil, M. & Ramachandra, G. 1993. This fissured land: an ecological history of India. Univ of California Press.

## **REFERENCE BOOKS:**

1. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
2. Grumbine, R. Edward, and Pandit, M.K. Threats from India's Himalaya dams. Science 339.6115 (2013): 36-37.
3. Heywood V.H. & Watson, R.T. 1995. Global Biodiversity Assessment. Cambridge University Press.
4. Mc Cully, P. 1996. Silenced rivers: the ecology and politics of large dams. Zed Books.



## SEMESTER-III

**COURSECODE: BPE 302**

**(MAJORCOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **METHODOFTEACHINGYOGA**

**Objectives:** Following the completion of this course, students shall be able to

- Understand the basic principles of Teaching Methods.
- Have knowledge of different aspects of teaching methods used in Yoga.

#### **Course Outcomes:-**

**CO-1** To enable the student to have good health

**CO-2** To practice mental hygiene.

**CO-3** To possess emotional stability.

**CO-4** To integrate moral values.

**Unit-I: Principles and methods of teaching yoga [15 Hrs.]**

1. Teaching and Learning : Concepts and Relationship between the two;
2. Principles of Teaching: Levels and Phases of Teaching,
3. Quality of perfect Yoga Guru; Yogic levels of learning, Vidyarthi, Shishya, Mumuksha;
4. Meaning and scope of Teaching methods, and factors influencing them;
5. Sources of Teaching methods; Role of Yoga Teachers and Teacher training.

**Unit-II: Basics of yoga class management [15 Hrs.]**

1. Practice of Yoga at different levels (Beginners, Advanced, School Children, Youth, Women and Special attention group);
2. Techniques of mass instructions;
3. Techniques of Individualised teaching;
4. Techniques of group teaching;
5. Organisation of teaching (Time Management, Discipline etc.).

**Unit-III: Lesson planning in yoga [15 hrs.]**

1. Essentials of Good Lesson Plan: concepts, needs, planning of teaching Yoga (Shatkriya, Asana, Mudra, Pranayama & Meditation);
2. Models of Lesson Plan;
3. Action Research of Yoga: Meaning, Roles, Steps in action research in Yoga Teaching;
4. Effective use of Library and other resources; Lesson Plan and its Practical applications.

**Unit-IV: Educational tools of yoga teaching [15 hrs.]**

1. Yoga classroom: Essential features, Area, Sitting arrangement in Yoga class etc.;
2. Class room problems: Types and Solutions, Characteristics and essentials of good Yoga teaching;
3. Time table: Need, Types, Principles of Time table construction; Time Table for Yoga teaching;
4. Meaning, Importance and Types of Educational technology; Role of Educational Technology in Yoga.

**TEXT BOOKS**

1. Dr. Shri Krishna : Notes on basic principles & methods of teaching as applied to yogic practices and a ready reckoner of yogic practices, Kaivalyadhama, Lonavala, 2009

**BOOKS FOR REFERENCE**

1. Dr. Gharote M L : Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007
2. Dr. Raj Kumar : Principles & methods of Teaching, Printo graphics, Delhi,
3. Saket Raman Tiwari & others : Teaching of Yoga, DPH Publishing Corporation, Delhi, 2007

### SEMESTER-III

**COURSE CODE: BPE 303**

**(MAJOR COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

#### METHOD IN PHYSICAL EDUCATION

##### Objective:-

- Develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.

**The Course learning outcomes (COs):**On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the Meaning and types of Teaching Methods.

**CO-2.** Discuss the Presentation Techniques in Physical Education.

**CO-3.** Generalizing the Methods of Words of command.

**CO-4.** Determining the knowledge to Lesson Planning.

**CO-5.** Applying the knowledge to take Lesson Plan in different categories.

**CO-6.** Reviewing the impact of all units in conduction of competitions

1

##### Unit-I (17 Hours)

1. Meaning, scope and importance of teaching methods in physical education.
2. Basic types of teaching methods.
3. Factors affecting teaching methods.
4. Command and types of command:
  - a. For beginners
  - b. For advance groups
  - c. For large groups
  - d. For complicated exercises
5. Techniques of commanding:
  - a. Counting
  - b. Continuous counting
  - c. Counting the beat
  - d. Rhythmic counting
  - e. Counting aloud
  - f. Use of whistle
  - g. Procession instruments and music

##### Unit-II (13 Hours)

###### 1. Preliminary preparation:

- a. Personal preparation

- b. Technical preparation
- c. Steps of preparation

**2. *Presentation Techniques:***

- a. Orientation
- b. Verbal explanation
- c. Demonstration
- d. Explanation

- e. Discussion
- f. Supervision
- g. Evaluation

**3. *Teaching aids and types of teaching aids***

- a. Motion pictures
- b. Charts & diagrams
- c. Models and exhibitions
- d. Musical instruments and recording

**Unit-III** (17 Hours)

1. Lesson planning and objectives of lesson planning.
2. Parts of lesson planning and their order:
  - a. Introductory part
  - b. Fundamental or main body part
  - c. Concluding part
3. Types of lesson planning:
  - a. General lesson plan
  - b. Specific lesson plan
4. Principles of lesson planning.
5. Lesson plan evaluation and re-planning.

**Unit-IV** (17 Hours)

1. Class formation, its values and types of class formation:
  - a. Single line
  - b. Double line
  - c. File formation
  - d. Semi-circle
  - e. Circle formation
  - f. Spoke
  - g. Horse shoe
  - h. L- shape
  - i. Triangular
  - j. Rectangular
  - k. Double sided
  - l. Three sided
  - m. Free formation

2. Supervision and inspection of teaching methods.
3. Methods of supervision and qualities of a supervisor.
4. Evaluation of teaching methods.
5. Need and importance of evaluation.

**Reference Books:**

1. Kamalesh M.L. and Sangral M.S., "Methods in Physical Education" Parkash Brothers, 5,6 Books Market Ludhinana 1986.
2. Tirunarayan and Hariharan, "Methods in Physical Education." M/S C.T. and S.H. Allagappa College of Physical Education Karaikudi-4.
3. Kazmer, H.C. and Cassidy, R., "Methods in Physical Education" W.B. Saunders andCo. Philadelphia, London 1958.
4. Charrles, E. Forrythe and Irrn A. Keller, "Administration of High School Athletics." Prentice Hall Inc. Englewood, N.J. 1979.

### SEMESTER-III

**COURSE CODE: BPE304**

**(ELECTIVE COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

#### **FUNDAMENTALS OF BIOMECHANICS IN SPORTS**

Objectives:-

- The major goal of biomechanics of sport and physical exercise is to **improve performance in given sport or physical exercise**.
- In a wider context the goal of biomechanics of sport and physical exercise is also to increase physical fitness.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

- CO-1.** Memorizing the Meaning, nature, role and scope of Biomechanics.
- CO-2.** Explaining the CG, Line of gravity Vectors and Scalars Quantities.
- CO-3.** Acquiring the knowledge of Linear and Angular Kinematics.
- CO-4.** Acquiring the knowledge of Linear and Angular Kinetics.
- CO-5.** Applying the concept of Lever & Equilibrium in game situation.
- CO-6.** Estimating the role of resistance in sports.

#### **Unit-I (15 Hours)**

1. Meaning, definition and importance of biomechanics in the field of sports.
2. Fundamental mechanical concept of:
  - a. Mass
  - b. Weight
  - c. Volume
  - d. Density
  - e. Pressure
3. Introduction to kinematics and its related terms:
  - a. Time
  - b. Displacement
  - c. speed
4. Role of kinematics in the field of sports.

#### **Unit-II (17 Hours)**

1. Fundamental biomechanical terms:
  - a. Friction
  - b. Inertia

- c. Force
  - d. Centripetal force
  - e. Centrifugal force
  - f. Center of gravity
2. Equilibrium, types of equilibrium and principles of equilibrium.
  3. Kinetics and its role in the field of sports.

**Unit-III** (17 Hours)

1. Motion and types of motion.
2. Newton's laws of motion and their implications in the field of physical education and sports.

3. Lever and types of lever.
4. Advantages of lever.

**Unit-IV** (17 Hours)

1. A brief description of mechanical principles:
  - a. Projectile
  - b. Aerodynamics
2. Mechanical analysis of following:
  - a. Walking
  - b. Running
  - c. Jumping
  - d. Throwing
3. Application of Biomechanics in the field of sports.

**Reference Books:**

1. Barrlea, R. (20047), "Introduction to Sports Biomechanics." Ran sedge Publishers, USA.
2. Blazeovich, A. (2007), "Sports Biomechanics." A and C Black Publishers USA.
3. Beer and Zarmicks (1979), "Efficiency of Human Movement." WIB Sounders CO. USA.
4. Hamill. J and Knutzen, K.M. (2003), "Biomechanical Basis of Human Movement." Lippincott Williams and Wilkins USA.
5. McGimsis, P. (2004), "Biomechanics of Sports and Exercise." Human Kinetics, USA.
6. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers Ludhiana second revised addition 2008.

## SEMESTER-III

**COURSE CODE: BPE 305**

**(ELECTIVE COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **ADAPTED PHYSICAL EDUCATION**

#### **Objectives:-**

- To develop a healthy level of balance, flexibility, muscular strength, body composition, and cardio-respiratory endurance.
- To learn new games and their rules and to demonstrate it correctly in the game settings.

**The Course learning outcomes (COs):**An individualized program of developmental activities, exercises, games, rhythms, and sport designed to meet the unique physical education needs of individuals.

#### **A sub discipline of PE or emerging field of studying**

- 1) Designed to meet long term unique needs
- 2) May take place in mainstream classes or segregated classes
- 3) An active program rather than a passive one
- 4) Adapted or modified sport can be used in APE program
- 5) Adapted means to adjust and to fit
- 6) Service to 3-21 years old (IEP) and may include 0-2 (IFSP)

#### **Unit-I (15 Hours)**

1. Introduction :
  - a. Meaning and aim of adapted physical education.
  - b. Objectives of the adapted physical education.
  - c. Basis for adapted physical education.
  - d. Functions of adapted physical education.
2. The adapted program in action :
  - a. Scope of adapted program.
  - b. Adapted program for elementary schools, high/secondary schools, colleges and university.

#### **Unit-II (16 Hours)**

1. Personal preparation :
  - a. Guiding principles of adapted physical education.
  - b. The policies for adapted physical education.
  - c. Preparation of personal.

- d. In-service training programe.

**Unit-III** (14 Hours)

- 1. Evaluation and measurement :
  - a. Selection of evaluation procedures.
  - b. Classification of handicapped and disabled individuals.
  - c. Determination of specific disabilities.
  - d. Need based program emphasis for individual handicapped.

**Unit-IV** (17 Hours)

- 1. Social and psychological adjustment :
  - a. Courses of maladjustment.

- b. Role of physical education in preventing maladjustment and in the promotion of adjustment.
- c. Recreation for the handicapped.
- d. Postural defects-flat foot, spinal defects and shoulder deformities and their rehabilitation.
- e. Special physical education programs for blind, deaf, dumb and mentally challenged children.
- f. Rehabilitation programs for bone and joint injuries, ankle, knee, shoulder, elbow and hand injuries.
- g. Neurological disabilities- Spastic poliomyelitis (Cerebral Palsy).

**References Books:**

1. H.H. Clark and D.H. Clark, "Development and Adapted Physical Education", Englewood, Prentice Hall, 1964.
2. A.S. Daniels, "Adapted Physical Education", New York, Harpers and Brothers, 1972.
3. G.T. Stafford, "Prevention and Corrective Physical Education", New York, A.S. Barnes and Co. 1970.
4. V.V. Hunt, "Recreation for the Handicapped", Prentice Hall inc. 174.
5. B.J. Gratty, "Adapted Physical Education in the Main Stream" Move Publisher Co. Denver Colorado-802222, 1989.

**SEMESTER-III**  
**PRACTICAL**  
**GAMES LESSON**

**COURSE CODE: BPE-P-306**

**(ELECTIVE GROUND COURSE-V)**

**Credit:4**

**Marks=100**

**Objectives:-**

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Communication. ...
- Change management. ...
- Problem solving. ...
- Flexible thinking. ...
- Morale building. ...

**The Course learning outcomes:**

**CO-1** Experiencing the General & Specific warming up for games

**CO-2** Acquiring the Basic skills of games.

**CO-3** Demonstration and application of various techniques of games

**CO-4** Warming up: - General & Specific

**CO-5** Specific conditioning program for games

**CO-6** Basic skills- offensive & defensive

Lesson on any one of the following games:- (120Hours)

1. Kho-Kho
2. BasketBall
3. Judo
4. Boxing
5. Table tennis

**SEMESTER-III**  
**PRACTICALS**  
**GYMNASTICS**  
**LESSON**

**COURSE CODE: BPE-P-307**

**(ELECTIVE GROUND COURSE-VI)**

**Credit:4**

**Marks=100**

**Objectives:-**

(120Hours)

- Helping members to develop physical confidence.

- Helping members to develop mentally.
- Promoting balance and co-ordination.
- Developing strength, improving flexibility.
- Improving body posture.
- Developing social skills.

## **The Course learning outcomes:**

**CO-1.** Define the meaning and general principles of

Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

On any one of the following gymnastics activities:-

1. Floor Exercises (Both for men&women)
2. Vaulting Horse (Both for men&women)
3. Parallel Bar (For men only)
4. Balancing Beam (For women only)

The contents of teaching for each activity are as follows:-

1. History of game/ gymnastic.
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.

7. Tournaments at national and international level.
8. Records (world, Olympic, Asian games and National Games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating: -
  - a. Duties of official.
  - b. Knowledge of score sheets.
  - c. Signals officiating.
  - d. Technical equipment for officiating.

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastics activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weightage.



**SEMESTER-III**  
**PRACTICALS**  
**YOGA PRACTICAL**

**COURSE CODE: BPE-P-308**

**(MINORELECTIVE COURSE-III)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

**The Course learning outcomes:**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

**ASANA**

Utkatasana , Chakrasana , Vrishabhasana , Kukkutasana , Vakrasana , Hasta Padangusthasana ,Paravatasana , Bhunamanasana , Konasana , Vatayanasana , Tulasana , Garbhasana , Mandukasana ,TiryakBhujangasana,Ardhchandrasana

**PRANAYAMA**

Shitali  
PranayamaShitkariPranay  
am

**SATKARMA**

Aganisar Kriya Shitkram  
Kapalbhati SutraNeti

**MUDHRAAND BANDH**

Shambhavi MurdaTadagi  
MurdaPran Murda

Kaki Murda

## SEMESTER-IV

COURSE CODE:BPE-401

(MAJOR COURSE-VII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### REMEDIAL AND MASSAGE

#### Objectives:

- Reducing stress and increasing relaxation.
- Reducing pain and muscle soreness and tension.
- Improving circulation, energy and alertness.
- Lowering heart rate and blood pressure.

#### The Course learning outcomes (COs):

**CO-1.** Use observation, verbal and other assessment tool to plan and perform a general relaxation massage.

**CO-2.** Apply the detailed knowledge of anatomy as it relates to the study of muscles, joint and ligament.

**CO-3.** Use the knowledge of physiological principles as it relates to the different system of the body and massage therapy.

**CO-4.** Apply the knowledge of pathological condition as they indicate or contraindicate the application of massage therapy

#### Unit-I (15 Hours)

1. Definition of Remedial, physiotherapy and corrective exercises.
2. Concept of posture, its meaning and characteristics of correct and incorrect posture.
3. Causes of incorrect posture
4. Necessity and importance of correct posture.
5. Principles of correct posture.
6. Tests for correct posture.

#### Unit-II (16 Hours)

##### 1. *Classification of posture :*

- a. Good Type
- b. Bantom Type
- c. Fatigue Type

##### 2. *Postural deformities and their causes :*

- a. Kyphosis
- b. Lordosis
- c. Scoliosis

- d. Bow legs
- e. Knock knee
- f. Flat foot

**3. *Preventive and remedial measures for postural defects :***

- a. Psychological and habitual consideration in preventing and correcting postural defects.
- b. Corrective exercises for various postural defects.
- c. Physiotherapist treatment in correcting postural defects.

**Unit-III** (17 Hours)

1. Massage :
  - a. Meaning, definition and a brief history of massage.
  - b. Massage as means of relaxation and points to be considered while giving massage.
  - c. General effects of massage.
  - d. Classification of the manipulation and movements in the massage :
    - i. Effleurage and stroking
    - ii. Petrissage
    - iii. Percussion/Tapotement
    - iv. Vibration and shaking
  - e. Effects of manipulation and movements on the different systems of humanbody.

**Unit-IV** (13 Hours)

1. ***Classification of positions :***
  - a. Fundamental positions
  - b. Derived positions
  - c. Modified positions
2. ***Classification of exercises along with their practical instructions :***
  - a. Free mobility exercises
  - b. Assisted exercise
  - c. Resisted exercises

**Reference Books:**

1. Smith Lara K. and Others, “Srunnstrem’s Clinical Kinesiology”, Jaypee Brothers P.B.No-7193 New Delhi 1998.
2. J.L. Rathoore, “Corrective Physical Education”, Philadelphia W.B. Saunders Co.1968.
3. P.G. Rasch and R.K. Burke, “Kinesiology and Applied Anatomy”, Lee and Febriger, Philadelphia 1978.
4. Singh Ajmer et.al, “Essentials of Physical Education”, Kalyani Publishers, Ludhiana,Second revised addition 2008.

## SEMESTER-IV

**COURSE CODE: BPE402**

**(MAJOR COURSE-VIII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION**

#### **Objectives:**

- It is the education that concerns physical activities, which develop and maintain human body
- Activity
- Teaching.
- Direction, coordination and control of group efforts

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the Students will be learning and able to do/perform the following.....

**CO-1.** Memorizing the Importance of Organization and Administration.

**CO-2.** Describing the Scope, Need and Importance of Organization and Administration.

**CO-3.** Acquiring the knowledge of Leadership in Physical Education and Sports.

**CO-4.** Determining the Role of Reports and records.

**CO-5.** Estimating the concept of drawing Fixtures.

#### **Unit-I** (15 Hours)

1. Meaning and definition of planning, organization, administration and management and their nature and scope.
2. Importance of management in educational institution.
3. Principles of management.
4. Theories of management.
5. Scheme of organization in school, college and university.

#### **Unit-II** (16 Hours)

##### **1. Facilities and equipment :**

- a. Layout of physical education facilities and sports facilities.
- b. Need and importance of equipment for physical education.
- c. Procedure for the purchase of equipment.
- d. Development of improvised equipment.

- e. Care, maintenance and disposal of unserviceable equipment.

**2. *Office management and budget :***

- a. Maintenance of records.
- b. Office correspondence and reports.
- c. Physical education budget and its preparation.
- d. Income and expenditure.
- e. Petty cash.

**Unit-III** (14 Hours)

**1. *Intramurals and extramural :***

- a. Intramurals :
  - i. Its importance and planning.
  - ii. Events of competitions, time and facility factor.

- b. Extramurals :
  - i. Planning and conduct.
  - ii. Outcomes of participations (Educational).
  - iii. Limitations in participations.
  - iv. Selection and training of teams.
  - v. Participation, finance and other aspects.

**Unit-IV** (18 Hours)

**1. Curriculum designing:**

- a) Curriculum designing its need and importance.
- b) Factors affecting time table.
- c) Place of physical education periods in curriculum and teacher-pupil ratio.

**2. Tournament organization:**

- a) Conduct of tournaments and athletic meet.
- b) Types of tournaments.
  - i. Elimination (knockout).
  - ii. League.
  - iii. Combination.

**Reference Books:**

1. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers Ludhiana Second revised addition 2008.
2. Kamlesh M. L. and Sangral M.S., "Methods in Physical Education", Parkash Brothers, 5,6 Book Market Ludhiana 1986.
3. Kamlesh M. L. "Principles and history of physical Education" , ParkashBrother Paliala, 1991.
4. Charles, E. Foxythe and Irrn A. Keuer, "Administration of High School Athletics" , Prentice Hall Inc. Englewood, N.J. 1979.

## SEMESTER-IV

**COURSE CODE: BPE403**

**(ELECTIVE COURSE-IV)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **BASIS OF YOGA THERAPY**

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#### **Objectives:**

- the application of Yogic principles to a particular person with the objective of achieving a particular spiritual, psychological, or physiological goal.

#### **The course learning outcomes (COs):**

- CO-1.**Effect of yoga in different factors
- CO-2.** Physical activity implement in asana and pranayama
- CO-3.** Yoga help in improves strength, balance and flexibility
- CO-4.** Yoga therapy benefits with disabilities and limitations.

**Unit-I: Yogic concepts of health and disease [15 Hrs.]**

1. Definition & Importance of Health According to WHO;
2. Dimensions of Health: Physical, Mental, Social and Spiritual;
3. Concept of Health and Disease in Indian Systems of Medicine i.e. Ayurveda, Naturopathy and Siddha Systems of Medicine, Utility and Limitations of these systems in health and healing;
4. Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi, Yogic concept of Health and Disease, role of Yoga in preventive health care – Heyam dukham anagatam;
5. Potential causes of Ill-health: Tapatrayas and Kleshas. Physical and Physiological manifestation of Disease: Vyadhi, Alasya, Angamejayatva and Svasa-prashvasa. Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva;
6. Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi).

**Unit-II: Yogic concepts for health and healing [15 Hrs.]**

1. Concepts of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing;
2. Concept of Pancha-koshas & Shat-chakra and their role in Health and Healing;
3. Concept of Abhyas and Vairagya, Chitta and Chitta Prasadana, Kriya-yoga, Ashtanga Yoga of Patanjali for Health and Healing;
4. Concept of Cleansing (Shuddhi), its role and importance in Health and Healing;
5. Concept of Swara Yoga and its efficacy in Health and Healing.

**Unit-III: Yogic principles and practices of healthy living [15 Hrs.]**

1. Yogic Principles of Healthy Living: Aahara, Vihara, Aachara and Vichara;
2. Role of Yogic Positive Attitudes (Maitri, Karuna, Mudita and Upeksha) for Healthy Living,
3. Concept of Bhavas and Bhavanas with its relevance in Health and well-being;
4. Yogic principles of Lifestyle management and its role in prevention of disease and health promotion;
5. Yogic Principles of Diet and its role in Healthy living;
6. Yogic Practices of Healthy living : i.e. Yama, Niyama, Shatkarma, Asana, Mudra & Bandha Pranayama, Pratyahara, Dharna and Dhyana, and their role in Healthy living.

**Unit-IV: Health benefits of yogic practices [15 Hrs.]**

Psycho-physiological effects and health benefits of Yogasana , Pranayama, Shatkarma, Bandha and Mudra, and Meditation.

### **TEXT BOOKS**

1. Preeti Goel and Rita Jain : Spectrum of Health (Sports Publications, New Delhi, 2003)
2. M. M. Gore : Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008)
3. Dr. K. Krishna Bhat: The power of Yoga

### **BOOKS FOR REFERENCE**

1. Dr. R. S. Bhogal : Yoga Psychology, Kaivalyadhama Publication
2. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
3. T.S. Rukmani: Patanjala Yoga Sutra
4. Sahay, G. S.: Hatha Yoga Pradeepika, MDNIY Publication, 2013
5. Kdham : Gheranda Samhita, Kaivalyadhama, Lonavla.

## SEMESTER-IV

COURSE CODE: BPE404

(ELECTIVE COURSE-IV)

Credit:4

Marks:(ESE=70+CCA=30)=100

### OFFICIATING AND COACHING

#### Objectives:

- They provide leadership and guidance to participants, ensuring that the competition is conducted in a safe and fair manner.
- to unlock people's potential to maximize their own performance.

**The Course learning outcomes (COs):**On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the meaning and general principles of Officiating.

**CO-2.** Discuss financial and legal aspects of officiating.

**CO-3.** Describe the qualification and qualities of an officiating.

**CO-4.** Classify the duties of officials.

**CO-5.** Define the ingredients of officiating.

**CO- 6.** Discuss enforcement, Facilities, Arrangement, and environment for officiating

**CO-7.** Explain the relations of officials with management, players, coaches, captains, spectators, and fans.

**CO-8.** Classify the preparations of officials before, during and after the game.

#### Unit-I (14 Hours)

1. Coaching :
  - a. Meaning and definition of coaching.
  - b. Principles of coaching.
  - c. Qualification and Qualities of a good coach.
  - d. Duties and responsibilities of a good coach.
  - e. Measures for improving the standard of coaching in India.

#### Unit-II (17 Hours)

1. Training Schedule :
  - a. Concept of Training Schedule.
  - b. Types of Training Schedule (Plan) :
    - i. Short term.
    - ii. Long term.
  - c. Periodization : Meaning of single and double periodization.
  - d. Principles of training schedule.

- e. Preparation of training schedule.

**Unit-III** (13 Hours)

1. Officiating :

- a. Meaning and definition of officiating.
- b. Principles of officiating.
- c. Qualification and qualities of a good official.
- d. Duties and responsibilities of an official.
- e. Measures for improving the standard of officiating in India.

**Unit-IV** (18 Hours)

1. Rules, regulations and plan of the following athletic events :
  - a) Sprints
  - b) Long jump
  - c) Shot put
  - d) Relay races
  - e) Middle and long distance races
  - f) Hope step and jump
  - g) Discus throw
  - h) Hurdles.
2. Score sheets and award of points for the above mentioned athletic events

**Reference Books:**

1. AAFB, "Officiating in Athletics", 2012.
2. Bunn, J.N. "Art of officiating in Sports", Prentice Hall Englewood N.J. 1968.
3. "Pearson G.F. Athletics", Thomson Nelson and sons ltd. London.
4. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, LudhianaSecond revised addition 2008.

## SEMESTER-IV

COURSE CODE: BPE405

(ELECTIVE COURSE-V)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPECIALIZATION IN WOODBALL

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, ground marking, rules and duties of officials, etc.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Chapter-I Introduction

Brief introduction of Woodball, Meaning & Definition of Woodball, History of Woodball (Invention, Player etc.), Woodball in India (origin Player etc.), Working Federation of Woodball in International, National, State Level.

#### Chapter-II Woodball-Equipments & Course

General Principles of woodball. Woodball course design (Figure), Specifications of course, layout plans of different woodball course, Shape & Size of Mallet, Ball & Gate.

#### Chapter-III Woodball Skill :

Player movement, Rules of Hitting & Penalties Putting  
, Penalties

Short Distance stroke. Mid

Distance stroke. Long

Distance stroke. Stoke

completion

**Penalties :** Penalties Rules in 1<sup>st</sup> shot.

Penalties Rules of Hitting

Penalties Rules in play Penalties

Rule in gate area.

#### Chapter-IV

Organization of woodball team & Dress, referee in woodball & recording methods.

##### Tournaments

State Level, National Level, International Level, AIU & SGFI Games, Distribution of Medals

##### Teams in Woodball

About woodball team, Manager Coach, Single event, Double event, Mix Double event

##### Players dress

Function of referee & chief referee line man

International Referee: Hand signs & Referee Marking

methods in score sheet, Results making

## **Chapter-V**

### **Yoga & Exercise for Woodball Player**

Asana, Pranayama, Mudra & Bandha, Dhyan, Shatkarma

#### **Reference :**

1. Woodball Association of India <[woodballindia.com](http://woodballindia.com)>
2. International Woodball Federation <[www.iwbf-woodball.org](http://www.iwbf-woodball.org)>
- 3.

## SEMESTER-IV

**COURSE CODE: BPE0406**

**(ELECTIVECOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN KABADDI**

#### **Objectives :**

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### **The Course Learning Outcomes (COs):**

- CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of various team games.
- CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Kabbadi
2. Development of Kabaddi in India and worldwide.
3. Establishment of national and international federations/associations of Kabaddi.
4. Major tournaments of Kabaddi.
5. Awards associated with Kabaddi.

#### **Unit-II (16 Hours)**

1. Measurements and marking of Kabaddi court.
2. Preparation and maintenance of Kabaddi court.
3. Officials, no. of officials and duties of officials in the game of Kabaddi.
4. Technical equipments for officiating.

#### **Unit-III (16 Hours)**

1. Fundamental skills of Kabaddi:
  - a) Holding
  - b) Dodging
  - c) Kicking

- d) Chain formation
- e) Raiding
- 2. Lead-up games.
- 3. AAHPERD Youth Fitness Test.

**Unit-IV** (16 Hours)

- 1. Major rules and regulations of Kabaddi.
- 2. Important Signals in Kabaddi.
- 3. Knowledge of score sheet.
- 4. Related sports terminologies.
- 5. Eminent sports personalities associated with Kabaddi.

**Reference Books:**

1. "Training Manual of Kabaddi", NSNIS, Patiala.
2. Mishra S.C. (2007), "Teach Yourself Kabaddi", Sports Publishers, New Delhi.
3. Rao, C.V. (1983), "Kabaddi : Native Indian Sports", NSNIS, Patiala Publishers, Patiala.
4. Rao, E.P. (1994), "Modern Coaching in Kabaddi", DVS Publishers, New Delhi.
5. "Official Rule Book of Kabaddi", International Kabaddi Federation.

## SEMESTER-IV

**COURSECODE: BPE407**

**(ELECTIVECOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN JUDO

#### Course Objectives

- Judo, Japanese jūdō, system of unarmed combat, now primarily a sport.
- The rules of the sport of judo are complex.
- The objective is to cleanly throw, to pin, or to master the opponent, the latter being done by applying pressure to arm joints or to the neck to cause the opponent to yield.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques,

stances, forms, rules and duties of officials, etc. in the event of Judo.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Judo.
2. Development of Judo in India and worldwide.
3. Contribution of 'Jigaro Kano' in the promotion of Judo.
4. Establishment of national and international federations/associations of Judo.
5. Major tournaments of Judo.
6. Awards associated with Judo.

#### Unit-II (16 Hours)

1. Measurements of Competition Area for Judo.
2. Preparation and maintenance of Competition area of Judo.
3. Officials/Judges, no. of officials and duties of officials in the game of Judo.
4. Technical equipments for officiating.

#### Unit-III (17 Hours)

1. Fundamental skills of Judo:
  - a) Rolling.
  - b) Rei.

- c) Kumikata.
  - d) Ushiro Ukemi.
  - e) Yoko Ukemi.
  - f) Mai Ukemi.
2. Lead-up game.
  3. AAHPERD Youth Fitness Test.

**Unit-IV** (17 Hours)

1. Major rules and regulations of Judo.
2. Important Signals in Judo.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Judo.

**Reference Books:**

1. “Training Manual of Judo”, NSNIS, Patiala.
2. Law, M. (2009), “Falling Hard : A Journey in to the world of Judo”, Trumperer Publishers, Japan.
3. Takahashi, M. (2005), “Mastering Judo”, Human Kinetics, USA.
4. Harison, E.J. (2002), “Coaching Successfully Judo”, Sports Publishers, New Delhi.
5. “Official Rule Book of Judo”, International Judo Federation.

## SEMESTER-IV

**COURSE CODE: BPE408**

**(ELECTIVE COURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN BADMINTON

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of fundamental skills, techniques,

stance, rules and their interpretation and duties of officials in the event of badminton.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Badminton.
2. Development of Badminton in India and worldwide.
3. Establishment of national and international federations/associations of Badminton.
4. Major tournaments of Badminton.
5. Awards associated with Badminton.

#### Unit-II (17 Hours)

1. Measurements and marking of Badminton court.
2. Specifications of equipments related to Badminton.
3. Preparation and maintenance of Badminton court.
4. Officials, no. of officials and duties of officials in the game of Badminton.
5. Technical equipments for officiating.

#### Unit-III (16 Hours)

1. Fundamental skills of Badminton:
  - a) Holding (Grip) of the racket
  - b) Service
  - c) Smash
  - d) Drop
2. Lead-up games.
3. AAHPERD Youth Fitness Test.

**Unit-IV****(17 Hours)**

1. Major rules and regulations of Badminton.
2. Important Signals in Badminton.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Badminton.

**Reference Books:**

1. "Training Manual of Badminton", NSNIS, Patiala.
2. Grice, T. (2007), "Badminton : Steps to Success", 2<sup>nd</sup> Ed., Human Kinetics, USA.
3. Singh, M.K.(2006), "A to Z Badminton", Friends Publication, New Delhi.
4. Jain, D. (2001), "Teaching and Coaching Badminton", Khel Sahitya Kendra, New Delhi.
5. "Official Rule Book of Badminton", International Badminton Federation.

**SEMESTER-IV**

**PRACTICAL**

**GENERAL**

**LESSON**

**COURSE CODE: BPE-P-409**

**(ELECTIVE GROUND COURSE-VII)**

**Credit:4**

**Marks=100**

**Objectives:**

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

**The Course Learning Outcomes:**

**CO-1.** Define the meaning and general principles of Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

Lesson on any one of the following general lesson activities:- (120Hours)

1. Class formation
2. Lazium
3. Indian club&rings
4. Aerobics.

**SEMESTER-IV**

**PRACTICAL**

**GYMNASTICS PRACTICAL**

**COURSECODE: BPE-P-410**

**(ELECTIVE GROUND COURSE-VIII)**

**Credit:4**

**Marks=100**

**Objectives:-**

**(120Hours)**

- Gymnastics, the performance of systematic exercises—often with the use of rings, bars, and other apparatus—either as a competitive sport or to improve strength, agility, coordination, and physical conditioning.

## **The Course Learning Outcomes:**

- CO-1.** Define the meaning and general principles of Rhythmic activities.
- CO-2.** Discuss the Rules and their interpretation.
- CO-3.** Describe the types of exercises.
- CO-4.** Examine the performance of skills.

Lessons on any one of the following gymnastics activities:-

1. Uneven bar (for women)
2. Rhythmic gymnastics ( for women)
3. Horizontal bar ( for men)
4. Pommel horse ( for men)
5. Roman rings ( for men)

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastic activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weight age.

The contents of teaching for each activity are as follows:-

1. History of game/gymnastics.
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead-up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.
7. Tournaments at national and international level.
8. Records (World, Olympic, Asian and National games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating :-
  - a. Duties of the official.
  - b. Knowledge of score sheets.
  - c. Officiating signals.
  - d. Technical equipment for officiating.

e. .

## SEMESTER- IV YOGA

### PRACTICAL

COURSE CODE: BPE-P-411

(MINOR ELECTIVE COURSE-IV)

**Credit:4**

**Marks=100**

(120Hours)

#### **Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values

#### **The Course Learning Outcomes:**

**CO1-** Demonstrate basic skills associated with yoga and Pilates.

**CO2-** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO3-** Apply the knowledge of basic choreography, and effective group management.

**CO4-** Demonstrate the ability to create and present various yoga activities.

#### **ASANA**

Paschimottanasana , Natarajasana , Kurmasana , Uthit Padmasana , Padangusthasana , AkarnDhanurasana, BaddhaPadmasana, Astavakrasana, Guptpadmasana, Sarpasana, ArdhaChandrasana , ParivrttaJanushirasana, Sankatasana

#### **PRANAYAMA**

Bahyavriti  
pranayama  
Abhyantara  
Vritipranayama

#### **SATKARMA**

Vyutkrama  
Kapalbhati  
Tratak

#### **MUDHRAAND BANDH**

Mahamudra  
Mahabandha  
Murda  
Mahavedh

## SEMESTER-V

**COURSECODE: BPE501**

**(MAJORCOURSE-IX)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

## KINESIOLOGY

### Objectives:-

- Kinesiology studies the mechanics of human movement and how they impact our health and wellbeing.
- During classes, students learn how to combine a holistic approach with Anatomy, Biomechanics, and Psychology principles to help increase or repair the physical mobility of patients.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be

learning and

able to do/perform the following:

**CO-1.** Describe the definition and meaning of kinesiology.

**CO-2.** Discuss the aims and objectives of kinesiology.

**CO-3.** Explain the role of kinesiology in physical education.

**CO-4.** Interpret the fundamental concept of center of gravity, line of gravity, axis, and planes.

**CO-5.** Write about the composition, and classification of bones and Muscles

### Unit-I (13 Hours)

1. Meaning and definition of Kinesiology
2. Origin and development of kinesiology
3. Aim and objectives of kinesiology
4. Need and scope of kinesiology
5. Importance of kinesiology in Physical Education

### Unit-II (17 Hours)

1. Planes and axis
2. Joint and types of joints
3. Various fundamental movements
4. Movements around various joints :
  - a. Neck
  - b. Shoulder
  - c. Elbow
  - d. Wrist
  - e. Hip

- f. Ankle

**Unit-III** (15 Hours)

**1. *Muscle contraction and its types:***

- a. Isotonic
- b. Isometric
- c. Isokinetic

**2. *Corrective/therapeutic exercises:***

- a. Passive exercises
- b. Active assistive exercises
- c. Active exercise

- d. Resistive exercise
- e. Stretching exercises

**3. *Application of kinesiology in the field of physical education and sports***

**Unit-IV** (17 Hours)

1. Structural classification of skeletal muscles
2. Functional classification of skeletal muscles
  - a. Agonist
  - b. Antagonist
  - c. Stabilizer
  - d. Neutralizer
3. Location, origin, insertion and action of the following muscles :
  - a. Deltoid
  - b. Biceps
  - c. Gastrocnemius
  - d. Latissimus dorsi
  - e. Trapezius major
  - f. Sternocleidomastoid

**Reference Books:**

1. Rasch, P.I. and Burke R.K., "Kinesiology and Applied Anatomy", Lee and Febiger.
2. Wells K., "Kinesiology", Philadelphia W.B. Saunders Co. 1986.
3. Cooper and Cleseo, "Kinesiology", St. Louis C.V. Mosby Co.1968.
4. Smith Lara K. and Others, "Srunnstrem's Clinical kinesiology", Jaypee Brothers P.B.No-7193 New Delhi 1982.
5. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised addition 2008.

## SEMESTER-V

**COURSECODE: BPE502**

**(MAJORCOURSE-X)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### FUNDAMENTALS OF SPORTS TRAINING

#### Objectives:-

- Every sport activity needs specific type of physical fitness, and hence, the improvement of various components of physical and skills related fitness like strength, speed, coordination, endurance and flexibility is an important aim and objective of sports training.

#### The Course Learning Outcomes (COs):

**CO-1.** The learners will be able to identify the fundamental concepts, theories and principles of human body training related to sports performance.

**CO-2.** The learners will be able to demonstrate the skills to train different fitness components and related planning.

**CO-3.** The learners will be able to understand the organization to achieve high performance in sports.

#### Unit-I (15 Hours)

1. Meaning, definition, aim and objectives of sports training.
2. Characteristics of sports training.
3. Principles of sports training.
4. Concept of warming up and cooling down, its use and importance.

#### Unit-II (17 Hours)

1. Meaning and definition of physical fitness and its components :
  - a. Speed.
  - b. Strength.
  - c. Endurance.
  - d. Flexibility.
  - e. Co-ordinative ability/agility.
2. Speed training :
  - a. Meaning of speed training, types of speed and methods of speed training.
  - b. Factors influencing speed.
3. Strength training :
  - a. Meaning of strength training, types of strength and methods of strength training.

- b. Factors influencing strength.

**Unit-III** (17 Hours)

1. Endurance training :
  - a. Meaning of endurance training, types of endurance and methods of endurance training.
  - b. Factors influencing endurance.
2. Concept of training load, adaptation and recovery :
  - a. Definition of load and training load.

- b. Types of load.
- c. Symptoms, causes and measures to overcome overload.
- d. Meaning, definition and benefits of adaptation.
- e. Meaning, definition and benefits of recovery.

**Unit-IV** (16 Hours)

1. Meaning and definition of technique, skill and style.
2. Implications of technical training in various phases.
3. Stages of technical training.
4. Meaning and definition of tactical training.
5. Methodology of tactical training, strategy and tactics.
6. Relationship between technical training and tactical training.

**Reference Books:**

1. "Fundamentals of sports training, progress publishers", Moscow, 1977.
2. Dyson, "The mechanics of Warwick square, Athletics."
3. Buwn J. "Scientific Principles of coaching." Prentice Hall.
4. Broer, M. "Efficiency of Human movement." Philadelphia W.B. Saunders Co. 1978.
5. "Science of Coaching" By Hardy Singh.
6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana Second revised addition 2008.

## SEMESTER-V

**COURSE CODE: BPE503**

**(MAJOR COURSE-XI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **COMMON SPORTS INJURIES ,PREVENTION AND CURE**

#### **Objectives:-**

- The ultimate goal of the rehabilitation process is to limit the extent of the injury, reduce or reverse the impairment and functional loss, and prevent, correct or eliminate altogether the disability

#### **The Course Learning Outcomes (COs):**

**CO-1.** To know the different type of injuries and illness associated with sports participation

**CO-2.** Understand risks and hazards associated with sports participation

**CO-3.** Be able to undertake a risk assessment relevant to sports

**CO-4.** Pupils will be able to recognize the common sign and symptoms for injuries

**CO-5.** Pupils will understand the difference between a chronic and acute injury.

#### **Unit-I (15 Hours)**

1. Sports injuries and its types:
  - a. Acute injuries
  - b. Overuse injuries
2. Common sport injuries:
  - a. Sprain
  - b. Strain
  - c. Fracture
  - d. Dislocations
  - e. Abrasion
  - f. Contusion
  - g. Bruise
  - h. Blisters
  - i. Corn
  - j. Athletes foot
  - k. Tennis elbow
  - l. Footballers Knee
  - m. Footballers Ankle
3. Preventive measures for common sports injuries
4. Treatment for common sports injuries

**Unit-II** (15 Hours)

1. Meaning, aim and objectives of first aid
2. First aid box and its articles
3. Types of bandages and splinters
4. Qualities and functions of a first aider
5. Principles of first aid
6. Causes of sports injuries

7. First aid for the common sports injuries
8. Concept of PRICE.

**Unit-III** (15 Hours)

1. Emergency treatment for common accidents:
  - a. Drowning
  - b. Burning
  - c. Insect stings & bitings
  - d. Snake bite
  - e. Dog bite
  - f. Poisoning
  - g. Unconsciousness
  - h. Fainting
  - i. Hysteria
  - j. Sunstroke
  - k. Shock
  - l. Electric shock
  - m. Acid burn
2. Ergogenic aids in sports and their ill effects :
  - a. Anabolic agents
  - b. Stimulants
  - c. Beta blockers
  - d. Narcotic analgesics
  - e. Diuretics
  - f. Blood doping

**Unit-IV** (15 Hours)

1. Rehabilitory exercises for sports injuries
2. Rehabilitation procedures of sports injuries :
  - a. Cold Therapy
  - b. Heat Therapy
  - c. Hydrotherapy
  - d. Electron radiotherapy
  - e. Ionization Therapy
  - f. Exercise Therapy
  - g. Massage

## Reference Books

1. Armstrong and Tuckler; "Injuries in sport", London, Staples press, 1964.
2. Bolan J.P., "Treatment and prevention of athletic injuries".
3. More house, L.E. and Resch, P.J., "Sports medicine for Trainers, Philadelphia".
4. Ryans Allan; "Medical Care of the Athlete", McGraw Hill.
5. Evans, A. William; "Everyday safety", Chicago: Iyan and Chamaha.
6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana, Second revised addition 2008.

## SEMESTER-V

**COURSE CODE: BPE504**

**(ELECTIVE COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN KHO-KHO**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills of running and chasing, techniques, sitting positions, field dimensions, rules of the games and duties of officials in the event of kho-kho.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Kho-Kho.
2. Development of Kho-Kho in India and worldwide.
3. Establishment of national and international federations/associations of Kho-Kho.
4. Major tournaments of Kho-Kho.
5. Awards associated with Kho-Kho.

#### **Unit-II (15 Hours)**

1. Measurements and marking of Kho-Kho playfield.
2. Preparation and maintenance of Kho-Kho playfield.
3. Officials, no. of officials and duties of officials in the game of Kho-Kho.
4. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Kho-Kho :
  - a. Offensive skills :
    - i. Giving Kho
    - ii. Covering

- iii. Tapping
- iv. Diving
- b. Defensive skills :
  - i. Running
  - ii. Chain
  - iii. Ring
- 2. Lead-up games.
- 3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Kho-Kho.
2. Important Signals in Kho-Kho.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Kho-Kho.

**Reference Books:**

1. "Training Manual of Kho-Kho", NSNIS, Patiala.
2. Chakaraborty, G.(2002), "Kho-Kho Avlokan", Khel Sahitya Kendra, New Delhi.
3. Pandey, L. (1982), "Kho-Kho Sarvaswa", Metropoliton, New Delhi.
4. "Official Rule Book of Kho-Kho", International Kho-Kho Federation.

## SEMESTER-V

**COURSECODE: BPE505**

**(ELECTIVECOURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALISATION IN BASKETBALL

#### Objectives:-

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of basketball.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of BasketBall.
2. Development of BasketBall in India and worldwide.
3. Establishment of national and international federations/associations of BasketBall.
4. Major tournaments of BasketBall.
5. Awards associated with BasketBall.

#### Unit-II (15 Hours)

1. Measurements and marking of BasketBall court.
2. Specifications of Basketball.
3. Preparation and maintenance of BasketBall court.
4. Officials, no. of officials and duties of officials in the game of BasketBall.
5. Technical equipments for officiating.

#### Unit-III (15 Hours)

1. Fundamental skills of BasketBall :

- a. Dribbling
  - b. Passing
  - c. Shooting
  - d. Defense
2. Lead-up games.
  3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of BasketBall.
2. Important Signals in BasketBall.
3. Knowledge of score sheet.
4. Related sports terminologies.
6. Eminent sports personalities associated with BasketBall.

**Reference Books:**

1. “Training Manual of Basketball”, NSNIS, Patiala.
2. Drewelt, J. (2007), “How to improve Basketball”, Crabtree Publishing Co., USA.
3. Sharma, O.P. (2003), “Basketball Skills and Rules”, Khel Sahitya Kendra, New Delhi.
4. Thani, Lokesh (1995), “Skills and Tactics of Basketball” , Sports Publication, NewDelhi.
5. “Official Rule Book of Basketball”, International Basketball Federation.

## SEMESTER-V

**COURSECODE: BPE506**

**(ELECTIVECOURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALISATIONIN BOXING**

#### **Objectives:-**

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, apparatus

used, court markings and dimensions, rules and duties of officials, etc. in the individual

event of boxing.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Boxing.
2. Development of Boxing in India and worldwide.
3. Establishment of national and international federations/associations of Boxing.
4. Major tournaments of Boxing.
5. Awards associated with Boxing.

#### **Unit-II (15 Hours)**

1. Measurements of Boxing Arena/Ring.
2. Specifications of equipments related to Boxing.
3. Preparation and maintenance of Boxing Arena/Ring.
4. Officials, no. of officials and duties of officials in the game of Boxing.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Boxing :
  - a. Shot Ring Boxing
  - b. Middle Ring Boxing

- c. Long Ring Boxing
- 2. Lead-up games.
- 3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

- 1. Major rules and regulations of Boxing.
- 2. Important Signals in Boxing.
- 3. Knowledge of score sheet.
- 4. Related sports terminologies.
- 5. Eminent sports personalities associated with Boxing.

**Reference Books:**

1. "Training Manual of Boxing", NSNIS, Patiala.
2. Gotay, A.L.(2008), "Boxing Basics", Outskirts Press, USA.
3. "Official Rule Book of Basketball", International Basketball Federation.

## SEMESTER-V

**COURSE CODE: BPE507**

**(ELECTIVE COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN TAEKWONDO**

#### **Objectives:-**

- **To enhance the sports performance:** It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Taekwondo.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Taekwondo.
2. Development of Taekwondo in India and worldwide.
3. Establishment of national and international federations/associations of Taekwondo.
4. Major tournaments of Taekwondo.
5. Awards associated with Taekwondo.

#### **Unit-II (15 Hours)**

1. Measurements of Competition Arena for Taekwondo.
2. Specifications of equipments related to Taekwondo.
3. Preparation and maintenance of Competition area of Taekwondo.
4. Officials, no. of officials and duties of officials in the game of Taekwondo.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Taekwondo :
  - a. Blocking

- b. Open & Closed Stance
  - c. Kicking & Striking
  - d. Punching
  - e. Stepping
  - f. Offensive & Defensive Techniques
  - g. Kicking Combinations
2. Introduction of Gyeorugi & Poomsae.
  3. Motor Ability Test.

## **Unit-IV**

(15 Hours)

1. Specific Taekwondo Goals for Individual Grades
2. Major rules and regulations of Taekwondo.
3. Important Signals in Taekwondo.
4. Knowledge of Score Sheet.
5. Related Sports Terminologies.
6. Eminent sports personalities associated with Taekwondo.

### **Reference Books:**

1. Anslow, Stuart (2013). From Creation to Unification: The Complete Histories Behind the Ch'ang Hon (Itf) Patterns: CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
2. Anslow, Stuart (2nd Edition 2009). Ch'ang Hon Taekwon-Do Hae Sul: Real Applications to the Itf Patterns; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
3. Kim, Bok Man (1<sup>st</sup> Edition 2015). Taekwon-Do: Origins of the Art: BOK Man Kim's Historic Photospective (1955-2015) ; Moosul Publishing, LLC.
4. Chun, Richard (2<sup>nd</sup> edition 2007). Tae Kwon Do: The Korean Martial Art ; Ymaa Publication Center.
5. Son, Duk Sung & Clark, Robert J.(1st edition 1968).Korean Karate: The Art of Tae Kwan Do ; Prentice-Hall.
6. Chun, Richard (1<sup>st</sup> Edition 2013). Tae Kwon Do Black Belt Poomsae: Original Koryo and Koryo ; Ymaa Publication Center.
7. Kim, Sang H (2010). Taekwondo Step Sparring ; Turtle Press.
8. Kim, Sang H (2009). Taekwondo Self Defense: Taekwondo Hoshinsool ; Turtle Press.
9. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 1 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
10. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 2 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
11. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 3 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
12. Cook, Doug (3<sup>rd</sup> Edition 2001). Taekwondo: Ancient Wisdom for the Modern Warrior ; Ymaa Publication Center.

13. Cook, Doug (1<sup>st</sup> Edition 2006). Traditional Taekwondo: Core Techniques, History and Philosophy ; Ymaa Publication Center.
14. Cook, Doug (1<sup>st</sup> Edition 2009). Taekwondo: A Path to Excellence ; Ymaa Publication Center.
15. Gillis, Alex (1<sup>st</sup> Edition 2008). A Killing Art: The Untold History of Tae Kwon Do ; ECW Press, Canada.
16. Park, Yeon Hwan & Gerrard, Jon (Updated Edition 1999). Tae Kwon Do: The Ultimate Reference Guide to the World's Most Popular Martial Art; Checkmark Books.
17. Park, Yeon Hwan & Gerrard, Jon (1<sup>st</sup> Edition 2013). Black Belt Tae Kwon Do: The Ultimate Reference Guide to the World's Most Popular Black Belt Martial Art; Skyhorse.
18. Lee, Kyu Hyung & H. Kim, Sang (1<sup>st</sup> Edition 2007). Complete Taekwondo Poomsae: The Official Taegeuk, Palgwae and Black Belt Forms of Taekwondo ; Turtle Press, U.S.
19. Hornsey, Kevin (1<sup>st</sup> Edition 2003). Taekwondo: A Step-by-Step Guide to the Korean Art of Self-Defense ; Tuttle Publishing.
20. Park, Dong Keun & Schein, Allan (1<sup>st</sup> Edition 2006). Tae Kwon Do: The Indomitable Martial Art of Korea : Basics, Techniques, and Forms ; Invisible Cities Press Llc.

“Official Rule Book of Taekwondo”, World Taekwondo Federation. [www.worldtaekwondo.org](http://www.worldtaekwondo.org) , [www.taekwondofederationofindia.com](http://www.taekwondofederationofindia.com)

**SEMESTER-V**  
**PRACTICAL**  
**GAMES LESSON**

**COURSECODE:BPE-P-508**

**(ELECTIVE GROUND COURSE-IX)**

**Credit:4**

**Marks=100**

(120Hours)

Objectives:-

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

**The Course Learning Outcomes:**

- Experiencing and Immiting the General & Specific warming up for games
  - Acquiring the Basic skills of games
  - Demonstration and application of various techniques of games.
- Warming up: - General & Specific
- Specific conditioning program for games
- Basic skills- offensive & defensive

Lesson on any one of the following games:-

1. Cricket
2. HandBall
3. Taekwondo
4. Weight Lifting
5. Football.

## **SEMESTER-V**

### **PRACTICAL**

#### **ATHLETICS LESSON**

**COURSE CODE: BPE-P-0509**

**(ELECTIVE GROUND COURSE-X)**

**Credit:4**

**Marks=100**

#### **Objectives:-**

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

**CO-1.**Administrating of the skill performance.

**CO-2.**Practicing of the skill performance.

**CO-3.**Summarizing record file

Lesson on any one of the following athletics events:-

(120 Hours)

1. High Jump.
2. Hammer Throw
3. Javelin
4. Competitive walking.

#### **Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastics activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsion for each candidate which will be assessed by external examiner appointed by the university.

3. Each group of practical examination will be of three hours duration irrespective of its weight age.

The contents of teaching for each activity are as follows:-

1. History of Game/Athletics .
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead-up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.
7. Tournaments at national and international level.
8. Records (World, Olympic, Asian games and national games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating: -
  - a. Duties of official
  - b. Knowledge of score sheets
  - c. Signals officiating
  - d. Technical equipment for officiating.

**SEMESTER-V**  
**PRACTICALSYOGAPRAC**  
**TICAL**

**COURSECODE: BPE-P-510**

**(MINORELECTIVECOURSE-V)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values

**The Course Learning Outcomes:**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

**ASANA**

Mayurasana, Shirshasana, Eka Pada Skandasana, Vatayanasana, Titibasana, Garbhasana, Shirsha Padangusthasana, Guptasana, Padambakasana, Purna Ustrasana, Vibhaktapaschimottanasana, Karnapidasana

**PRANAYAMA**

Bhramari  
Pranayama Bhastrika  
Pranayama Udgeeth  
Pranayama Murcha Pranayama

**SATKARMA**

Shankh  
Prakshalan Nauli Kriya  
Vastra Dhauti

**DHYAN**

YogaNidra

## SEMESTER-VI

**COURSE CODE: BPE601**

**(MAJOR COURSE-XII)**

**Credit:4**

**Marks: (ESE=70+CCA=30)=100**

### **FUNDAMENTALS OF COMPUTER APPLICATIONS IN PHYSICAL EDUCATION**

#### **Objectives:-**

- **Operate a variety of advanced spreadsheet, operating system and word processing functions.**  
Solve a range of problems using office productivity applications, and adapt quickly to new software releases. Maintain quality assurance through critically evaluating procedures and results.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

- CO-1.** Memorizing the Importance of Computer, characteristics and application.
- CO-2.** Describing the block diagram and classification of the computers.
- CO-3.** Acquiring the knowledge of software, hardware, and storage devices of the computers.
- CO-4.** Determining the role of MS-Word, MS-Excel & MS Power point.
- CO-5.** Define Word processor and its types.
- CO-6.** Applying the concept of prepare the presentation and slide show, animation with function.
- CO-7.** Estimating the working with graph.

#### **Unit-I Concepts of Computer and its basics: (15 Hours)**

1. History, application, characteristics, types of computer (Analog, Digital, Hybrid) and generations of Computer.
2. Physical structure of computer.
3. Use of computer
4. Human V/s Computer
5. Role of computer in various fields
6. Aspects and need of computer in Physical Education.

#### **Unit-II Component of Computer System: An Introduction of Hardware and Soft ware (15 Hours)**

1. Components of computer system
2. CPU (CU, ALU and Main memory)
3. Input devices (Keyboard, Mouse and Track Ball, Touchpad, Joysticks, Touch Sensitive Screens, Data Scanning Device, Bar Code Readers, Optical Mark Reader (OMR) and Magnetic Ink Character Reader (MICR))

4. Output Devices (Monitor, Printer, LCD)
5. Hardcopy Devices (Printers and Plotter)
6. UPS and types of UPS
7. Operating System Programme Languages translator.
8. Application program/package

**Unit-III Operating System :** (15 Hours)

1. Operating system and its functions.
2. DOS, Internal and External DOS Commands
3. Window features
4. Windows accessories- Calculator, notepad, word-pad and paint.
5. Structure of window screen (Desktop, wallpaper, taskbar and icons)
6. Start button

7. Programme, documents, setting search, help and support, run, concept of file and folders and shut down.
8. Virus- Types, symptoms, effects and protection.

#### **Unit-IV MS Office :**

(15 Hours)

1. Work-Introduction to word processor, creating and saving documents, editing and formatting a document, including color, size, font, alignment of text, printing a document, inserting word art, clip art and picture, page sorting, bullets and numbering, inserting tables, creating rows and columns and mail-merge.
2. Power point.
3. Excel- Introduction to excel, need of spreadsheet, creating, opening and saving workbook, editing worksheet, using links, applying different views and types of functions.
4. Internet and its benefits.
5. Types of connections: dial up, dedicated or leased lines, Wi-Fi.
6. Using search engine downloading the information
7. Communication on the Internet: e-mail, chatting and internet newsgroups.

#### **Reference Books**

1. Arora S., "Introduction to Information and Technology", Dhanpat Rai and Co. (Pvt.)Ltd. Education and Technical Publisher (2002).
2. Nasib Fill, "Essential of Computer and Network Technologies", Khana Book Publishing Company Darya Ganj New Delhi.
3. Hussain; "Computer Technology and Application", 1996.
4. Carter Roger, "The Information Technology Handbook", Heinmar Professional Publishing (Ltd.) 1987.
5. Raja Raman V; "Fundamentals of Computer", Prentice Hall of India (Pct) Ltd. 1982.
6. Raja Gopalan R., "Understanding Computers", Tata McGraw Hill Publishing Company Ltd. 1920.

## SEMESTER-VI

COURSE CODE:BPE602

(MAJORCOURSE-XIII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPORTSPSYCHOLOGY

#### Objectives:-

Most people study sport and exercise psychology with two objectives in mind:

(1) to understand how psychological and social factors influence an individual's behavioural outcomes (e.g., sport performance, exercise motivation)

(2) to understand how participation in sport and exercise influences psychological

**The Course learning outcomes (COs):** On completion of the four years B.P.E.S, program, the students will be learning and able to do/perform the following.....

State the Meaning and Definition of Psychology.

**CO-1.** Estimating the stages of Growth and Development.

**CO-2.** Acquiring the knowledge of Individual Differences.

**CO-3.** Estimating the Learning curves.

**CO-4.** Acquiring the knowledge of Individual differences and body types.

**CO-5.** Determining the factors of motivation in Physical Education & Sports.

**CO-6.** Estimating the knowledge of Mental Preparation Strategies.

**CO-7.** Combining the knowledge of Mental Preparation Strategies in relation to Sports performance.

#### Unit-I (13 Hours)

1. Meaning, definition, scope and importance Sports Psychology.
2. Relationship of sports psychology with other sports sciences.
3. Development of sports psychology in India.
4. Psychological factors effecting physical performance.
5. Utility of sports psychology in the field of physical education and sports.

#### Unit-II (16 Hours)

1. Concept of growth and development.
2. Physical, mental, social, intellectual and emotional development in infancy, later childhood and adolescence stages.
3. Learning: meaning, definition and nature of learning.
4. Laws of learning and learning curve.
5. Theories of learning.

#### Unit-III (16 Hours)

1. Meaning and definition of motivation.
2. Types of motivation and motivation in learning.
3. Individual differences its type and nature.
4. Determinants of individual difference:
  - a. Heredity
  - b. Environment
5. Intelligence, its meaning and types.

**Unit-IV** (15 Hours)

1. Meaning, definition and characteristics of personality.
2. Types of personality.
3. Factors affecting personality development.

4. Role of Physical Education and sports in the development of personality.
5. Description of Important psychological terms:
  - a. Anxiety
  - b. Stress
  - c. Self Confidence
  - d. Group Dynamic
  - e. Group Cohesion

### **Reference Books**

1. “Educational Psychology”, Little Field Adms OC. 1979.
2. Cratty B.J., “Psychology in contemporary sports”, Prentice Hall, Englewood Cliffs
3. Kamlesh M.L., “Psychology of Physical Education and sports”, MetropolitanBook Co. (P) Ltd. New Delhi 1983.
4. Sharma Y.P., “Psychology in Physical Education and sports”, Reliance PublishingHouse New Delhi 2000.
5. Singh Ajmer et.al, “Essentials of Physical Education”, Kalyani Publishers LudhianaSecond revised addition 2008.

## SEMESTER-VI

**COURSE CODE: BPE603**

**(MAJOR COURSE-XIV)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **TEST MEASUREMENT AND EVALUATION**

#### **Objectives:-**

- To frame the objectives –
- Test and Measurement helps in setting the target or goal according to the need and requirement.
- By adopting the Test and Measurement techniques the physical education teachers gets an accurate idea about the progress made by the students.

**The Course learning outcomes(COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the meaning and general principles of Test, Measurement &Evaluation

**CO-2.** Discuss the role and Importance of Test, Measurement & Evaluation.

**CO-3.** Acquiring the knowledge of Concept of Physical Fitness

**CO-4.** Determining the role of Endurance

**CO-5.** Calculating and examine the Anthropometric Measurements

#### **Unit-I** (15 Hours)

1. Meaning and definition of test, measurement and evaluation
2. Relationship between test, measurement and evaluation
3. Principles of evaluation
4. Need and importance of test, measurement and evaluation in the field of physical education

#### **Unit-II** (15 Hours)

1. Criteria for test selection
2. Characteristics of an effective test:
  - a. Validity
  - b. Reliability
  - c. Objectivity
  - d. Norms/subjectivity
3. Classification of tests :
  - a. Standardized test
  - b. Teacher made test
4. Construction of a test:

- a. Knowledge test
  - b. Skill test
5. Administration of a test:
- a. Advance preparations
  - b. During test duties
  - c. After test duties

**Unit-III** (15 Hours)

- 1. Meaning and definition of motor ability
- 2. Tests for motor ability:

- a. Barrow motor ability test
- b. Scott motor ability test
3. Meaning and definition of physical fitness
4. Test of physical fitness and cardiovascular endurance test:
  - a. AAHPERD test
  - b. Harvard step test

**Unit-IV** (15 Hours)

1. Specific sports skill test:
  - a. Badminton- French short serve and clear test.
  - b. Basket ball- Johnson basket ball test.
  - c. Kabaddi- Schmithals French test in field Kabaddi.
  - d. Volley ball- SAI Volleyball Test.

**Reference Books:**

1. Clarks H. Harrison; "Application of measurement to health and Physical Education" Prentice Hall Inc., Englewood Cliffs, N.J. 5<sup>th</sup> Edition, 1976.
2. Scott Gladys and French; "Measurement and Evaluation in Physical Education", W.M.C. Brown Co. Publishers, Dubuque, Iowa, 1959.
3. Mathews K. Donald; "Measurement in Physical Education" W.B. Saunders Co., Philadelphia, London (Second Edition).
4. Mayer J.C; "Tests and Measurements in health and Physical Education", AppletonCentury Crafts, Inc. Third Edition.
5. Johnson, Barry L. and Nelso Jack K; "Practical Measurement for Evaluation in Physical Education", Surjeet Publications, 1982.

## SEMESTER-VI

COURSE CODE: BPE604

(ELECTIVE COURSE-VII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPECIALIZATION IN YOGA

#### Objectives:-

- 1- To enable the student to have good health.
- 2- To practice mental hygiene.
- 3-To possess emotional stability.
- 4- To integrate moral values

#### The Course Learning Outcomes (COs):

**CO-1.** The purpose of this course is to create awareness among everyone about yoga that helps in

transforming body and mind and promoting well-being of the society.

**CO-2.** To teach knowledge, skills, proficiency and

teaching techniques necessary for teaching Yoga.

#### Unit-I (16 Hours)

1. Meaning, definition and origin of Yoga.
2. Aims, objectives and scope of yoga.
3. Historical development of yoga in India.
4. Importance of yoga in the modern era.
5. Types of Yoga:
  - a. Gyana Yoga
  - b. Karam Yoga
  - c. Bhakti yoga
  - d. Raj Yoga
  - e. Hatha Yoga
  - f. Mantra Yoga
  - g. Laya Yoga

#### Unit-II (14 Hours)

1. Concept and philosophy of Asthanga Yoga.
2. Constituents of Asthanga Yoga & Shat Chakras :
  - a. Yama
  - b. Niyama
  - c. Asana

- d. Pranayama
- e. Pratyahar
- f. Dharma
- g. Dhyana
- h. Smadhi

3. Role and mode of practice of each step in the attainment of goal.

**Unit-III** (14 Hours)

- 1. Asanas and their importance.
- 2. Classification of asanas:

- a. Meditative
  - b. Relaxative
  - c. Cultural
3. General techniques and benefits with lesson plan any one of the following: Padmasana, Vajrasana, Halasana, Bhujangasana, Sarvangasana, Chakrasana, Dhanurasana, Salabhasana, Paschimotanasana, Mayurasana, Shirshasana.
  4. Technique and benefits of Surya namaskar.
  5. Difference between yoga and general exercises.

**Unit-IV** (16 Hours)

1. Lesson Plan (any one)
2. Concept of Shat Karma (Shudhi Kriyas), Hast Mudras and brief description of the following:  
Neti, Dhوتي, Basti, Nauli, Tratak, Kapalbhathi
3. Meaning and definition of Pranayama, general techniques and physiological benefits of the following :  
Ujjai, Sitkari, Shitali, Bhastrika, Bhramari, Kapalbhathi, Anlom-Vilom
4. Meaning and definition of Hast Mudra and Bandhas.
5. Rule & Regulation of Yoga Competition (All India Yoga Society Reg.)
6. Equipments, Officiating & Coaching

**Reference Books:**

1. "Facts about Yoga", By Shri Jogindera, The Yoga Institute, Santa Cruz, Bombay-55(1975)
2. "The Complete Book of Yoga", By Shre Anand Publishers Orient.
3. "Yoga in Modern Life", By Shri Jogindera, The Yoga Institute Santa Cruz, Bombay-55 (1966).
4. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers, Ludhiana, second revised addition 2008.
5. Ramdev, S. (2006). *Yoga Sadhana and Yoga Chikitsa Rahasya*. Haridwar, India: Divya Prakashan.
6. Ramdev, S. (2009). *Pranayam Rahasya*. Haridwar, India: Divya Prakashan.

## SEMESTER-VI

**COURSE CODE: BPE605**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN HANDBALL

#### Objectives:-

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### The Course Learning Outcomes:

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, Techniques, stances, forms, rules and duties of officials, etc. in the event of Handball.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (14 Hours)

1. Origin and brief history of Handball.
2. Development of Handball in India and worldwide.
3. Establishment of national and international federations/associations of Handball.
4. Major tournaments of Handball.
5. Awards associated with Handball.

#### Unit-II (17 Hours)

1. Measurements and marking of Handball court.
2. Specifications of Handball.
3. Preparation and maintenance of Handball court.
4. Officials, no. of officials and duties of officials in the game of Handball.
5. Technical equipments for officiating.

**Unit-III** (14 Hours)

1. Fundamental skills of Handball :
  - a. Dribbling
  - b. Passing
  - c. Shooting
  - d. Defense
2. Lead-up games.
3. Barrow motor ability test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Handball.
2. Important Signals in Handball.
3. Knowledge of score sheet.
4. Related sports terminologies.

5. Eminent sports personalities associated with Handball.

**Reference Books:**

1. Training Manual of Handball”, NSNIS, Patiala.
2. Phillips, B. E. (2009), “Fundamental Handball”, Kessinger Publishers, USA.
3. Jain, D. (2003), “Play and Learn Handball”, Khel Sahitya Kendra, New Delhi.
4. Surbone, L.M. et. al. (2010),“Team Handball ”, Betascript Publishing Co.,USA.
5. “Official Rule Book of Handball”, International Handball Federation.
6. .

## SEMESTER-VI

**COURSECODE: BPE606**

**(ELECTIVECOURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN VOLLEYBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

- CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Volleyball.
- CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of VolleyBall.
2. Development of VolleyBall in India and worldwide.
3. Establishment of national and international federations/associations of VolleyBall.
4. Major tournaments of VolleyBall.
5. Awards associated with VolleyBall.

#### **Unit-II** (16 Hours)

1. Measurements and marking of VolleyBall court.
2. Specifications of VolleyBall.
3. Preparation and maintenance of VolleyBall court.
4. Officials, no. of officials and duties of officials in the game of VolleyBall.
5. Technical equipments for officiating.

#### **Unit-III** (15 Hours)

1. Fundamental skills of VolleyBall :

- a. Service
  - b. Pass
  - c. Smash
  - d. Blocking
2. Lead-up games.
  3. Barrow motor ability test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of VolleyBall.
2. Important Signals in VolleyBall.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with VolleyBall.

**Reference Books:**

1. Training Manual of Volleyball”, NSNIS, Patiala.
2. American Volleyball Coaches Association (2005), “Volleyball : Skills and Drills”, Human Kinetic, USA.
3. Scates, A.E.(1993), “Winning Volleyball”, W. C. Brown, USA.
4. Sagar, S. K.(1994),“Cosco skill Tactics -Volleyball ”, Sports publication, Delhi.
5. “Official Rule Book of Volleyball”, International Volleyball Federation.

## SEMESTER-VI

**COURSE CODE: BPE607**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN FOOTBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Football.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of Football.
2. Development of Football in India and worldwide.
3. Establishment of national and international federations/associations of Football.
4. Major tournaments of Football.
5. Awards associated with Football.

#### **Unit-II** (17 Hours)

1. Measurements and marking of Football ground.
2. Specifications of Football.
3. Preparation and maintenance of Football ground.
4. Officials, no. of officials and duties of officials in the game of Football.
5. Technical equipments for officiating.

#### **Unit-III** (15 Hours)

1. Fundamental skills of Football :
  - a. Passing
  - b. Kicking
  - c. Trapping
  - d. Heading
  - e. Throw in
2. Lead-up games.
3. Barrow motor ability test.

**Unit-III** (14 Hours)

1. Major rules and regulations of Football.
2. Important Signals in Football.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Football.

**Reference Books:**

1. Training Manual of Football”, NSNIS, Patiala.
2. American Football Coaches Association (2002), “The Football Coaching Bible”, 1<sup>st</sup> edition, Human Kinetic, USA.
3. Sharma, O.P.(2001), “Teaching and Coaching Football”, Khel SahityaKendra, New Delhi.
4. Thani, Yograj (2002), “Coaching Successfully Football ”, Khel SahityaKendra, New Delhi.
5. “Official Rule Book of Football”, Federation International Football Association.

## SEMESTER-VI

### PRACTICAL

#### MARKING&OFFICIATINGIN GAMES

**COURSE CODE: BPE-P-608**

**(ELECTIVE GROUND COURSE-XI)**

**Credit:4** Marks=100 (120Hours)

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes:**

- Know the role of and the correct terminology used by a Marker
- Know the role of and the correct terminology used by a Referee
- Know the correct times allowed for various intervals during a game of squash
- Know the rules relating to the serve
- Understand the basic rules relating to interference on court
- Know the different categories relating to injuries and the times allowed for recovery (including for bleeding)
- Have a basic knowledge of the Conduct Rule and when it can be used

**SEMESTER-VI**  
**PRACTICAL**  
**MARKING&OFFICIATING IN ATHLETICS**

**COURSE CODE: BPE-P-609**

**(ELECTIVE GROUND COURSE-XII)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

**The Course Learning Outcomes:**

- Know the role of and the correct terminology used by a Marker
- Know the role of and the correct terminology used by a Referee
- Know the correct times allowed for various intervals during a game of squash
- Know the rules relating to the serve
- Understand the basic rules relating to interference on court
- Know the different categories relating to injuries and the times allowed for recovery (including for bleeding)
- Have a basic knowledge of the Conduct Rule and when it can be used

Lessonsonmarkingandofficiatingonanytwoevents(oneontrackandonefieldevent)ofathleticsoveredinthepractical'scoursecontentofB.P.E.course(SemesterItoV).

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons on marking & officiating in athletics and games (5 lessons each in athletics & games). In addition each trainee shall complete 1 assignment each in marking & officiating in athletics & games.
2. For the purpose of examination in practical's one lesson each in marking and officiating of respective games & athletic events is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its

weight age.

The contents of teaching for each activity are as follows:-

1. Measurements & marking of track & field events and play fields of games.
2. Equipments & specification of equipments.

3. Rules & regulations of athletic events and games.
4. Related books & magazines.
5. Officiating :
  - a). Duties of official
  - b). Knowledge of score sheets
  - c). Officiating signals
  - d). Technical equipment for officiating
  - e). No. and types of officials.

## **SEMESTER-VI PRACTICAL**

**(Fundamental of Computer Application In Physical Education Practical)**

**COURSECODE:BPE-P-610**

**(MINOR ELECTIVELAB COURSE-VI)**

**Credit:4**

**Marks=100**

**(120Hours)**

### **Objectives:-**

- **Operate a variety of advanced spreadsheet, operating system and word processing functions.**  
Solve a range of problems using office productivity applications, and adapt quickly to new software releases. Maintain quality assurance through critically evaluating procedures and results.

### **The Course Learning Outcomes:**

- CO-1.** Memorizing theImportance ofComputer, characteristics and application.
- CO-2.** Describing the block diagram and classification of the computers.
- CO-3.** Acquiring the knowledge of software, hardware, and storage devices of the computers.
- CO-4.** Determining the role of MS-Word, MS-Excel& MS Power point.
- CO-5.** Define Word processor and its types.
- CO-6.** Applng the concept of prepare the presentation and slide show, animation with function.
- CO-7.**Estimating the working with graph.

1. M.S. Word :
  - a. Creating Document
  - b. Typing Text
  - c. Text Formatting

- d. Inserting Tables, rows and columns
  - e. Mail- Merge
  - f. Page Formatting
2. Excel:
    - a. Creating Spread Sheet and Sorting
  3. Power Point Presentation:
    - a. Creating PPT's
  4. Creating e-mail, Id and Web-browsing.





University of Patanjali Haridwar



Department of Psychology

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<b>c.</b>	Program Specific Outcomes (PSOs)
<b>d.</b>	Eligibility of Admissions
<b>2</b>	Structure of the Courses
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<b>b.</b>	Semester II
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## Department of Psychology

University of Patanjali

Haridwar

### M.A Psychology with specialization in Clinical Psychology

(w.e.f. Academic Session: 2019-20 )

#### 1. Program Educational Objectives (PEOs):

PEO1	Promotion of holistic health with the knowledge of Clinical Psychology.
PEO2	Application of scientific knowledge to understand and interpret psychological phenomena.
PEO3	Engagement in innovative and integrative thinking of psychotherapies.
PEO4	Apply psychological concepts and skills to career goals.
PEO5	Apply ethical standards to conduct and evaluate psychological science and practice.

#### 2. Program Outcomes (POs):

PO1	Use scientific Knowledge to understand and interpret psychological phenomena.
PO2	Applications of Rational thinking approach in the solution of problems.
PO3	To promote the ability to work with <i>Manoyoga</i> (passion).
PO4	Use psychological principles to understand local, regional, national and international issues.
PO5	Apply psychological principles and theories to serve and improve one's community.

#### 3. Program Specific Outcomes (PSOs):

PSO1	Students will be able to create Yogic-Psychological environment in different areas of life.
PSO2	Students of Psychology will be able to have unconditional positive regard and empathy towards others.
PSO3	Students will learn to work in a team and develop leadership qualities.
PSO4	Students will be able to conduct short empirical researches so that they develop an understanding about application of statistics and research methodologies.
PSO5	Students will be able to apply psychological principles and theories to serve and improve one's community.

## Eligibility of Admissions

The course requirements for the degree of M.A Psychology with specialization in Clinical Psychology have been designed with the objective to provide comprehensive knowledge and training with research orientation in the details of modern Psychology. The students shall have to pass in the theory and practical papers separately.

**Eligibility for Admission:** Bachelor's Degree in any discipline from UGC recognized University/Institute. Reservation will be as per University/ Central Government Rules.

**Duration:** Four semesters (Two years course)

The distribution of theory and practical papers for M.A I year and II year examinations (semester wise) is as follows-

### FIRST YEAR (M.A. PART-I)

#### I Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-101	Yoga Psychology	30	70	100
MAP-102	Statistical techniques and experimental designs	30	70	100
MAP-103	Social Psychology	30	70	100
MAP-104	Biological foundations of behaviour	30	70	100
MAP-105	Practicum	30	70	100
	Total Marks			500

#### II Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-201	Research Methods	30	70	100
MAP-202	Positive Psychology	30	70	100
MAP-203	Cognitive Psychology	30	70	100
MAP-204	Theories of Personality	30	70	100
MAP-205	Practicum	30	70	100
	Total Marks			500

**Important:** In second year (Semester III and IV). Clinical Psychology course (**Group-A**) will be run by the department and five **days educational tour** to visit Mental Health Institution and **one month internship** should be mandatory.

## SECOND YEAR (M.A. PART-II)

### Group A: Clinical Psychology

#### III Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-301	Health Psychology	30	70	100
MAP-302	Psychopathology	30	70	100
MAP-303	Clinical Psychology	30	70	100
MAP-304	Psychometry	30	70	100
MAP-305	Practicum	30	70	100
	Total Marks			500

#### IV Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-401	Guidance and Counseling Psychology	25	70	100
MAP-402	Psychological Testing	25	70	100
MAP-403	Therapeutic techniques	25	70	100
MAP-404	Dissertation/Project work	25	70	100
MAP-405	A report of the academic tour/survey in mental Health Institution/in clinical situation prepared by the students	25	70	100
	Total Marks			500

\*Dissertation/Project work will be of 100 marks.

**SEMESTER-I**  
**CODE: MAP 101**  
**Yoga Psychology**

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**Marks-70**  
Time- 03 Hrs

### **Course Objectives:**

- To initiate the understanding of psychological knowledge within yoga and meditation linking with the idea of mental health and well-being.
- To deepen the practice of yoga and meditation systems and linking to applications in various contexts.

### **Course Outcomes (COs):**

After completion of the course students will be able:

- CO 1- To achieve spiritual and mental wellbeing.
- CO 2- To promote ancient Indian Knowledge.
- CO 3 -To understand human behaviour as per Yogic Perspectives.

### **Course Contents**

**Unit 1: Yoga Introduction:** Definition and meaning of Yoga, Historical Development of Yoga over the ages including a brief philosophical overview (Patanjali yoga)

**Unit 2: Yoga in Modern Context:** Vivekananda's framework of Raja Yoga; Karma Yoga, Swami Ramdev and his ideas.

**Unit 3: Yoga school in contemporary context:** Bihar school of Yoga, Art of living and Sri SriRavi Shankar, Integral Psychology by Sri Aurobindo.

**Unit 4: Fundamental text of Yoga Psychology 1:** Samadhi Paada- Concepts Svaroop, Samsskara, Vasana, Viveka, Vairagya and Ishwar.

**Unit 5: Fundamental text of Yoga Psychology-11:** Saadhana Paada- Kriya Yoga, Tapas, Svadhyaya, Ishwar Pranidhana, Kleshas, Avidya, asmita, raga-dvesa, abhinivesha, yama, niyampranayama, pratyahara, two yoga therapies: Meditation and yognidra (with practical knowledge).

### **Books Recommended:**

- Taimni, I. K. (1961). The science of yoga. Adyar, India: The Theosophical Society of India.
- Feuerstein, G. (2002). The yoga tradition: Its history, literature, philosophy and practice. Delhi, India: Bhavana Books and Prints.
- Jacobsen, K. A., Larson, G. J. (2005). Theory and practice of yoga: Essays in honour of Gerald James Larson. Leiden, Holland: Brill.
- Vivekananda, S. (1982). Raja yoga or conquering the internal nature. Calcutta, India: Advaita Ashram.

Semester- I  
Code: MAP 102  
**Statistical Techniques and Experimental Designs**

**Marks-70**  
Time- 03 Hrs

**Course Objectives (COs):**

- To develop an understanding of various statistical techniques in terms of their Applications
- To create understanding about different types of Design employed in Psychological Research

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO 1- To collect organizes, interpret and analyze of psychological data in various fields of life.
- CO 2- To obtain scientific results by using different statistical methods.
- CO 3- To utilize statistical knowledge in various fields of science and arts.

**Course Contents**

- Unit 1** : **Measures of Variability:** NPC- Characteristics & Applications of Normal Probability Curve, Average Deviation, Quartile and Standard Deviation.
- Unit 2** : **Test of Statistical Significance:**Significance of difference between means: CR and 't' test (Correlated & Uncorrelated). Analysis of variance (one way and two ways), Non-Parametric Statistics:Chi-Square test, Sign Test, Median Test. Difference between parametric and non-parametric statistics.
- Unit 3** : **Correlation Methods:** Concept and Significance of correlation methods, Product Moment Correlation (Ungrouped Data), Rank Difference Correlation, Bi-serial, Point Bi serial, Phi contingency.
- Unit 4:** **Regression and Prediction:** Partial and Multiple (Introduction only not numerical).
- Unit 5** : **Introduction to Experimental Design:** Randomized group design, Block design, within group design, factorial design.

**Note:**

1. Students can use simple calculator (Without Programming/Nonscientific) during the Examination.
2. Statistical Tables will be provided during the Examination.

**Books Recommended:**

1. Gareett, H.E. (2005). Statistics in Psychology and Education. New Delh. Paragon International Publishers.
2. Haslam, S.A., &Mcarty, C. (2003). Research Methods and Statstics in Psychology. London: Sage Publication.
3. D. Howitt, D., & Cramer, D. (2000). An Introduction to Statistics in Psychology. London: Pearson Education.

## Semester- I

Code: MAP 103

### Social Psychology

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To understand the use of social psychological perspectives to explore human experiences and behaviour within social situations or socio-historical context.
- To develop insight about the basic assumptions and scope of social psychological perspectives.
- To explore the use of social psychological perspectives in addressing the issues and problems of the real world.

#### Course Outcomes (COs):

After completion of the course, students will be able to:

- CO 1- Describe a broad social perspective towards social issues.
- CO 2- Present scientific solutions of social problems.
- CO3 – Explain intergroup relationship.

#### Course Contents

**Unit 1: Introduction to Social Psychological Perspectives:** Nature and scope of Social Psychology, Methods of Social Psychology: Experimental, Survey, Field Studies and Questionnaire.

**Unit 2: Social Influence and Responding to Social Situations:** Social facilitation, social loafing, Social perception, attitude and its change within cultural context, aggression and ways to manage aggression.

**Unit 3: Intergroup relations:** Group dynamics, leadership style and effectiveness, theories of intergroup relations (relative deprivation theory, realistic conflict theory, conflicts and resolution).

**Unit 4: Socialization:** Agents, process and characteristic of socialization, determinants of socialization, communication and language.

**Unit 5: Social Conformity and Social Problems:** Social Conformity, Conformity Bias, Impact of Feedback and Non-Conformity, Social Problems: Poverty and Deprivation, Gender Issues and Social Violence.

#### Books Recommended:

1. Baron, R.A. & Byrne, D. (2000). Social Psychology, New Delhi: Prentice Hall of India Pvt. Ltd.
2. Fraser, C. & Burchell, B. (2001). Introducing Social Psychology. Madlen: Blackwell.
3. Myers, D. (2007.) Social Psychology. New Delhi: Cengage Learning.
4. Singh, A.K. (2009). An outline of Social Psychology. New Delhi: Motilal Banarasi Das.
5. S. Mohamad (2009). Advanced Social Psychology. New Delhi: Motilal Banarasi Das.

Semester- I  
Code: MAP 104

## **Biological Foundations of Behavior**

**Marks-70**  
**Time- 03 Hrs**

### **Course Objectives:**

- To learn about biological foundations of behavior.
- To understand about physiology and importance of brain functions.

### **Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1- Describe causes of human behaviour as per biological perspectives.
- CO 2- Control and manage the physiological changes of one's own body.
- CO3 – explain neurological understanding about human behaviour.

### **Course Contents**

- Unit 1** : **Introduction to Physiological Psychology** (Meaning and definition), nature and scope of Physiology Psychology.
- Unit 2** : **Central Nervous System:** Structure and functions of human brain (spinal cord, medulla oblongata, cerebellum, thalamus and hypothalamus, cerebrum.)
- Unit 3** : **Peripheral Nervous System:** Cranial nerves and spinal nerves, Sympathetic and Para- Sympathetic nervous system- structure and functions, Endocrine glands and Psychological functions.
- Unit 4** : **Brain and behavior:** Mechanism of Hormonal action, Reproductive behavior, sleep and biological rhythm.
- Unit 5** : **Recent advances in neurophysiology:** hemispheric specialization and localization.

### **Books Recommended:**

1. F. Leukel. (1985). Introduction to Physiological Psychology. New Delhi: CBS Publishers and Distributors.
2. Tiwari, G & Pal, R. (1985). Experimental Psychology: A Dynamic Approach. Agra: Vinod PustakMandir.
3. Morgan, C.T. (1965). Physiological Psychology. New York: McGraw Hill.
4. Tiwari, B.D. (2001). Modern Physiological Psychology. Varanasi: MotilalBanarasidas.

Semester- I  
Code: MAP 105  
**Psychology Practicum**

**Course Objectives:**

- The course aims to deliver practical and in-depth experience in accordance to the principles learnt in the theory courses covering the areas of verbal learning, memory, forgetting etc.
- To provide the students with the practical knowledge of conducting various experiments and Psychological Tests.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1-Describe the basic concepts of psychological testing.
- CO 2- Measure various psychological characteristics.
- CO 3- Compare individual differences.

**List of Practicals:**

➤ **Any five of the following:**

1. Marital Adjustment Inventory
2. Emotional Competency
3. Depth Perception
4. Eysenck Personality Inventory
5. Sixteen Personality Factors
6. Retroactive Interference
7. Reaction time
8. Division of attention
9. Mirror Drawing Apparatus
10. Effect of noise of attention

➤ **Division of Marks:**

- |                               |   |          |
|-------------------------------|---|----------|
| • Conduction of 02 Practicals | : | 40 Marks |
| • Viva Voce                   | : | 35 Marks |
| • Practical Record Book       | : | 15 Marks |
| • Internal Viva-Voce          | : | 10 Marks |

Total : 100 Marks

**Note:** Any five practicals shall be conducted /administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

**Semester- II**  
**Code: MAP 201**  
**Research Methods**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To inform students about the basics of scientific research in applied psychology.
- To make them learn the statistical rigors in designing research and processing data.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1- To conduct short empirical research.
- CO 2- To prepare and present scientific research report in various fields of life.
- CO 3- To prepare research reports.

**Course Contents:**

- Unit 1 : **Research Process:** Nature of research, Problem and hypothesis, Variables: selection, manipulation and control of independent and extraneous variables, measurement of dependent variables.
- Unit 2 : **Types of Research:** Experimental, Quasi Experimental, Correlation Research and Ex-post facto research.
- Unit 3 : **Sampling:** Meaning, Purpose and Types, Sampling error, Factors affecting sampling error.
- Unit 4 : **Methods of Data Collection:** Observation, Interview and questionnaire, content analysis, sociometry method.
- Unit 5 : **Report Writing** – Research Report Writing based on APA Style. Ethical issues in psychological research – APA ethics code.

**Books Recommended:**

1. K.D. Broota (1992). Experimental Design in Behavioural Research, New Delhi: Willey Eastern.
2. F.N. Ferlinger (1973). Foundation of Behavioural Research, Delhi: Surjeet Publications.
3. A.K. Gupta and R. Singh (2009). Research Methodology, New Delhi: Vayu Education of India.
4. L.H. Kidder (1981). Research Methods in Social Science. Tokyo: Holt Saunders.
5. Mohsin: Research Methods in behavioural Sciences, New Delhi; Longman

Semester- II  
Code: MAP 202

## **Positive Psychology**

Marks-70  
Time- 03 Hrs

### **Course Objectives:**

- To recognize what contributes/does not contribute to happiness.
- To understand the right kind of vocation relationship and values in life that enhances one's well-being
- To recognize the role of positive emotions and traits in enhancing happiness.

### **Course Outcomes (COs):**

After completion of the course, students will be able:

- CO 1- To know and apply the true meaning of life.
- CO 2- To create happy and healthy ambiance.
- CO 3- Explain the importance of holistic wellbeing.

### **Course Contents:**

1. **Introduction: Positive psychology:** meaning, definitions, nature, goals and relation with other fields.
2. **Happiness and well-being:**Happiness: concept and definitions, happiness and facts of life, gender, love, marriage, close relationships and others.
3. **Emotion, personality traits and well-being:** Emotional Intelligence, Positive emotion and well-being, positive beliefs and illusions.
4. **Virtues, character strengths and well-being:**Classification of human virtues, religion, spirituality, religion and virtue: Buddhism, Islam and Hinduism.
5. **Positive Health and Positive change:** meaning of positive health, stages of change process.

### **Books recommended:**

- Kumar, V., Archana, & Prakash, V. (2015). Positive Psychology-Application in work, health and well-being. Delhi& Chennai, India:Pearson.
- David, S, A., Boniwell, I & Ayers, A.C. (2013) The oxford handbook of happiness. Oxford: Oxford University.

## Semester- II

Code: MAP 203

### **Cognitive Psychology**

Marks-70

Time- 03 Hrs

#### **Course Objectives:**

- To learn about basic psychological processes through scientific experiments.
- To understand various mental processes: Attention and consciousness, Memory processes, Reasoning and decision making.

#### **Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- Provide an in-depth understanding of some of the cognitive processes in terms of current theories, models and applications.
- CO2 -Help learners understand the importance of these cognitive processes in everyday life.
- CO3- Become creative and decision oriented.

#### **Course Contents:**

- Unit 1 : **Attention and Perceptual Processes:** Attention: Concepts and Mechanisms, factors affecting attention, Perception – Figure- ground organization. Perception of depth and movement, Perceptual constancy – Brightness, size and shape.
- Unit 2 : **Memory and Forgetting:** Memory – Types of memory (STM and LTM). Methods and Material, determinants of memory. Forgetting – Concepts, Causes and theories of forgetting – Interference Theory (Behaviouristic) and repression theory.
- Unit 3 : **Thinking and Problem solving:** Thinking – Meaning and Types, Language and thinking. Problem solving – Nature, factors affecting problem solving and strategies.
- Unit 4 : **Verbal Learning:** Nature, materials and methods of verbal learning, Determinants of verbal learning and transfer of learning.
- Unit 5 : **Creativity and decision Making: Meaning and nature, Factors affecting decision making, improving Decision Making.**

#### **Books Recommended:**

1. M.R. D'Amato (1979). Experimental Psychology: Methodology, Psychophysics and learning. New Delhi: Tata McGraw Hill.
2. B.E. Goldstein (2002). Sanstationand Perception. USA: Wadsworth.
3. J.W. Kling and L.A. Riggs (1984). Woodworth and Schlosberg's Experimental Psychology. New Delhi: Khosla Publishing House.
4. R.L. Solso (2001). Cognitive Psychology, Singapore: Pearson Education.

Semester: II  
Code: MAP 204  
**Psychology of Personality**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To develop an understanding of the concept of individual difference.
- To develop an appreciation of the biological and social impact on personality.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1- Achieve and maintain dignity of human behaviour.
- CO 2- Built organized personality.
- CO 3 – Explain importance of Indian virtues.

**Course Contents**

- Unit 1 : **Concept and Definition of Personality:** Meaning and definition of Personality, Views on self and Personality: Upanishadic, Gita and Buddha
- Unit 2 : **Determinants of Personality:** Importance of heredity in the development of personality, Role of biological factors: Direct genetic effect; mediated effect through environment factors: Physical and socio- cultural impact.
- Unit 3 : **Trait and type Approaches:** Allport, Cattell, Eysenck and Big Five Factors Models.
- Unit 4 : **Personality of individual differences:** Biological and social explanation of gender differences in Personality, Trigun theory of Personality.
- Unit 5 : **Recent advances in Personality Research:** Human Strength and virtues: Learned Helplessness.

**Books Recommended:**

1. G.C. Hall, G. Lindzey and J.C. Campbell (1998). Theories of Personality. New York: John Wiley and Sons.
2. W. Mischel (1976). Introduction to Personality. New York: Holt Reinhart and Winston.
3. R.M. Rchman (2000). Theories of Personality. USA: Thomson Wadsworth.
4. R. Frager and J. Fadiman (1998). Personality and Personal Growth, New York : Longman.
5. J.M. Burger (2004), Personality. USA: Thomson Wadsworth.

Semester- II  
Code: MAP 205  
**Psychology Practicum**

**Course Objectives:**

- To provide a understanding of psychological tests having applications in clinical practice.
- Exposure to the general concepts of psychology through experimentation and testing.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO -1 Detect various mental diseases through psychological tests.
- CO - 2Provide scientific report of psychological qualities.
- CO-3Compare individual differences.

**List of Practicals:**

**Any Five of the following:**

1. Defense Mechanism
2. Emotional Maturity Scale
3. Attribution Style
4. Adjustment Inventory
5. Mental Health Scale/Inventory
6. Muller Lyer
7. Two Hand Coordination
8. Maze learning
9. Aggression Scale
10. Judging Emotions by Photographs

**Division of Marks:**

Conduction of 02 Practicals	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
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Total	:	100 Marks
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Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

Semester- III  
Code: MAP 301  
Group A: Clinical Psychology  
**Health Psychology**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To familiarize with the concept of health psychology to live healthy life.
- To orient the students about management of stress.

**Course Outcomes (Cos):**

After completion of the course, students will be able to:

- CO 1- Maintain a holistic approach of health.
- CO 2 - Promote Indian psycho-yogic views of health in the society.
- CO 3- Describe conceptual knowledge of behavioural health.

**Course Contents**

- Unit 1: **Concept of Health:** Definition of Health, Biopsychosocial model VS biomedical model. Interaction of biopsychosocial variables, clinical implication of biopsychosocial model, cross cultural perspective of health.
- Unit 2: **Social and Environmental Factors:** Global health trends, Health care systems, socio-economic factors in health, Gender and Health.
- Unit 3: **Stress and Coping:** Meaning and sources of stress, Stress as stimulus and Response, techniques of coping, Stress related health problems: – cardiovascular disease: hypertension, stroke, diabetes.
- Unit 4: **Modification of Health Behaviour:** Changing health beliefs, self observation and self monitoring, Health enhancing behaviour – Exercise, accident prevention and weight control.
- Unit 5: **Behavioural health:** Effect of smoking, interventions to reduce smoking, effects of alcohol, preventing alcohol.

**Books Recommended:**

1. Baum, A., R.J. Gatchel, R. J. & Krantz, D.S (1997). An Introduction to Health Psychology. New York: McGraw Hill.
2. Baum, A., Revenson, T.A & Singer, J.E. (2001). Handbook of Health Psychology. New Jersey: Lawrence Erlbaum.
3. Dimatteo, M.R. & Martin, L.R. (2010). Health Psychology. New Delhi: Dorling Kindersley Pvt. Ltd.
4. Khokhar, C.P. (2007). A Text Book of Stress Coping and Health Meerut: Shalab Publication

Semester- III  
Code: MAP 302  
Group A: Clinical Psychology  
**Psychopathology**

Marks-70  
Time- 03 Hrs

### Course Objectives:

- To develop understanding of the various manifestations of psychopathology.
- To familiarize with DSM IV and ICD II to classificatory systems in the context of diagnosis of various psychiatric/psychological disorders.

### Course Outcomes (COs):

After completion of the course, students will be able:

- CO-1 To understand nature, aetiology and prevention of mental health issues.
- CO-2 To develop skills for diagnosis and classification of mental disorders.
- CO-3 To prepare mental status examination.

### Course Contents

**Unit 1: Approaches to Psychopathology:** overview of latest version of Diagnostic and statistical Manual (DSM) International classification of diseases. Biological, Psychodynamic, behavioural, cognitive, Socio-cultural.

**Unit 2: Anxiety disorders:** Approaches and etiology of generalized anxiety disorder, panic disorder, phobia, obsessive-compulsive disorder and post traumatic stress disorder.

**Unit 3: Psychotic disorders:** Approaches and etiology of Schizophrenia, Paranoid and mood disorders.

**Unit 4: Cognitive Impairments:** Approaches and etiology of delirium, dementia and amnesic syndromes, dementia of the Alzheimers type.

**Unit 5: Substance Related Disorders:** Alcohol Dependence, Short-term effects of Cannabis.

### Books Recommended:

1. Buss, A.H. (1999). Psychopathology. New York: John Wiley and Sons.
2. Lamm, A. (1997). Introduction to Psychopathology. New York : Sage Publications
3. Davison, G.C., & Neals, J.M. (1996). Abnormal Psychology. New York: John Wiley and Sons.
4. Mohanty, G.B. (1998). Text Book of abnormal Psychology. New Delhi: Kalyani Publishers.

Semester- III  
Code: MAP 303  
Group A: Clinical Psychology

**Clinical Psychology**

Marks-70

Time- 03 Hrs

**Course Objectives:**

- To familiarize with the history and development of clinical psychology as a field in India and its evolving professional identity.
- To orient students to major theoretical models which guide clinical psychological practice and research
- To orient about clinical assessment process and its application in various domains.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To describe the basic concepts of clinical psychology.
- CO-2 To assist clinical psychologists and psychiatrists
- CO-3 To assess and prepare a treatment plan under clinical setting.

**Course Contents:**

**Unit 1: Clinical Psychology:** meaning and nature of clinical psychology, professional issues: roles, skills and ethics.

**Unit 2: Psychoanalytic approach:** Brief orientation to four psychoanalytic psychologies: Drive, Ego, Object relations and Self-personality, understanding of psychological defences.

**Unit 3: Other approaches of clinical psychology:** Behavioural approach, humanistic approach, attempt at integration: bio-psycho-social.

**Unit 4: Clinical assessment:** Meaning and stages of Clinical interview with its merits and demerits, case history

**Unit 5: Areas of application:** Intellectual and educational, personal and interpersonal.

**Books Recommended:**

1. Llewelyn, S., Murphy, D. (Eds.) (2014). What is clinical psychology? Oxford UK: Oxford University Press.
2. Bellack, A. S., & Hersen, M. (1980). Introduction to clinical psychology. New York: Oxford University Press.
3. Korchin, S. J. (1986). Modern clinical psychology. Delhi: CRR Publishers and Distributors.
4. Ray, S. D. (1996). The practice of psychotherapy. New Delhi: New Age International.

Semester- III  
Code: MAP 304  
Group A: Clinical Psychology  
**Psychometry**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with Psychometry and psychological measurement.
- Criteria of psychological test and the steps used in test construction.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To create critical understanding of measurement issues and techniques in psychological inquiry
- CO-2 To develop skills and competencies in test construction and standardization
- CO-3 To learn the application and contextual interpretation of data from psychological measurement

**Course Contents**

- Unit 1: **Foundations of Psychometric:** Basic of measurement theory, Speed vs. power test, nature of psychological testing.
- Unit 2: **Test Construction:** Item writing – method of scoring, step use in test construction, Item analysis – meaning and purpose, items difficulty, difficulty value and index of discrimination.
- Unit3: **Standardization of tests:** Types of norms, specificity of norms.
- Unit 4: **Reliability and Validity:** Meaning of reliability, Methods – test retest, internal consistency/ split half. Factors influencing reliability of a test. Validity – meaning, types-content, criterion, predictive, concurrent and construct validity. Factors influencing validity of the test.
- Unit 5: **Application of Tests:** Applications of Psychological testing in various settings- education, counseling and guidance, and ethical issues.

**Books Recommended:**

1. Chadha, N.K. (2009). Applied Psychometry. New Delhi: Sage Publications.
2. Guilford, J.P. (1989). Psychometric Methods, New Jersey: John Wiley and Sons.
3. C. Jackson (2003). Understanding Psychological Testing, Mumbai: Jaico Publishings House.
4. Nunnally, J.C. (1978). Psychometric Theory. New York: McGraw Hill.
5. Chandha, N.K. (1996). Theory and Practice of Psychometry. New Delhi: New Age international Publishers.

Semester- III  
Code: MAP 305  
**Psychology Practicum**

**Course Objectives:**

- To provide an understanding of psychological tests having applications in clinical practice.
- Exposure to the general concepts of psychology through experimentation and testing.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO-1 Demonstrate working knowledge of report writing and providing psychological consultancy in various setting.
- CO-2 Developing an appreciation of how psychological tests can be applied to real life settings.
- CO-3 Compare individual differences.

**List of Practical:**

**Any Five of the following:**

1. Rorschach
2. T.A.T.
3. PGI Health Questionnaire
4. Depression Scale
5. Rosenberg Self Esteem
6. Self Concept Rating Scale
7. Sportsman Spirit Test
8. The group test of general mental ability
9. Draw a man test
10. Eight State Questionnaire

**Division of Marks:**

Conduction of 02 Practical	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks

Total : 100 Marks

**Note:** Any five practicals shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

Semester- IV  
Code: MAP 401  
Group A: Clinical Psychology  
**Guidance and Counseling Psychology**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain the knowledge about guidance and counseling
- Importance of counseling in real life.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To understand bio- psycho-social issues of human life as per psychological perspectives.
- CO-2 To assist clients under the supervision of clinical psychologists in various areas of life.
- CO-3 To provide counselling in school, college and university levels.

**Course Contents:**

- Unit 1 : **Counseling Psychology: Meaning and nature of guidance and counseling, Ethical issues in counseling, Distinctions between counseling and Psychotherapy.**
- Unit 2 : **Expectations and goals of Counseling:** Goals and expectations, Process, Characteristics of counselors, Role and functions of the counselors and their professional training.
- Unit 3 : **Theoretical Approaches to Counseling:** Psychoanalytic, Behavioral, Rational- Emotive Behavior Therapy, Client Centered and Transactional Analysis.
- Unit 4 : **Areas of Counseling:** Educational, Career, Family and Marital, Gerontological and Weaker Sections, Stress Management Oriented Counseling.
- Unit 5 : **Future of Counseling:** The future and status of counseling with special reference to India.

**Books Recommended:**

1. C.J. Gelso and B.R. Fretz (1995). Counselling Psychology. Bangalore: Prism Books Pvt. Ltd.
2. V.R. Patri (2001): Counselling Psychology, New Delhi : Authors Press.
3. S.N. Rao (2002). Counselling and Guidance, New Delhi : McGraw Hill
4. A. David (2004). Guidance and Counselling. New Delhi: Common Wealth Publishers.

Semester- IV  
Code: MAP 402  
Group A: Clinical Psychology  
**Psychological Testing**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with psychological testing and its nature and functions
- To create understanding about different types of testing.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1-To administer psychological testing in various settings like school, hospitals and NGO.
- CO2-To provide help in the assessment of mentally retarded and physically handicapped persons
- CO3- To explain about various types of psychological testing.

**Course Contents**

- Unit 1: **Psychological Test:** Nature, Uses, Functions and Types of Psychological Tests. Test Administration- Effects of examiner and situational variables. Test-takers perspective, Effects of training on test performance.
- Unit 2: **Measurement of Aptitude and Abilities:** Group Tests – Multidimensional Aptitude Battery, Multilevel Aptitude Batteries – Cognitive Ability Test. Multiple Aptitude Test Batteries- Differential Aptitude Test
- Unit 3: **Personality Testing:** Self Inventories – MMPI, EPPS, 16PF, Neo Personality, Inventory, Projectivetechniques: TAT, Rorschach test.
- Unit 4: **Interest Inventories:** Strong interest Inventory, Kuder Interest Inventory, Jackson's Vocational Interest Inventory.
- Unit 5: **Tests for special Population:** Infant and Pre-school testing, Assessment of mentally retarded and physically handicapped.

**Books Recommended:**

1. A. Anastasi (1998). Psychological Testing. New Delhi : McMillan.
2. Paul Kline (1993). The Hand Book of Psychological Testing. London Poutlege.
3. K.R. Morphy and C.O. Davidshofer (1988). Psychological Testing: Principles and Application. New Jersey: Prentice Hall of India Pvt. Ltd.
4. F.S. Freeman (1971). Theory and Practices of Psychological Testing. New York: Oxford Press.
5. L.J. Cronbach (1972). Essentials of Psychological Testing. New York: Harper and Row.

## Semester- IV

Code: MAP 403

### Group A: Clinical Psychology Therapeutic Techniques

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To gain knowledge about different therapies
- To create understanding and awareness about the use of therapies in professional life.

#### Course Outcomes (COs):

After the completion of this course students will be able:

- CO1-To apply psycho - therapeutic knowledge in practical life.
- CO2-To assist psychotherapist and clinical psychologist.
- CO3- To explain the basic utility of psychotherapies.

Unit 1: **Psychotherapies:** Concept, Roles and responsibilities, The Client and therapist Relationship, Ethical issues.

Unit 2: **Psychodynamic Therapy:** Freudian Psychoanalysis, Alfred Adler and Erik Erikson.

Unit 3: **Behaviour Therapy:** Guided Exposure, Systematic desensitization, Aversion Therapy, Assertion training, Modeling, Biofeedback.

Unit 4: **Cognitive Behaviour Therapy:** Beck's Cognitive Therapy, Rational emotive behavior Therapy, Michenbaum's cognitive behaviour therapy.

Unit 5: **Humanistic Therapies:** Person centered therapy- Gestalt Therapy, existential therapy. Transactional therapy, Interpersonal Relationship Therapy- Marital and Family Systems Therapy.

#### Books Recommended:

1. G. Corey (2001). Theory and Practice of Counselling and Psychotherapy. Belmont CA: Brooks Cole.
2. S. Culari (1998). Foundations of Clinical Psychology. New York: Allyn and Bacon.
3. T. Plante (2005). Contemporary Clinical Psychology, New York: John Wiley and Sons.
4. R. Erskine (1988) Integrative Psychotherapy in Action, New York: Sage Publications
5. M.B. Ghorpade and V.B. Kumar (1988). Introduction to Modern Psychotherapy. New Delhi: Himalaya Publishing House.
6. A Bandura (1969). Principle of Behaviour Modification. New York: Holt Rinehard and Winston.
7. G.D. Rastogi (1991). Psychopathology and Treatment. New Delhi: Wiley Eastern Ltd.

**Semester- IV**  
Code: MAP 404  
Group A: Clinical Psychology  
**Dissertation**

**Course Objectives:**

- Assess the student's mastery of the factual information, the theoretical concepts, and the methodological approaches in his/her field.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- conduct original research including: Literature review and generation of hypothesis
- CO2- Explain and apply an appropriate technique of research methodology and Statistical analysis of data.
- CO3- Produce final dissertation outcomes of a high professional standard.

**Eligibility Criteria:**

The students securing a minimum of 60% marks in total in I, II and III Semester examination (Subject to clearing all the theory and practical papers) will have an opportunity to select a Dissertation Work (100 Marks) in lieu of only 4<sup>th</sup> paper of IV semester. The student opting for Dissertation will select a topic related to his/her group of specialization (Clinical Psychology) with the help of supervisor (one of the faculty member) and later on submit an application along with relevant information through the supervisor to the Head of the Department within 30 days from the declaration of the result of III semester. The students securing less than 60% marks in total I, II, and III will have prepare project report. The dissertation in typed form (two copies) following APA manual between seventy-five to hundred pages shall be submitted on or before 30<sup>th</sup> April to the Head of the Department along with Supervisor certificate.

**Division of Marks:**

Report Writing	:	70 Marks
Viva Voce	:	30 Marks
Total	:	<hr/> 100 Marks <hr/>

Note: Supervisor will act as an internal examiner. The marks will be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

**Semester- IV**  
Group A: Clinical Psychology  
Code: MAP 405  
**Tour Report**

**Course Objectives:**

A report of the academic tour/survey in mental Health Institution/in clinical situation prepared by the students has following objectives. They are as follows:

- Deepen Social and practical knowledge.
- Develop critical thinking.
- Enhances perspectives

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- Collaborate with teachers, and integrate new perspectives with informal environments to enhance learning initiatives.
- CO2- Apply skills, values and general knowledge in new settings.
- CO3- Explore practical utility of the clinical tour.

**Division of Marks:**

Viva Voce	:	75 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
		_____
Total	:	100 Marks
		_____

Note: The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

**ORDINANCE AND COURSE CURRICULUM FOR**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**

**TWO YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

**[www.universityofpatanjali.com](http://www.universityofpatanjali.com)**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**Scheme of Examinations**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**  
**SEMESTER LAYOUT**

<b>Semester-I</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-101</b>	<b>Tourism Concepts and Principles</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -102</b>	<b>Tourism in Uttarakhand</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -103</b>	<b>Yoga Health &amp; Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-104</b>	<b>Adventure Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-105</b>	<b>General Viva-Voce</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-II</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-201</b>	<b>Travel Agency &amp; Tour Operation</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -202</b>	<b>Tourism Resource in India</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -203</b>	<b>Transport Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -204</b>	<b>Computer Applications in Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-205</b>	<b>Educational Tour</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-III</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-301</b>	<b>Culture Heritage and Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -302</b>	<b>Airlines Ticketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -303</b>	<b>Hotel &amp; Resort Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-304</b>	<b>Research Methodology</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-305</b>	<b>Project Report &amp; Presentation</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-IV</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM -401</b>	<b>Major Destinations of world</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --402</b>	<b>Tour Packaging Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --403</b>	<b>Tourism Marketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --404</b>	<b>Tourism Policy &amp; Planning</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --405</b>	<b>On-The Job Training</b>	<b>100</b>	<b>-</b>	<b>100</b>

## Semester -I

### **TOURISM CONCEPTS & PRINCIPLES (MTTM-101)**

#### **Course objectives:**

1. This will be an introductory module giving the basis of tourism studies.
2. This will give an overview of the Tourism Industry and various organisations.
3. Give an insight into how travel and tourism involved over a period of time and reached the modern stage.
4. Enhance the knowledge of students in various areas related to Tourism and how it affects the destination.

**Course Outcomes:** After studying this paper, students will able to

CO 1. assume the elementary concepts of Tourism that are applied in Tourism and Hospitality Industry.

CO 2. classify the role, function and operation in Tourism Industry.

CO 3. divide the concept of Travel and Tourism, the framework of the system, types and form of tourism as well as the impacts of tourism.

CO 4. describe the different types tourism resources of India, there importance in tourism and management.

#### **Unit – I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components
4. Different approaches to the study of tourism.

#### **Unit – II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

#### **Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

#### **Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

#### **Unit- V Tourism Organization:-**

Origin, location, and functions of WTO, IATA,PATA,TAAI, ITDC.

**Suggested Readings:**

- Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.
- Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.
- Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.
- Mill, R.C., (1990), Tourism: The International Business, Pretience Hall, New Jersey.
- Bhatia, A.K., - International Tourism  
Seth, P.N., (1999) Successful Tourism Management (Vol 1 & 2 )

## **Tourism in Uttarakhand (MTTM-102)**

### **Course Objectives:**

1. The module gives information of tourist places of Uttarakhand that helps students to know the background elements of tourism resources of Uttarakhand state.
2. Establishing world class infrastructure, attracting private sector for infrastructure development and identifying new tourism destination.
3. Gives the knowledge of religious and pilgrimage sites.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Enrich about the different Tourism resources of Uttarakhand that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. List of the Tourism prominent role in Uttarakhand. The draw of the Himalayas, the beauty and cool relief of hill stations and the wealth of Hindu religious pilgrimage sites are a part of the attraction.

CO 3. Explore the importance of religious places.

### **Unit 1 Geographical and Historical Background**

Geographical features, divisions, mountain ranges, rivers, main symbol of Uttarakhand Reason , climate, General introduction of History Garhwal and Kumaon region.

### **Unit 2 Social and Cultural Heritage**

Important caste and tribes, Main dances, Fairs and Festival, Handicrafts, Tradition, Main Cusin.

### **Unit 3 Spiritual Tourism in Uttarakhand**

Background of historical tourism, important places -Haridwar, Rishikesh, Jageshwar, Chardham in Uttarakhand, Panch Prayag, Hemkund, panch Badri ,panch kedar.

### **Unit 4 Natural Based Tourism**

Vedani and Dayara Bugyal, Roopkund, Nainital, Devtaryatal, Sahastra tal, Mussiore, Kosani, Ranikhet, Munasyari, ,Kotdwar, Valley of Flowers, Rajaji and Jim Corbett National Park.

### **Unit 5 Adventure Sports**

Trekking, Mountaineering, Skiing, River Rafting and Paragliding, Bungi Jumping - General Introduction.

### **Suggested Readings:**

- - Uttranchal 'the abode of gods'
- - Uttrakand ka smagra darshan – Savita Mohan.
- - Uttrakhand year book – 2010 –Lokesh Navbani
- - Uttranchal- Aitihashik avem Sanskritic Ayam- Uma Prashad Thapaliya
- Uttranchal ke Devalaya – Triloke Chandra Bhatt.
- Uttranchal me Paryatan naye chitize – Dr. Harimohan.

## **Yoga Health and Tourism (MTTM-103)**

### **Course Objectives:**

1. The course intent to upgrade the knowledge of the latest trends in tourism particularly the health tourism in the country.
2. Since health tourism constitute a niche market for the industry and the government as well, it becomes desirable for the students to get in touch with this new segment of tourism industry.
3. After studying this course, the student shall be able to define the trends, issues and challenges in the field of health tourism in India.
4. After reading this subject, students get the knowledge of health and wellness.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Classify the Health and wellness tourism paper can provide opportunities to students to learn new skills or knowledge related to nutrition, fitness, and other aspects of health and wellness.

CO 2. Interpret in enhancing self-awareness among the students by practically taking them in various health & wellness activities, as per the requirements and needs.

CO 3. Classify the importance of health and wellness of the country.

### **Unit 1**

Meaning of word 'Yoga', its definition, Aims & objects, Brief history of yoga, Introduction of Patanjali Yoga Sutra, Relevance of Yoga in relation to Tourism.

### **Unit II**

Health aspects of Yoga: Meaning of Health Yoga, its definition, Aims & objects, its brief history and significance of Hathyoga in Tourism, limbs of Hathyoga.

### **Unit III**

Role of Asanas, Pranayama & Mudra during Travelling. Importance of Yoga while in high Altitudes, Study of Depiction of Yogic love in the places of Pilgrimages.

### **UNIT – IV**

Health and Medical Tourism: Meaning, nature and scope Health and Medical tourism Product

Health and Medical Tourism markets at global level Advantages and disadvantages for India in Global Medical Tourism Market

### **UNIT – V**

Health and Medical Tourism in India Role of Private sector in health and medical tourism

Traditional Health Care system in India Government incentives for health and medical tourism in India

## **References**

1. Asana- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
2. Pranayama- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
3. Ghrand Samhita ----do----
4. Hath Pradipika ----do----
5. Ghrand Samhita-Swami Niranjananda Saraswati, Bihar School of Yoga, Mungher.  
Asana, Pranayama, Bandha and Mudra-: Swami Satyananda Paramhansa Bihar School of  
Yoga, Maugher
6. Smith, Melanie, & Puczko, Laszlo, Health and Wellness Tourism.
7. Conell, John, Medical Tourism.
8. Kumar, Medical Tourism in India (Management and Promotion)
9. Edlin, Gordon & Golanty, Eric, Health and Wellness.

## **Adventure Tourism (MTTM-104)**

### **Course Objectives:**

1. Memorize the concepts related to adventure tourism.
2. Explains the status of the adventure tourism market in India.
3. Illustrate the challenges, opportunities, and future prospects for adventure tourism in India.
4. Examine the various types of adventure sports in India
5. Evaluate the role of government and other stakeholders in adventure tourism.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Relate the adventure tourism.

CO 2. Explain this type of tourism tourists do some adventures activities like as skydiving, hill climbing, scuba diving for their pleasure and fun purposes.

CO 3. Demonstrate the practical & theoretical aspects of Adventure Tourism.

### **Unit –I: Introduction:-**

Definition, Nature and scope of Adventure tourism: Adventure motives through the ages and their contribution to inventions, explorations and discoveries.

Adventure in the present context, contemporary trends in Adventure tourism Geographical diversities and opportunities for A.T.in India. Potential and existing adventure tourism in different states. Planning and development perspective, major thrust areas, promotional steps taken by states and centers. Organization and institutions promoting Adventure Tourism in India.

### **Unit –II: Land based Adventure activities:-**

Mountaineering, Trekking, Rock climbing, skiing, skating; their necessary equipments, techniques and problems. Wildlife tourism: status of wildlife tourism, popular National parks and Wildlife sanctuaries.

### **Unit –III: Water based activities:-**

Water resources of India; rivers, sea and lakes. River reading, nature of white water, silent water and sea water. Rafting, Kayaking canoeing, yachting, water scooter, Hover craft. Surfing, SCUBA diving, under water activities, coastal activities. Places, organizations, equipments associated with above activities.

### **Unit-IV: Air based activities:-**

Air based activities, Atmosphere, seasons, wind pressure and wind movement in India. Hang gliding, Ballooning, Para jumping , Sky diving, Para sailing. Places, organizations and equipments associated with above activities.

**References:-**

1. Ahmad Aizaz : 'General Geography of India, NCERT, New Delhi
2. Goh Cheong long : An Economic Atlas of India, Oxford University
3. National Atlas of India, Govt. of India Publication, Calcutta
4. Atlas of World Oxford
5. Singh, R.L.(ed) India : A Regional Geography National Geographical Society of India (Varansi 1989)
6. Manorama Year Book
7. Indian Year book, Publication Division, Govt. of India, New Delhi
8. Aluwalia H.P.S. and Manfred Garner : Himalayas: A Practical Guide, Himalayan Books ( Delhi, 1985)
9. Bedi, Ramesh and Rajesh : Indian Wildlife, Brijbasi Printers ( New Delhi, 1989)
10. Bose, S.C. Geography of the Himalayas, National Book trust, India ( New Delhi,1976)
11. Chand Gian and Manohar Puri 'Trekking' International publisher India ( new Delhi,1989)
12. Gamma, Karl 'The Handbook of Skiing Pelham Books (London, 1985)
13. Lozawa, Tomoya : Trekking in the Himalayas, Allied published Pvt. Ltd., ( New Delhi, 1980)
14. Law, B.C. (ed) : Mountains and Rivers of India, Calcutta, 1968
15. Rowe, Ray 'White in Water Kayaking', Salamander Books (London, 1987)
16. Saharia, V.B. "Wildlife in India' Natraj Publisher (Dehradun, 1982)

## **General Viva-Voce (MTTM-105)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions studied in current semester.
2. The purpose is to study the destinations followed in different circuits.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

- CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.
- CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.
- CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will go for the general Viva Voce Examination. The curriculum of this exam is curriculum of MTTM 1<sup>st</sup> sem and the major tourist interest in India.**

The Viva exam and evaluation will jointly taken by the internal & external examiner.

## **Travel Agency & Tour Operation (MTTM-201)**

### **Course Objectives:**

1. The students will understand the conceptual meaning and differentiation between Travel agency and Tour operation. Further they will understand formalities and documentation needed to set up these units.
2. Organize the services being provided to the customer, such as transportation and accommodation.
3. Understand various skills necessary for travel agency and tour operation business
4. Understand various travel terminology.
5. Acquire knowledge on documentation in travel industry.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend the travel agencies can be defined as a sector that books, sells, and arranges travel, tour, and accommodation services provided by suppliers of the industry.
- CO 2. Interpret everything possible even with complicated dates.
- CO 3. Infer Some of primarily engaged in making travel arrangements and reservation services.
- CO 4. Outline the skills necessary to identify sales and marketing strategies for travel agencies

### **Unit - I : Travel Agency and Tour Operation business:**

Travel Agencies and Tour Operators- meaning, concept, types and importance Historical growth and development of travel agency and tour operation business. Linkages and integrations in travel agency and tour operation The future role of Travel intermediaries

### **Unit - II: Organizational structure and functions**

Organizational structure of travel agency and tour operator-main operational and managerial staff. Travel agency HR planning and job analysis of major positions Major functions of Travel agency and tour operators

### **Unit - III: How to Set Up a Travel Agency**

Procedure for approval of Travel Agents, Tour Operators by Department of Tourism, Government of India and IATA Ownership structure and revenue source of travel agency and tour operation fiscal and non-fiscal incentives available to travel agencies and tour operators business.

### **Unit - IV: Understanding the role of Government and other organizations in Travel Trade**

Role and contribution of Department of Tourism, Government of India, ITDC and State Government Travel Trade Associations and Organizations- Role and contribution of WTO, IATA, TAAI and IATO. Present business Trends and Future prospects of travel agencies and tour operators business.

**Unit - V: Case Studies**

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**Suggested Readings:**

Holloway, J. c., The Business of Tourism (1983), Mac Donald and Evans, Plymouth.

Syratt Gwenda, Manual of Travel Agency Practice, Butterworth Heinmann, London, 1995

Stevens Laurence, Guide to Starting and Operating Successful Travel Agency, Delmar Publishers Inc., New York. 1990

Gee, Chuck and Y. Makens, Professional Travel Agency Management, Prentice Hall, Nt.: York, 1990.

Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

Foster D.L. The Business Of Travel Agency Operations and Administration

## **Tourism Resource in India (MTTM-202)**

### **Course Objectives:**

1. The module gives information of countries tourist places of national and international importance and it helps students to know the background elements of tourism resource
2. To provide entertainment to tourists, organise tourism related activities such as cultural shows, fairs and festivals etc.
3. To take over and develop and manage places of tourist interest, parks, lakes, avenues, beaches and recreational places, sports etc.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Compare about the different Tourism resources of India that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. Go through the planning of tourists will often gain a greater respect for the lifestyle of the people living in the area they are visiting.

CO 3. Increase tourism that leads to local communities improving their skills and improving their social status.

### **Unit – I Introduction:**

Concept of resource, attraction & product in tourism, meaning & characteristics, Typology & nature of tourism resources. Nature & Scope to tourist places in India.

### **Unit- II Natural Resources:**

Study of wild life Parks, Sanctuaries & Tiger Reserves in India with case studies of Raja Ji National Park, Jim Corbett, Bharatpur Bird Sanctuary, Valley of Flowers & Gir National Park, Kaziranga National Park.

### **Unit-III Pilgrimage Destinations:**

**Hindu-** Char Dham Yatra, Haridwar, Khajuraho, Mahabalipuram, Tirupati, Madurai, Konark.

**Buddhist:** Lumbini, Bodhgaya, Sarnath, Kushinagar, Sanchi, Ajanta.

**Jain:** Mount Abu, Sharavanbelgola.

**Islamic:** Delhi, Agra, Fatehpur Sikri.

**Sikh:** Patna, Nanded, Golden Temple (Amritsar) Hemkund Sahib (Uttarakhand).

### **Unit- IV Socio-Cultural Resource:**

Socio cultural resources - Important fairs and festivals with case studies of Kumbha Mela, Dussehra, Onam, Puri Rath Yatra- & Chhath.

### **Unit - V: Hill Station & Coastal Destination:**

**Hill Station:** Study of Hill Station attractions and their environs with case studies of Mussoorie, Nainital, Shimla, Manali and Ooty.

**Beaches:** Beaches and Islands: Beaches in Goa, Kerala, Andaman & Nicobar Islands.

**Suggested Readings:**

- Gupta, SP, Lal, K, Bhattacharya, M. Cultural Tourism in India (DK Print 2002)
- Dixit, M and Sheela, C. Tourism Products (New Royal Book, 2001)
- Oki Morihiro, Fairs and Festivals, World Friendship Association, Tokyo, 1988.
- Mitra, Devla, Buddhist Architecture, Calcutta.
- Michell, George, Monuments of India, Vol. 1. London.
- Tourists Resource of India- Ram Acharya.
- Tourists Resources of India- Ratandeeep Singh.
- Tourists Resources of India-Jagmohan Negi.
- Himachal Pradesh, The Land, the people by S.S. Negi

## **Transport Management (MTTM-203)**

### **Course Objectives:**

1. Transport is a vital component of the travel and tourism industry.
2. It becomes imperative for the students of tourism to learn about different modes of transportation and modern world.
3. It is the most important accessibility in terms of exploring world.
4. Promotes social cohesion, accelerate economic prosperity and insure security and territorial integrity.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Demonstrate Transport helps people to move from tourist generating area to tourist destination area.
- CO 2. Elaborate different modes of transport like road transport, rail transport, water transport and air transport.
- CO 3. Get the knowledge about transport management in tourism.
- CO 4. Shape cities, promoting community and enhance quality of tourism

### **Unit-I: Transport and Tourism**

Transportation as dynamic & visual manifestation of tourism. History of different modes of transportation. Landmarks in the development of transport sector and factors affecting the development of different modes of transport.

### **Unit-II: Air Transport**

Airlines & tourism: history of airlines' in India. Role and contribution of air India, Indian Airlines, private airlines & helicopter services. Infrastructural basis of airlines in India. Role of airlines in tourism promotion: recent policies regarding airlines, problems of airlines business.

### **Unit-III: Surface Transport**

Surface transport & tourism: Growth and development of surface transport in India. Importance of surface transportation. Infrastructural basis for surface transport. Coaches & car rental system in India. Problems faced by surface transport sector. Role and contribution of NHAI.

### **Unit-IV: Railway Transport**

Railway & tourism: history & present status of Indian railway. Zonal distribution, infrastructural basis of Indian Railway. Role of Indian railway in tourism promotion. Special trains & packages for tourists. Problems faced by Indian railway.

### **Unit-V: Water Transport**

Water transport: history & present status of water transport, Waterways of India. Types of water transport: Ocean liners, Cruise liners, ferries, hovercraft, river and canal boats and fly cruise.

**References:**

1. Ahmad Aizaz: 'General Geography of India, NCERT, New Delhi.
2. National Atlas of India, Govt. of India, Publication Calcutta.
3. Atlas of World Oxford.
4. Singh, R.L.(ed) India: A Regional Geography National Geographical Society of India (Varanasi 1989)
5. India year book, Publication Division, Govt. of India, New Delhi.
6. Aggarwal Surinder : 'Travel Agency Management', communication India, New Delhi.
7. Hannel Christine, Robert Harshman and Grahan Draper- Travel and Tourism A world regional geography , john Wiley and Sons, New York
8. Hurst, Elist, 'Transporation Geography' McGraw Hill, New York
9. OAG Airlines time table
10. OAG Cruise lines time table
11. Indian Railway Time table

## Computer Applications in Tourism (MTTM-204)

### **Course Objectives:**

1. This module is to inform the students about the role of Computer Information systems in travel trade.
2. The prescribed unit enhance the skills of students especially when they will be attached for practical.
3. This course provides the knowledge of basics computers.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Demonstrate the term Application refers to Software which is a set of instructions or code written in a program for executing a task or an operation in a Computer.

CO 2. Extent applications play a vital role in a Computer as it is an end-user program that enables the users to do many things in a system.

CO 3. Explain the basic rules of computer science.

### **UNIT-I: Computer System**

Introduction to Computers, Characteristics of computers, Applications of computers, Different units of computer, Component of computers, Input / Output and auxiliary storage Devices. CD/DVD ROM, RAM, ROM, Computer application In Tourism.

### **UNIT-II : Windows & MS Office**

Introduction to windows MS –Office: MS Word, MS Excel, MS Power Point.

### **UNIT – III :Network and Communication**

Networking: Concept, User, Types, Devices Used, LAN, MAN, WAN.

Basic Communication Components: Modems, Routers, Client, Server, Communication processors, Host Computers, Types of Transmission.

### **UNIT – IV: Internet**

Internet: Concept, uses, components, browsing, Search Engines, E-mail: Opening Account. Internet and Tourism. Information and Communication Technology (ICT) ICT: need definition, uses for tourism, and future role. ICT in tourism sector, Strategic and tactical role of ICTs for Tourism.

### **UNIT – V: Hotel & Travel Software:**

What is CRS, How it functions. CRS for Rail Transport, Hotel Bookings, Airlines: Different packages used: Amadeus, Galileo, Sabre etc.

**REFERENCES:**

1. Leon Alexis and Mathews Leon: Introduction to Computers, Vikas Publishing House Pvt Ltd. New Delhi
2. Bhatnagar S C and Ramani K V: Computers and information management. A Primer for Practicing Managers, New Delhi, Prentice Hall of India Pvt. Ltd.
3. Bansundara, S: Computer Today.
4. Goel Ritender and D N Kakkar: Computer Application in Management, New Age International Publishers, New Delhi.
5. Jaggi V P and Jain Sushma: Computers for Every one, New Delhi, Academic India Publishers.
6. Simpson Alan: Your First Computers (2nd Edition) New Delhi-BPB Publications.
7. Saxena S: and Prabhpreet Chopra: Cumputer Applications in Management, Vikas Publishing house Pvt. Ltd. New Delhi.
8. Saxena S: MS Office2000 for Everyone Vikas Publishing house Pvt. Ltd. New Delhi.
9. Internet Sites and resources.

## **Educational Tour MTTM-205**

### **Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

### **COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

### **Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

## **Culture Heritage and Tourism (MTTM-301)**

### **Course objectives**

- 1.This module is important to study because India is rich in heritage properties and its maintenance is necessary.
- 2.This will help to understand the nature of heritage properties and conservation.
- 3.prevention and promotion of tribes and communities of the state.
- 4.It helps in studying traditional culture and preserve with modernity.

**Course Outcomes:** After studying this subject, students will able to

CO 1. Contrast of sustainable tourism is defined as “tourism that respects both local people and the travels.

CO 2. Translate the cultural heritage and the environment” It seeks to provide people with an exciting and knowledgeable fair.

CO 3. Supports culture and helps renewing tourism.

CO 4. Relate the strategies of many organizations regarding cultural heritage

### **Unit 1: Understanding Culture & Tourism**

Concept and Fundamentals of Indian Culture.

Culture – Tourism Relationship; Socio-Cultural Impacts of Tourism.

Spiritual basis of Indian culture

### **Unit-II: UNESCO Heritage Sites**

What is Heritage? Meaning and concept. Criteria for selection as heritage sites, monuments and zone by UNESCO (WHC). Types of heritage property. World famous heritage sites and monument in India and abroad.

### **Unit - III: Living Culture and Performing Art of India**

Major Fairs and festivals of India

Classical dances and Music of India

Indian handicrafts

### **Unit – IV: Heritage Management in India**

Heritage Management, objectives and strategies, Protection, Conservation and Preservation, Heritage Marketing, Destination development.

National and International Organisations engaged in Heritage Management (UNESCO, ICOMOS, ASI, INTACH and NGOs),

### **Unit – V: Museums**

Museums, Concept and classification. (National Museum, New Delhi; Bharat Kala Bhawan, Varanasi; Archaeological Museum, Sarnath, etc.), Heritage Hotels.

**Suggested Readings:**

- Allchin, B., Allchin, F.R. et al. (1989) Conservation of Indian Heritage, Cosmo Publishers, New Delhi.
- New Inskeep, Edward, Tourism Planning: An Integrated and Sustainable Development Approach (1991) VNR, New York.
- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- UNESCO-IUCN (1992) Eds. Masterworks of Man and Nature, Pantoga, Australia.
- IATA Special Mail Manual.

## Airlines Ticketing (MTTM-302)

### **Course Objectives:**

1. This module is intended to prepare the students to enter a travel agency where he will be required to be well-versed with the modalities of air ticketing and the study of air transportation industry.
2. Certificated air carriers, the freight and passenger business, general aviation.
3. Economic impact of aviation, understanding of competition and government regulations, Ownership of airlines.
4. The cyclical nature of the airline business. Distribution of world passenger traffic, etc

**Course Outcomes:** After studying this paper, students will able to

CO 1. Interpret the Airline tickets are important documents that confirm a passenger has a seat on a flight.

CO 2. Summarize the ticket includes important information about the passenger and the flight that they will take.

CO 3. Infer the ticket is exchanged for a boarding pass during the check-in process, and this gives the passengers permission to board the plane from studying this subject.

CO 4. Compare the global world class aircraft manufactures and airport providers.

**Unit-I** Aviation Geography: IATA areas, sub areas, sub regions, Longitude, Latitude, time calculation: GMT variation, concept of standard time and daylight saving time, calculator of elapsed time, flying time and ground time, Global Indicators, Aviation Organisation: IATA & ICAO.

**Unit II** Air Transportation: Concept of Airlines, Domestic and international airlines in India, Private sector and government airlines, types of aircraft, the hub and spoke system, interline agreements, role of DGCA, critical remarks on air transport industry of India, policies, practices.

**Unit III** Understanding of various codes: ABC codes, looking up schedules, flight connections, transfer connections, looking TIM:- Passport, visa, special permits, customs formalities and currency regulations, health regulations and Airport tax, passenger needing special attention. Minimum connecting time, general rules of currency conversion and rounding up of fare, different modes of payments e.g. cash, credit card etc.

**Unit IV** Introduction to fare construction:- Definition and understanding of published fares, various types, normal, child fare, one way, return, excursion etc; commissions, discounts, MCO, PTA, HIP, BHC, looking up MPM, calculating TPM, determining the fare breakup point, surcharges, excess mileage table. Ticketing-Insurance of tickets, Normal, one way, return, round the world, excursion, circle trip, child, etc. cancellation, reissue of tickets.

**Unit V** Documentation: Air way bill, charges correction advice, irregularity report, cargo manifesto, cargo transfer Manifesto, documents concerning postal mails and diplomatic mails. Shippers declaration for dangerous goods. Handling- Cargo capacity of Air and Ships. Cargo needing special attention, introduction to dangerous goods regulations. Some important Cargo companies.

**Suggested Readings:**

- Gupta S.K : International Airfare & Ticketing Methods & Technique UDH Publishers & Distributors (P) Ltd. New Delhi.
- Sinha P.C: Encyclopaedia of Tourism Management
- Jagmohan Negi: Travel Agency & Tour Operation Concepts & principle
- Galileo systems
- ABC World wide Airways Guide (Red & Blue)
- Air Tariff Book 1, Worldwide Fares.
- Air Tariff Book 1, Worldwide Rules, IT Fares etc.
- Air Tariff Book 1, World Wide Maximum Permitted Mileage
- Travel Information Manual ( TIM )
- IATA Ticketing Hand Book

## **Hotel & Resort Management (MTTM-303)**

### **Course Objectives:**

1. This Module is prescribed to appraise students about the important departments of classified hotel.
2. To teach various aspects related to accommodation Industry.
3. To determine various departments according to guests needs and safety.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend The Hotel and Resort Management course is designed for students with a career interest in the lodging and resort industries.
- CO 2. Outline these fields represent a wide range of businesses, from the small country inn or bed and breakfast to multinational chains of hotels and resorts.
- CO 3. Interpret the students regarding different accommodations with their functions.

**Unit – I    Origin and Expansion:** Conversion of Tavern; Inns, Chalets and places into hotels, creation of private, Public and multinational hotel chains in India. Regional, National and International Hotel Associations and their operation.

**Unit – II    Departments of hotel:** Front Office, House Keeping, Food and Beverage, Personnel and Accounts. Role and functions of different departments.

**Unit – III    Type and forms of Hotels:** Classification of hotel on basis of location, size, clientele and range of service, hotel plan, type of room etc.  
Star classification- Criteria and Procedure adopted in India.  
Resort Properties, Heritage Hotels- concept and emerging dimensions.

**Unit – IV    Major Hotel Chain in India:**

Taj Group of Hotels  
Oberoi Hotels & Resorts  
Lalit Group of Hotels  
Ashok Group of Hotels

**Unit – V    Resort Planning:** Preliminary Consideration in Resort Planning and Development and Phases of Resort Planning and Development. Trends and factors in Developed Tourist Markets leading to growth of Resort Concept. Factors affecting rate. Basic Elements of a Resort Complex: Lodging facilities, landscaping, Dining and drinking facilities, Family Oriented Services, shops and services, Entertainment; Use of Community Resources.

**Suggested Readings:**

- Selected case studies from sterling. Delmia, Toshali and R.C.I. International will be managed from concerned organisations.
- Andrews, Sudhir : 1985, Hotel Front Office, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : Hotel House Keeping, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : (1991),Food and Beverage Service,Tata M C Graw–Hill, New Delhi.

## Research Methodology (MTTM-304)

### Course Objectives:

1. The main objective of this course is to introduce the basic concepts in research methodology related to Management & Tourism.
2. This course addresses the issues inherent in selecting a research problem and discuss the techniques and tools to be employed in completing a research project.
3. This will also enable the students to prepare report writing and framing Research proposals.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. contrast and comprehend the basics in research methodology and applying them in research/ project work.

CO 2. take up and implement a research project/ study.

CO 3. develop skills in qualitative and quantitative data analysis and presentation used in Research activities.

**Unit-I: Research:** meaning, characteristics, types and relevance of research; trend and challenges with special reference to tourism and hotel business. Research process. Identification and formulation of research problem. **Research methodology:** meaning and procedural guidelines. **Literature review** – Meaning, Importance and sources of literature

**Unit-II: Research design-** Meaning of research design; need for research design; features of a good Research design; different research designs. **Sampling design:** the concept of sampling; Aims of sampling, census versus sample survey; steps in sampling design; characteristics of a good sample design; criteria for selecting a sampling procedure; sampling techniques/methods: probability sampling and non-probability sampling.

**Unit-III: Measurement and scaling techniques-** Measurement in research; sources of Error in measurement; test of sound measurement; technique of developing measurement tools; measurement scales; meaning of scaling; bases of scales- classification, importance; scaling techniques-rating and ranking; types of scales.

**Unit-IV: Collection of Data-** nature, sources of data; methods of data collection. **Processing of data:** Classification and Tabulation, Interpretation of data.

**Unit-V: Report writing-** meaning functions; types of research report; significance of report writing report.

### Suggested Reading:

1. Research Methodology (Pearson Publication) by Ranjit Kumar
2. Management Research Methodology (Pearson Publication) by Krishna swamy, Sivakumar & Mathirajan
3. Business Research Methods (Tata McGraw Hill Publication) by Cooper & Schindler
4. Research Methodology (New Age Publishers) by C.R. Kothari
5. Methods in Social Research (Surjeet Publications) by William J. Goode & Paul K. Hatt

## **Project Report & Presentation (MTTM-305)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will have to submit a Project Report for Via-Voce of several places of tourist interest in India.**

The students will go for Viva Voce Examination which shall be evaluated jointly by the internal & external examiner.

## **Major Destinations of World (MTTM-401)**

### **Course Objectives:**

1. Though there are so many tourist destinations in the world, there are few most famous among them. The primary objective is to explore the major popular destinations of the world.
2. It is worthwhile to know the tourist products in the lights of their main attractions, existing infrastructure facilities, linkages etc.
3. To study the destinations of whole world which is changing in to a global village and outbound tourism from India is growing at a very fast pace.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Illustrate the different tropical region, natural sites, historical heritage, and accommodation with cultural hospitality.

CO 2. Compare world that tells about major destination business around the world.

CO 3. studies about destination under UNESCO.

**Unit-I Main Destination of Asia and Pacific Region:** - Tokyo, Singapore, Dubai, Thailand, Malaysia.

**Unit-II Main Destination of Europe:** - London, Paris, Madrid, Athens.

**Unit-III Main Destinations of Africa:** - Cairo, Cape Town and Johannes berg, Mauritius, Nairobi.

**Unit -IV Main Destinations of Americas:** - New York, Los Angles, Montreal, Rio de Janeiro, San Francisco.

**Unit -V Other Destinations:** - Sydney, Fiji, Wellington, Buenos Aires.

### **References:**

- Ahmad, Aizaz: General Geography of India, NCERT, New Delhi
- Goh Cheong Long: An Economics Atlas of India, Oxford University.
- World Atlas , Oxford press.
- Singh, R.L. (ed) India: A Regional Geography National Geographical Society of India, Varanasi, 1989.
- □Manorama Year Book 2012
- □Indian Year Book 2012, Publication Division, Govt. of India, New Delhi
- Tourism Planner.
- Tour Brochures of related places.
- Lonely Planet-India and related destinations.
- Kumar Ravi Bhushan: Coastal Tourism and Environment, AOH Publishing Corporation, New Delhi.
- Websites of related destinations.

## **Tour Packaging Management (MTTM-402)**

### **Course Objectives:**

1. In this course tourism students are taught the details of tour packages, planning, framing itineraries and costing.
2. To gain knowledge about tours escorting and
3. To study and examine travel packages of known travel companies, so that the students can learn to prepare and run travel packages independently.
4. The students will set practical knowledge relating to travel and tour operation.

**Course Outcomes:** After studying this paper, students will able to

CO 1: Gain the operational knowledge of tour packaging business.

CO2 Acquire the skill of formulation of tour package.

CO3 Acquire the skill of tour costing and pricing techniques of various types of tour packages.

CO4 Apply the practical knowledge in making various real tour packages

**Unit 1** Meaning, definition, development, types components and significance of tour packages with relation to tourists, destinations and tour companies, role and input of public and private sector tourism organizations in promotion of tour packaging business.

**Unit II** Tour Formulation – Influencing factors, stages involved in tour formulation initial research (destination and market), itinerary development, negotiations, confidential tariff, costing & pricing marketing strategies. Brochure designing, Printing and distribution.

**Unit III** Itinerary preparation- meaning, types, do's and Don'ts of itinerary preparation. Limitations and constraints., Tour costing and pricing-cost concept, types of costs. Tour cost sheet. Procedure of costing; group tour, independent tours, and business tours pricing in tour operation Industry-Tour pricing strategies in India. Pricing of deferent tour packages.

**Unit IV** Detailed study of passport-definition, how to get the passport form, essential documents, photographs & fee for passport, type of passport. Visa- meaning, type of visa issued by India, necessary documents to get visa. Health regulations. Customs and currency regulations, baggage rules and insurance.

**Unit V** Tourists activities based on Mountains, Deserts, Forests and Wildlife, White Water, Marinas, Aero sport etc. and cultural and pilgrimage i.e. place of religions, historical archaeological, architectural and monumental significance, fairs and festivals, Conference and conventions and special events, Case studies of Tour Packages offered by government & private sectors and Thomas Cook and SITA etc.

**Suggested Readings**

1. Marketing of Travel & Tourism by Middleton.
2. International Encyclopaedia of Tourism Management by P.C. Sinha.
3. Dynamics of Tourism by R.N. Kaul.
4. Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

## Tourism Marketing (MTTM-403)

### Course Objectives:

1. The course includes the operation techniques of tourism marketing. The students are expected to attain a basic knowledge of marketing principals.
2. Study to suitability of alternative promotional approaches to and formulate marketing plans and promotional approaches to tourism and other related organizations.
3. It helps the learner to develop an understanding of the nature of different tourism products.
4. Provide insights into the process of developing and managing various tourism products enhance the knowledge of students about various tourism products of India.

**Course Outcomes:** By studying this course, students able to

CO 1. Demonstrate about tourism marketing is the collective name given to the various marketing strategies used by businesses within the tourism industry.

CO 2. Plan the hotels, understand and can identify tourism products that are associated with Marketing.

CO 3. Explain the central, peripheral services and public services in tourism product.

CO 4. Contrast the role of Indian architectural heritage in the tourism industry.

**Unit – I Marketing:** Core concepts in marketing; Needs, Wants, Demands, Products markets. Marketing management philosophies-Production, Product, Selling, Marketing and societal perspectives. Economic importance of marketing.

**Unit –II Analysis and selection of market:** Measuring and forecasting tourism demand; Forecasting methods, Managing capacity and demand. Market segmentation and positioning (STP)

**Unit– III Marketing Strategies:** Developing marketing environment, Consumer buying behaviour, Competitive differentiation and competitive marketing strategies. New product development. product life cycle, Customer satisfaction and related strategies in internal and' external marketing; Interactive and relationship marketing.

**Unit –IV Planning marketing programmes :** Product and product strategies; Product line, Product mix Branding and packaging. Pricing considerations. Approaches and strategies. Distribution channels and strategies.

**Unit –V Tourism Marketing :** Service characteristics of tourism. Unique features of tourist demand and tourism product, Tourism marketing mix. Marketing of Tourism. Services : Marketing of Airlines, Hotel, Resort, Travel Agencies and other tourism related services-Challenges and strategies..

**Suggested readings:**

- Kotler, Philip : Marketing Management & Hospitality and Tourism Marketing
- Sinha, P.C : Tourism marketing
- Vearne, Morrison Alison: Hospitality marketing.
- Crough, Marketing Research for Managers.
- Singh Raghbir, Marketing and Consumer Behaviour. Patel, S.G., Modern Market Research, Himalaya Publishing

## **Tourism Policy & Planning (MTTM-404)**

### **Course Objectives:**

- 1.The module will expose the students about the Tourism policy of India and of a few tourism states of the country.
- 2.To create jobs and entrepreneurial opportunities in the tourism sector and ensure the supply of a skilled labour pool.
- 3.To promote the destination trying to improve internal and external tourism demand.
4. To achieve international tourism growth and increase foreign currency income to support the balance of payments.

**Course Outcomes:** After studying this paper, students will able to

CO 1. To promote sustainable, responsible and inclusive tourism.

CO 2. Relate the policy and planning aims to promote sustainable tourism by minimizing the negative impact of tourism on social, environmental and economic aspects and maximizing the positive impact.

CO 3. outline the tourists to ensure about the propaganda tourism policy and planning.

**Unit – I Tourism Policy & Planning Framework:** Tourism Policy- meaning ,relevance & salient feature. Tourism Planning- meaning, levels & types of tourism planning.

**Unit – II Tourism Policy:** Study of National Tourism Policy 1982 and 2002, National Action Plan on Tourism, 1992: Special Tourism Area Development Programme. The concept of National Tourism Board, National Committee on Tourism, Case study of tourism policies of a few states (Uttar Pradesh, Rajasthan, Kerala, Madhya Pradesh,). Investment opportunities and government policy for investment in hotel/tourism industry. Sources of funding.

**Unit – III Destination Planning:** Destination Mix- concept and components. Step and stage in Destination Planning. Tourism Project Feasibility Study.

**Unit – IV Approaches to Tourism Planning:** Eco-centric or environment approach of tourism planning. Community approach of tourism planning. Concept of Tourism Complex Planning & its relevance in India context.

**Unit – V Tourism Policy & Planning:** Case Studies: Place of Tourism in India's Five Year Plan. Tourism Policy of india and contribution of NCT to this effect. Organizational structure of tourism in India at Central and State Level.

### **Suggested Readings:**

- New Inskeep, Edward, Tourism Planning : An Integrated and Sustainable Development Approach ( 1991) VNR, New York.

- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- Dept. of Tourism, GOI Investment Opportunities in Tourism (Brochure).
- Sharma, J. K. (2000), Tourism Development. Design for ecological sustainability, Kaniska Publication, New Delhi.

## **On-Job Training & Report (MTTM-405)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources from the industry experts based on primary and/or secondary analysis.
2. To collect the data available from outside sources such as stake holders and tourists can help the students in fulfilling the project's operations.
3. Connecting what the student has undergone till above semesters.
4. To build a harmony of theoretical and practical knowledge with actual work experience, in order to compliment field specific skills and learn new ones.

**Course Outcomes:** After undergone this training, students will able to

- CO 1. Analyse the current obstacles that are occurred in Tourism/Travel related business also they'll able to bring out certain solutions of the problem.
- CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.
- CO 3. Develop skills in the application of theory to practical work situations.
- CO 4. Develop skills and techniques directly applicable to their careers.
- CO 5. Internships will increase a student's sense of responsibility and good work habits.

### **Course Details:**

The Training is based upon the 45 days practical training with any recognised Travel Agency/Tour Operating Company/Hotel. The Department will circulate the placement brochure / letter to various organisations prior to the joining in the same. During the organisational work (training period), each student is required to prepare practical report of day to day activities to be submitted for evaluation.

The students will have to submit the Job Training Report after completion of their Job Training before Viva-voce examination.

### **Viva – Voce**

The Viva-Voce examination will be conducted on the basis of the Tour Package Prepared, Tour and Job Training Reports and other theory papers taught.

# **ORDINANCE AND COURSE CURRICULUM FOR**

**P.G. DIPLOMA YOGA HEALTH & CULTURAL TOURISM**

**ONE YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

[www.universityofpatanjali.com](http://www.universityofpatanjali.com)

**UNIVERSITY OF PATANJALI, HARIDWAR**  
**Course Syllabus**

**PGD (YH&CT) Semester-I**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-101	Fundamentals of Yoga	70	30	100
YH-102	Principles of Hath Yoga	70	30	100
YH-103	Tourism Theory and Practice	70	30	100
YH -104	Hospitality Management	70	30	100
YH-105	Yoga Practicum	70	30	100
YH -106	Project Report (Tourism)	100	-	100
YH CE 01	Communicative English (Non Credit)	70	30	100

**PGD (YH&CT) Semester-II**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-201	Patanjal Yoga Darshan	70	30	100
YH-202	Yoga Therapy	70	30	100
YH-203	Cultural Tourism Resources	70	30	100
YH -204	Itinerary Planning, Marketing, Tour Packaging and Costing	70	30	100
YH-205	Yoga Practicum	70	30	100
YH -206	Educational Tour	100	-	100
YH CE 02	Communicative English (Non Credit)	70	30	100

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-101)**  
**FUNDAMENTALS OF YOGA**

**Course Objectives:**

1. The main objective of this course is to attain higher level of consciousness and mental hygiene.
2. To possess emotional stability and integrate moral values.
3. To enable the student to have good physical and mental health.
4. To prepare students for spiritual journey and to become healthier.

**Course Outcomes:** After studying this course, students will able to

CO 1. Demonstrate basic skills associated with yoga activities including strength and flexibility, balance and coordination.

CO 2. Demonstrate the ability to perform yoga movements in various combination and forms.

CO 3. Explain and apply the knowledge of basic sequencing, and effective group management.

**Unit-1: General Introduction to Yoga**

Origin of Yoga, Psychological basis for origin of Yoga, History and development of Yoga (Vedic period, Darshan period, Commentary period, Bhakti Yoga and Hatha Yoga period, Modern period), Etymological meaning and definition of Yoga, Purpose of yoga, Current misconceptions regarding yoga, Major principles of yoga, Yoga practices for healthy life, Importance of yoga in present age.

**Unit - 2: Basis of Yoga and Tradition of Yoga**

General introduction of Vedas, Upanishads and Ayurveda in yogic context, General introduction of Samkhya, Yoga and Vedanta philosophy (in yogic context), General introduction of Bhagavadgita (in yogic context), General introduction of Puranas (in yogic context), Yoga in Yog Vashishtha and Narada Bhakti Sutra, Brief Introduction to Yoga in Jain Philosophy and Buddhist Philosophy, Bhakti Yoga of Medieval Saints (Kabir, Nanak and Sufism)

**Unit - 3: Basis of Yoga and Tradition of Yoga - II**

General introduction of Tantra and its currents (Shaiva, Shakta, Vaishnava, Buddhist Tantra), Concept of Shiva and Shakti, Yoga in Shaivite and Shakta Tantras, Concept of Nadi and Prana, Kundalini, Kundalini Shakti and Shatchakra Sadhana, Impact of Tantra in Hatha Yoga Tradition and Sadhana.

## **Unit - 4: Major Streams of Yoga**

Concepts of major streams of yoga and introduction of their limbs with the effects - Gyan Yoga, Bhakti Yoga, Karma Yoga, Ashtanga Yoga, Kriya Yoga, Hatha Yoga and Mantra Yoga

## **Unit - 5: Introduction to Renowned Yogis**

Introduction (life & works) of the great yogis of India - Maharishi Patanjali, Maharishi Vyas, Maharishi Kapil Muni, Adi Shankaracharya, Maharishi Dayanand Saraswati, Swami Vivekananda, Maharishi Arvind, Swami Kuvalayananda, Maharishi Raman, Yogarishi Swami Ramdev

### **Prescribed text book**

1. योगदर्शनम्- स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
2. दर्शनप्रवेश- दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
3. योगकेमूलभूतसिद्धांत - आचार्यबालकृष्णजी. दिव्यप्रकाशन, पतंजलियोगपीठ.हरिद्वार
4. गीतारहस्य (निर्धारितपाठ्यांश)- लोकमान्यतिलक
5. भारतकेमहानयोगी- विश्वनाथमुखर्जी
6. तंत्रदर्शन - स्वामीनिरंजनानंदपरमहंस - पंचदशनामअलखबाड़ा, देवघर, बिहार
7. Sharma, Chandradhar: A Critical Survey of Indian Philosophy. Motilal Banarasi Das, Delhi, 2013

### **BOOKS FOR REFERENCE:**

1. Agarwal MM: Six systems of Indian Philosophy, Chowkhambha Vidya Bhawan, Varanai, 2010
2. Swami Bhuteshananda: Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
3. Hiriyanna M.: Outlines of Indian Philosophy, Motilal Banarsidas, Delhi, 2009
4. Bhat, Krishnak.: The Power of Yoga: Suyoga Publications Mangalore, 2006
5. Swami Prabhavananda: Spiritual Heritage of India (English). Sri Ramkrishna Math, Madras, 2004
6. Swami Vivekananda: Jnana Yoga, Bhakti Yoga, Karma Yoga, Raja Yoga. Advaita Ashrama, Calcutta, 2000
7. Pandit, M.P.: Introduction to Upanishads: Theosophical Society of India, Adyar, Madras, 1976

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-102)**  
**Principles of Hath Yoga**

**Course Objectives:**

1. To Maintain a youthful body, develop physical and psychic powers, awakening the potential energy and finally attaining enlightenment.
2. To build asanas related Hatha yoga are practiced to bring health and energy to body and mind by opening the nadis.
3. It includes physical techniques to preserve and channel the vital force or energy.

**Course Outcomes:** After studying this course, students will able to

CO 1. Go through the mastery of the prana, or energy of the body, we can then easily master the control of the mind and obtain success.

CO 2. Gain self-control and self-discipline and an energetic body with the help of hath yoga.

CO 3. Get strengthen and purify physical body and cultivate prana and activate kundalini.

**Unit-1: General Introduction to Hatha Yoga**

Hatha Yoga - Meaning, Definition, Origin, Tradition and Purpose. Prevailing misconceptions regarding Hatha Yoga. Helping and obstructing elements of Hatha Yoga. The Hatha Yogic practice described in Hathayoga pradipika. Concept of Math, Manuals for the practitioner of Hatha Yoga, Concept of Mitahar, Pathya & Apathya. Tradition of Hatha Yoga. A brief introduction and contribution of the major yogis of the Nath Yoga tradition. Relations in Hatha Yoga and Raja Yoga.

**Unit-2: Practices of Hatha Yoga - Purification and Asanas**

Introduction to purification practices - Purification actions described in Hatha Yoga Pradipika and Gherand Samhita and their method, benefits and precautions. The role of purification practices in yoga sadhana and the importance of purification practices in modern life. Yogasana: Definition, characteristics and importance in yoga practice. Method, benefits, precautions and importance of asanas in Hatha Yoga Pradipika and Gherand Samhita.

**Unit-3: Practices of Hatha Yoga - Pranayama, Bandha and Mudras**

*Pranayama* : Introduction. Method of Proper Respiration, Yogic Deep Breathing. Concept of Inhale (*Purak*), Retention (*Kumbhak*) and Exhale (*Rechak*). Prana, types of prana and sub-

prana. Importance of Pranayama in *Hatha Yoga Sadhana*. Method and importance of *Nadishodhana* Pranayama. Preparation for Pranayama. Method, benefits and precautions of Pranayamas in *Hatha Yoga Pradipika* and *Gherand Samhita*. Signs of *Hatha siddhi* (success in hatha yoga). Bandha :introduction, the importance of bandha-triad in yoga sadhana. Main *mudras* in *Hatha Yoga Pradipika* and *Gherand Samhita* - their methods, benefits and precautions.

#### **Unit-4: Practices of Hatha Yoga - *Pratyahar, Nadanusandhana and Swarodaya Gyan***

*Pratyahara, Dharna and Dhyana* in *Gherand Samhita*, their methods, benefits and precautions. *Samadhi*, signs of *samadhi* in *Hatha Yoga Pradipika*. *Nāda*, the four stages of *Nadānusandhana* and their accomplishments (*siddhis*). Concept of *Swara*, the importance of *Swarodaya Gyan* in *Yoga Sadhana* (with special reference to *Gyan Swarodaya* and *Shiva Swarodaya*).

#### **Unit-5: Introduction and Importance of Major Texts of Hatha Yoga**

Introduction, Purpose and Importance of major texts of Hatha Yoga: *Siddha- Siddhantha Paddhati*, *Goraksha Samhita*, *Shiva Samhita*, *Hatha Yoga Pradipika*, *Gherand Samhita*. *Hatha Ratnavali*: Main applications of hatha yogic activities- preparation of *Raja Yoga Practice*, achieving holistic health, prevention of diseases, rejuvenation, healing and slow aging.

#### **Prescribed text book**

1. हठयोगप्रदीपिका - कैवल्यधाम, लोनावला
2. घेरंडसंहिता - कैवल्यधाम, लोनावला
3. गोरक्षसंहिता - डॉ. चमनलालगौतम (1985)
4. प्राणायामरहस्य - स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
5. Research Publication, P.R.I. Patanjali Yogpeeth

#### **BOOKS FOR REFERENCE:**

1. Woodroffe, Sir John: *The serpent power*, Ganesh & Company, Madras, 2000
2. Woods, J. H.: *The Yoga system of Patanjali*, M.L.B.D., Delhi, 1988
3. Swami Vivekananda: *Rajayoga*, Advaita Ashram, Culcutta, 2000
4. Burley, Mikel: *Hatha Yoga, its' Context Theory and Practice* (M.L.B.D. Delhi, 2000)
5. Burnier, Radha: *Hathayoga Pradipika of Svatmarama*, The Adyar Library publications, Chennai

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-103)**

**TOURISM THEORY AND PRACTICE**

**Course Objectives:**

1. To deal with various aspects of sustainable tourism, ecotourism and responsible tourism.
2. To deal with all the fundamental aspects of tourism that are to be learnt by students of tourism, air transport, travel and hospitality disciplines.
3. To give an insight into the concept of tourism from different perspectives.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Gather various types of tourism aspects such as sustainable tourism etc.
- CO 2. Explain fundamental aspects of tourism such as air transport, tourism disciplines etc.
- CO 3. Classify full understanding of the challenges, assumptions, solutions and indicators for tourism.

**Unit - I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product and concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components

**Unit - II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

**Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

**Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

**Unit- V Tourism Organization:-**

Origin, location, and functions of WTO / UNWTO, IATA, UFTAA, ASTA, PATA, TAAL, ITDC.

**Suggested Readings:**

Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.

Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.

Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.

Mill, R.C., (1990), Tourism: The International Business, Prentice Hall, New Jersey.

Bhatia, A.K., - International Tourism

Seth, P.N., (1999) Successful Tourism Management (Vol 1 &2)

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-104)**  
**HOSPITALITY MANAGEMENT**

**Course Objectives:**

1. To appraise students about the important departments of a hotel.
2. To teach various aspects related to accommodation Industry.
3. To provide training, skill development and education, hospitality, tourism and entertainment industries.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Analyze information and make decisions using critical thinking and problem solving skills.
- CO 2. Describe and apply the fundamental principles of leadership and effective communication skills.
- CO 3. Evaluate diversity and ethical considerations relevant to the hospitality industry.

**Unit-I: Hospitality: Meaning, Nature and Typologies**

Defining Hospitality: Nature and its Meaning.

Age old Institution of Hospitality with the Spirit of 'Atithi Devo Bhav' in India and its present status.

Typology of Accommodation, Origin and growth of Hostel industry with special Reference to India.

**Unit-II: Organization and Functions of Various Department in Hotels.**

Front Office, Food Production, F& B Service, House Keeping, Back office and other Ancillary Departments.

**Unit-III: Type and Forms of Hotels**

Classification of Hotel on Basis of Location, Size, Clientele and Range of Service etc

Star Classification - Criteria and Procedure Adopted in India.

Resort Properties, Heritage Hotel and Ecotels- Concept and Emerging Dimensions.

**Unit-IV: Hospitality Institutions & Manpower Requirements.**

Manpower Requirement in Hotel Sector: designations, qualifications & remunerations.

Role and Contribution of I.T.D.C. and State Tourism Corporations in Development of Hotel Sector in India, Hospitality Educations of India-Growth & Development, Hospitality Associations (HAI, FHRAI)

**Unit-V: Major Hotel Chains in India**

The Taj Group of Hotels

Oberai Hotel & Resorts

Lalit Hotels

The Ashok Group of Hotels

**Suggested books**

Introduction to Hospitality Industry-Bagri &Dahiya

Introduction to Hospitality- J. Walker

Managing Hosopitality- D. Rutherford

Hotel Front Office Mannual-Sudhir Andrew

Housekeeping Maual-Sudhir Andrew

Hotel and Lodging Management and Introduction: by Alan T. Stutis & James F. Wortman, John Willy & Sons.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-105)**  
**YOGA PRACTICUM**

**Course Objectives:**

1. To understand the benefits, contraindications and procedure of all practices.
2. To demonstrate each practice with confidence and skill.
3. To explain the procedure and subtle points involved.
4. To teach the yoga practices to any given group.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Rephrase the benefits, contradictions and procedure of all practices.  
CO 2. Demonstrate each practice with confidence and skill.  
CO 3. Explain the procedure and subtle points involved.  
CO 4. Teach the yoga practices to any given group.

**Shatkarma:** Jalneti, Rabarneti, Vamana Dhauti / Kunjar Kriya, Vat karma, Kapalbhathi. - 15marks  
**Asana** - 25 marks

SukshmaVyayam (Pawan mukta Asana) -1, Yogic Jogging, 12 Asanas (Mandukasana, Shashakasana, Gomukhasana, Vakrasana, Makarasana, Bhujangasana, Shalabhasana, Markatasana, Pawanmuktasana, Halasana, Padvrittasana, Dwi-Chakrikasana and Shavasana)

Siddhasana, Kati chakrasana, Ardhalasana, Padmasana, Vajrasana, Swastikasana, Veerasana, Udarakarsanasana, Bhadrasana, Janushirasana, Ardhamatsyendrasana, Gomukhasana, Ustrasana, Uttanapadasana, Naukasana, Sarvangasana, Halasana, Matsyasana, Suptavajrasana, Chakrasana, Tadasana, TiryakTadasana, Ek paadpranamasana, Vrikshasana, Garudasana, Hastotansana, Padahastasana, Trikonasana, Ardhadhanurasana, Marjari asana, Ardhashalabhasana, Bhujangasana, Makarasan, Shavasana, Samakonasana, Bakasana, Sarpasana, Hanumanasana, Sukhasana, Ardhpadmasana, Ek Pada Halasana, Setubandhasana, Markatasana, Shashankaran, Vipreetnaukasana, Dwikonasana, Parshvatanasana, Singhasana.

**Pranayama**-10 marks

Diaphragmatic Breathing, Pranayama: Kapalbhathi, Bhastrika, Bahya, Ujjayi, Anulom-Vilom, NadiShodhan, Bhramari and Udghith

**Mudra & Bandha:** Jnana Mudra, Chin Mudra, Vipreet Karni Mudra, Yoga Mudra, Jalandhar Bandh, Uddiyan Bandh, Moolbandha - 10 marks

**Viva:** Ishwar Stuti Prarthnopasana-10marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-106)**  
**PROJECT REPORT (TOURISM)**

**Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

**Course Detail**

**The students will have to submit a Project Report for Via-Voce of several places of tourist destinations in India.**

The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce Examination.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH- CE 01)**  
**Communicative English (Non Credit)**

**Course Objectives:**

1. To improve the English communication of the students.
2. To analyze and restate the meaning of a text in English.
3. To develop the ability to speak English language with right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Will be able to use literary techniques in literary texts.
- CO 2. Will be able to gain confidence by speaking English in real life aspects.
- CO 3. Gain the skill to write English without grammatical errors.

**Communication:**

Communication definition and concept, Process of Communication. Elements of Communication steps/phase of Communication. Means, Methods, Mode of Communication. Verbal-oral-written Communication. Nonverbal-sign language, Body Language. Flow of Communication: Formal/Informal. Barriers of Communication- Intrapersonal, interpersonal and organizational barriers.

Recapitulation Linguistic Communication Patter of Communication Group Discussion (GD), History of print Media in India.

**Grammar and usage:**

- i. Noun
- ii. Pronoun
- iii. Verb, modal, Tenses
- iv. Adjective
- v. Adverb
- vi. Preposition
- vii. Conjunction
- viii. Interjection
- ix. Rules of Translation
- x. Punctuation
- xi. Capitalization and Abbreviation
- xii. Subject Verb Agreement
- xiii. Sentences Correction Rules

- XIV. One word substitution
- XV. Active and Passive voice xvi.
- XVI. Direct and Indirect Speech
- XVII. Direct and Indirect Speech Suffixes and prefixes  
Antonyms and synonyms  
Homophones and Homonyms Letters  
Writing

Gift of the Magi-O Henry

ShrinivasaRamanujan

MuktaDhara-R.N.Tagore

### **Readings (References)**

Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead effectively, by Helio Fred Garcia, 2012

Pone Communicates, Few Connect: 'What the Most Effective People Do Differently', haC. Maxwell, 2010

Interviewing: A Programmed Approach to Effective Communication, by David Dans, Margaret T. Hearn, Max R. Uhlemann and Allen E. Ivey, 2010

Art and Science of Communication: Tools for Effective Communication in the place, by P. S. Perkins and Les Brown, 2008  
Listening Effective Groups: The Art of Small Group Communication, by Randy Fujishin,

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-201)**  
**Patanjal Yoga Darshan**

**Course Objectives:**

1. To create yoga experts with in-depth knowledge based on yogic texts.
2. To establish holistic health, social harmony and world peace by training them to be good.
3. To teach citizens who can offer yogic way of right living.

**Course Outcomes:** After studying this paper, students will able to:

CO 1 Acquire and be equipped with skills in the application of theoretical & practical knowledge of Yoga.

CO 2. Practice for real life problem solving, in an increasing complex also for the corporate world.

CO 3. Maximize spiritual knowledge and various aspects of yoga with the help of yoga darshan.

**Unit 1: - Introduction of Yogasutra and Samadhi Pada**

Yoga Sutra :Introduction, Definition and Purpose of Yoga, Importance of Yoga Sutra as compared to other Yogic texts, Concept of *Chitta*, *Chitta Bhoomi*, *Chittavrittis* and their types, *Chitta Vritti Nidrodhopaya (Abhyas- Vairagya)*, *Chitta Vikshep (Antaraya)*, *Antarayabhava*, *Chitta Prasad* and its helpers, The metaphysics of Sankhyadarshana and its relation with Patanjali Yogadarshan.

**Unit-2: - Samadhi Pada-II and Sadhan Pada**

Ishwar: Swaroop, Pranava chanting and its results, Ashtanga Yoga - 1 (Bahirang Yoga- Yama, Niyam, Asana, Pranayama, Pratyahara), Importance and Relevance of Ashtanga Yoga and Kriya Yoga, Concept of Kriya Yoga, Describing *Klesha*, Measures of *Klesha* elimination, *Vivek Khyati*, *Chaturvyuhavaad*, the character of *Drishhta & Drishya*, , the form and types of samadhi - *samprajnata*, *asamprajnata*, *sabijand nirvij Samadhi*, *RitambharaPragya* and *Adhyatma Prasad*.

**Unit 3: - Vibhuti Pada**

Ashtanga Yoga - II (*Antaranga* Yoga - Dharna, Dhyana, Samadhi), Concept of *Sanyama - Sanyama* and its three consequences, Concept of *Vibhuti* and introduction of main vibhutis, Describing Ashtasiddhi.

## **Unit-4: - Kaivalya Pada**

Five types of Siddhis (birth, medicine, mantra, penance and samadhija), Nirmaanchitta.  
Types of Karma, *Vaasna*, *Vivek Gyan*, *Dharma Megha Samadhi*, *Kaivalya*

### **Prescribed text books**

योग दर्शनम् - स्वामी रामदेव, दिव्य प्रकाशन, पतंजलि योग पीठ, हरिद्वार

दर्शन प्रवेशदिव्य प्रकाशन-, पतंजलि योग पीठ, हरिद्वार

सहायक पुस्तक -

भोज वृत्ति

योगदर्शनम्-गीताप्रेस

### **BOOKS FOR REFERENCE**

BKS Iyengar: Introduction of Patanjali Yogasutra-s: MDNIY, New Delhi, 2011.

Swami Ved Bharti: Yogasutra of Patanjali (with the Exposition of Vyasa) M.L.B.D. New Delhi, 2004,  
Vol I & II.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-202)**  
**Yoga Therapy**

**Course Objectives:**

1. To promote positive awareness for the healthy body and healthy mind
2. To inculcate the teaching ability for conducting yoga sessions and offer various techniques.
3. To create yoga professionals of high caliber who know the concepts, techniques and can do the practical as well.
4. To create yoga experts with in-depth knowledge based on yogic texts.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Develop understanding of different yogic techniques.

CO 2. Attain perfection to perform different yogic practices and shat karmas.

CO3. Explain techniques of Pratyahara, Dharana, Dhyana and conduct practical sessions.

**Unit-1 Yoga Etiology, Diagnosis and Therapy**

Yogic Anatomy and Physiology: Concept of Psychic Centers, Pancha Kosha and three planes of human being; and effects of their activation and impairment over somatic, psychic and psycho-somatic levels of human existence. Yogic diagnostic techniques: Connections of SwarScience, Prana and Breathing Patterns over somatic, mental and psycho-somatic levels. Association of Psychic centers over nerve plexus and endocrine glands; Concept of health and wellness in terms of WHO, Ayurveda and Yoga; Concept of Yoga Therapy: Meaning, Definition, Aims, Principles, Factors Impacts and Limitations; Qualities of a yoga therapist.

**Unit-2: Musculo-Skeletal Disorders**

Back Pain: Classification of back pain: organic and functional: Lumbar Spondylosis, Intervertebral disc prolapse (IVDP), Spondylolisthesis, Spondylitis, Psychogenic- Lumbago, Medical and Yogic management; Neck pain: Classification- Cervical Spondylosis, radiculopathy, Functional neck pain; Medical and Yogic management, All forms of Arthritis: Rheumatoid Arthritis, Osteoarthritis, Medical and Yogic management.

**Unit- 3: Gastro Intestinal and Excretory Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Acid peptic disease - Indigestion Hyperacidity, Ulcer, Flatulence, Gastritis, Bowel problems - chronic Constipation and hemorrhoids, Irritable Bowel Syndrome, Ulcerative colitis or inflammatory bowel disease, Crohn's disease, gluten intolerance, food allergies; Excretory System: irritable bladder syndrome, stress incontinence, Chronic renal failure, Renal hypertension, Renal stones.

## **Unit- 4: Cardio-Pulmonary Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Hypertension and Hypotension, Ischemic heart diseases, Varicose veins, Peripheral vascular disease, Autoimmune Arteritis. Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management (rationale for the disease specific yoga protocol, scientific evidence if available, probable healing mechanisms, practices of choice and contra indications). Allergic, autoimmune respiratory conditions -Allergic Rhinitis & Sinusitis, Bronchial Asthma, COPD & Emphysema- Occupational pulmonary disease.

## **Unit-5: Neurological and Psychiatric Disorders**

Headaches: Migraine: Causes, Classification, clinical features, Medical and Yogic management, Tension headache: Causes and its symptoms and Medical and Yogic management; Cerebro vascular accidents: Causes, clinical features, Medical and Yogic management, Epilepsy, pain; Parkinson's disease: Causes, clinical features, Medical and Yogic management

Introduction to psychiatric disorders, classification - Neurosis, Psychosis: Neurosis: Anxiety disorders: Generalized anxiety disorder, Panic Anxiety, Obsessive Compulsive Disorder, Phobias: Medical and Yogic management: Depression: Dysthymia, Major depression, Medical and Yogic management; Psychosis: Schizophrenia, Bipolar affective disorder, Medical and Yogic management

### **TEXT BOOKS**

1. Nagarathna R and Nagendra HR, Yoga therapy for common ailments series, SVYPPublications, 2010
2. Swami Karmananda, Yoga therapy for common diseases, Yoga publication trust, Munger,2001
3. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers

### **REFERENCE BOOKS**

1. Shivanand Saraswati: Yoga Therapy (Hindi & English)
2. Rai, Lajpat: Discovering Human Potential energy: A Physiological Approach to Yoga (Anubhava Rai Publications, 1998)
3. Nagarathna, R and Nagendra, H.R.: Promotion of Positive Health, Swami Vivekananda Yoga Prakashana, Bangalore, 2002
4. Ramesh Bijlani: Back to Health through Yoga, Rupa Publications India Pvt. Ltd, 2011
5. MONIY publications: 10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi,2009
6. Swami SatyanandaSaraswati: Yoga and Cardio Vascular Management, Yoga PublicationTrust, Munger, 2005
7. Nagarathna R and Nagendra H R:Yoga for Arthritis, Back pain, Diabetes, Pregnancy Breathing Practices, Swami Vivekananda Yoga Prakashana, Bangalore, 2000

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-203)**  
**CULTURAL TOURISM RESOURCES**

**Course Objectives:**

1. To give information of countries Tourist places of India importance.
2. To help students to know the background elements of Cultural Tourism Resources.
3. To Discuss the importance of cultural and heritage tourism to national development.
4. To evaluate the culture and heritage of the Region.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Classify the concept of culture and its place in the tourism market.
- CO 2. Illustrate the impact of the cultures of visitors of the Caribbean cultures.
- CO 3. Identify the multiple cultures and its impact on its economic development.
- CO 4. Evaluate the study of folk dances, traditional music accessible in India.

**Unit - I**

Art Heritage of India- Indus valley architecture- Mauryan Architecture-Buddist Architecture, Temple Architecture through the ages-Islamic Architecture.

**Unit - II**

Pre historic paintings- Tribal and Folk-Indian manual painting-Ajanta, Ellora-Early western Chalukya-Pallava-Pandaya-early Chera-Rashtrakuta, Chola- Vijayanagar-Nayak School-Rajasthani- Mughal and Pahadi Schools-Modern paintings.

**Unit- III**

Classical dances and dances styles- (BharathaNatya, Kathakali, Mohiniattam. Kuchipudi, Oddisies, Manipuir) centers of learning and performances Indian folk dances.

**Unit- IV**

Music-Different types of Indian Music- Status of Vocal and instrumental music--various types- new experiments.

**Unit- V**

Handicrafts- Iconometry and Iconography- Metal works-stone ware wood carving-furniture-jewellery - dools- musical instrument

**Suggested Readings:**

- Banerjee, J.N.-The development of Hindu Iconography
- HamayanaKahan-Indian Heritage
- Percy Brawen-Indian Architecture
- Ragini Devi-Dance Dialects of India
- Sarswathi, S- Indian Sculpture
- Sivaramamoorthy –Indian painting
- Sunith V.A.- History of fine art in Indian and Cylon.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-204)**

**ITINERARY PLANNING, MARKETING, TOUR PACKAGING AND  
COSTING**

**Course Objectives:**

1. To develop an understanding of the creation of the inclusive tour product in the leisure travel market.
2. To develop interactive and communication skills.
3. To examine human behavior as it relation to the purchase of tours Learning outcomes upon completion of this course.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. offer wide exposure to the students to handle issues in tourism related businesses professionally.
- CO 2. develop knowledge to be an explorer he will set practical knowledge relating to travel and tour operation.
- CO 3. bridge the gap between theoretical and practical knowledge of the students by adopting tourism significance.
- CO 4. develop socially, ethically responsible business leaders and innovative teaching pedagogy.

**Unit - I**

What is marketing? Marketing Management, Marketing Management Philosophies, Marketing Mix, Marketing challenges into the next century.

**Unit - II**

Concept of Tour-Itinerary, Steps in preparation of tour Itinerary, Effective principles in making tour itinerary, steps in doing tour costing, FIT & GIT.

**Unit- III**

Some itinerary planning of north and west India: Example: Agra, Khjuraho and Varanasi circuit, Naintal, Deharadun, Shimla and Leh Circuit. Jaipur, Jodhpur and Udaipur Circuit.

Selected out bound package tour: Salient feature of outbound package tour, package tour of far east and South East Asian countries like Singapore, Hong Kong, Thailand and Malayasia, package tour of South Asia Countries like Nepal, Srilanka, Bhutan etc.

**Unit- IV**

Factors to consider when setting prices, General pricing approaches, Nature of distribution channels, Channel behavior & organization, Channel Management decisions.

**Unit- V**

The marketing communication mix, Communication process, Steps in developing effective communication, Setting total promotional budget and mix, Advertising, Sales promotion, Public relation, Personal selling.

**Suggested Readings:**

1. Navin Berry: Travel Planner
2. Eric Law: Managing Packaged Tourism
3. Philip Kotler & Gray Armstrong: Principles of Marketing
4. S. Neelamegham: Marketing in India-Cases & Readings
5. Rama Swamy & Mamakumari: Marketing Management- Planning Implementation & Control

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-205)**

**Yoga Practicum**

**Course Objectives:**

1. To Enable the student to have good health.
2. To Practice mental hygiene and possess emotional stability.
3. To Attain higher level of consciousness and integrate moral values.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. get to know more about physical and mental exercise.  
CO 2. witness many changes accordingly with flexibility.  
CO 3. attain higher moral ethics and learning about spiritual path.

**Shatakarma:**Danddhauti,Vastrdhauti, Nauli, Trataka. -5 marks

**Aasana:** -15marks

Dvipada Skandhasana, Purna Bhujangasana, Purna  
Matsyendrasana,Pakshee Aasan, Vrishchik Aasana, Padma  
Mayurasana,  
Purna Vrishchikasana, Takiya Aasana, Padma Sheershasana,  
Karnapidasana, PurnaDhanurasana, Gorakshasana,  
Purna Chakrasana, Purna Shalabhasana, Ek Pada Bakasana,  
Omkar Aasana, Purna Natarajasana  
And all the practices of previous semesters.

**Pranayama –**

10 marks

Udgeeth, Moorchha.

**Dhyana & Viva:** Vijnanamaya & Anandamaya Kosha - 20marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-206)**  
**EDUCATIONAL TOUR**

**Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

**COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

**Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH CE 02)**

**Communicative English (Non Credit)**

**Course Objectives:**

1. To analyze and restate the meaning of a text in English.
2. To demonstrate the skill to write in English without grammatical error.
3. To practice listening effectively to communication in English.
4. To develop the ability to speak English language with the right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Express the viewpoints with confidence in English with right pronunciation.
- CO 2. Outline values and skills gained through effective communication to other disciplines.
- CO 3. Compose articles and compositions in English and discuss about English effectively.

**Communication:**

- i. Recapitulation
- ii. Face to Face Communication
- iii. Telephonic Conversation
- iv. Reading Techniques
- v. Letter writing
- vi. Creative Writing
- vii. Accent
- viii. Stress
- ix. Rhythm
- X. Intonation
- Xi. Seeking Introduction/Introduce oneself
- Xii. Making Enquires
- Xiii. Asking Questions and Discussion

## **Literature**

- i. The Kite Maker by Ruskin Bond
- ii. RabindraNath Tagore-Chandalika
- iii. Autumn by Kalidasa(Translated by Arthur W.Ryoler)
- iv. While the Auto Waits O Henry(Adapted for the stage by walter wykes)
- v. The Loss by Anjali Shukla.

## **Suggested Readings**

- The Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead Effectively, by Helio Fred Garcia, 2012
- Crucial Conversations Tools for Talking When Stakes Are High, by Kerry Patterson, Joseph Grenny, Ron McMillan and AlSwitzler, 2011
- Everyone Communicates, Few Connect: What the Most Effective People Do Differently, by John C. Maxwell, 2010
- Messages: The Communication Skills Book, by MatthewMcKay, Martha Davis and Patrick Fanning, 2009
- Communication: The Key to Effective Leadership, by Judith A.Pauley, 2009
- The Art and Science of Communication: Tools for EffectiveCommunication in the Workplace, by P.S. Perkins and Les Brown, 2008

पतञ्जलि विश्वविद्यालय, ( हरिद्वार )

पाठ्यक्रम - B.A. - दर्शन ( ऑनर्स )

वर्ष- 2018-19



# **University Of Patanjali**

## **BA DARSHAN (BD)**

### **Program Educational Objectives (PEOs)**

- **PEO 1** – To inculcate human and moral life values in the student by learning the principles of Indian shaddarshan philosophies
- **PEO 2** – By imparting a proper sense of history, social science and political science to the student, by equipping the student with the glory of the past and the resolve of the golden future, to inculcate humanity in the family, social and political life.
- **PEO 3** – By giving understanding of Shrimadbhagwadgita and Upanishads, to equip the student with right devotion and right work.
- **PEO 4** – To awaken within the student the feeling of oneness, coexistence and universal brotherhood with self-realization by establishing individual and collective harmony by integrating the knowledge of body and universe with the understanding of Yoga science and Yajna science.
- **PEO 5** – To develop proficiency in English language along with national language and mother tongue.

### **Program Specific Outcomes (PSOs)**

After completing of the program, the students will be able to

- **PSO 1** – Build a divine personality and divine character by attaining the right understanding of the scriptures such as philosophy, political science, social science, Gita Upanishad, etc.
- **PSO 2** – Avoid (retire from) ignorance, mistrust and bad deeds, and gets engaged in good deeds and self-religion by being equipped with good knowledge and goodwill with the theoretical understanding of Vedic Philosophical schools.
- **PSO 3** – Become skilled and proficient in his overall physical, mental, intellectual and spiritual development while being equal in all dialectical situations with the knowledge and faith described in Shrimad Bhagvad Gita.
- **PSO 4** – Realise the Brahmavidya described in Upanishads and strong detachment from worldly attractions and complete loyalty and faith towards Guru and God.
- **PSO 5** – Destroy all the diseases and troubles present in himself and the society with the understanding of the science behind Yoga and Yagya.

**पाठ्यक्रम - B.A. /ऑनर्स- ( दर्शन )**  
**प्रथम, द्वितीय एवं तृतीय वर्ष**  
**के कुछ सामान्य नियम**

- ❖ परीक्षा में 50% अंक प्राप्त करने वाले छात्र को ही उत्तीर्ण माना जायेगा।
- ❖ प्रस्तुत पाठ्यक्रम तीन वर्ष का होगा।
- ❖ प्रत्येक वर्ष 2 सत्र (Semester) में, 2 बार परीक्षाएं होंगी।
- ❖ प्रत्येक परीक्षा में पाँच प्रश्नपत्र होंगे।
- ❖ दो प्रश्नपत्र दर्शनों से सम्बन्धित, तृतीय संस्कृत तथा चतुर्थ पत्र हिन्दी व पाँचवा अंग्रेजी भाषा का होगा।
- ❖ सभी पेपर 100-100 अंक के होंगे।
- ❖ कुल अंक एक वर्ष में 1000 तथा तीनों वर्ष के मिलाकर - 3000 अंक होंगे।
- ❖ परीक्षा का माध्यम English Paper को छोड़कर शेष सभी पत्रों में हिन्दी या संस्कृत होगा।
- ❖ प्रत्येक परीक्षा का निर्धारित समय 3 घण्टे होगा।

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) प्रथम वर्ष**  
**Semester -I**

**Paper -1- yogadarśana**

**Paper Code- BD-101**

(70+30=100)

**Course Objectives-**

- *yogadarśana ke mūla sūtroṃ kā bodha*।
- *yogadarśana ke mūla sūtroṃ kā jñāna*।
- *sāmānyasūtrārtha kā bodha*।
- *yoga ke paribhāṣā kā bodha*।

पातञ्जल योगसूत्र

(70+30=100)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *yogadarśana ke mūla sūtroṃ kā vācana*।
- *yogadarśana ke mūla sūtroṃ kā lekhaṇa*।
- *sāmānyasūtrārtha kā paricaya*
- *yoga kī paribhāṣā*।

सन्दर्भग्रन्थ - सदाशिवेन्द्रवृत्ति एवं योगदर्शन- स्वामीरामदेव जी

**Paper -2- sām̐khyadarśana-1**

**Paper Code- BD-102**

(70+30=100)

**Course Objectives-**

- *sām̐khyadarśana ke 1 se 3 adhyāya kā bodha*।
- *sām̐khyadarśana ke 1 se 3 adhyāya ke lekhaṇa kā bodha*।
- *sām̐khyadarśana ke sāmānyasūtrārtha (1 se 3 adhyāya) kā jñāna*।
- *trividha duḥkha ke nivāraṇa kā bodha*।

सांख्यसूत्र-(1-3 अध्याय)

(70+30=100)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *sām̐khyadarśana ke 1 se 3 adhyāya kā vācana*।
- *sām̐khyadarśana ke 1 se 3 adhyāya kā lekhaṇa*।
- *sām̐khyadarśana ke sāmānyasūtrārtha (1 se 3 adhyāya)*
- *trividha duḥkha kā vivaraṇa evaṃ nivāraṇa*।

सन्दर्भग्रन्थ - आचार्य आनन्दप्रकाश जी, विद्योदयभाष्य सहित सांख्यदर्शन (आचार्य उदयवीर शास्त्री जी)

**Paper -3- saṃskṛta-1**

**Paper Code-103**

(70+30=100)

**Course Objectives-**

- *saṃdhiprakaraṇa kā bodha*।
- *śabdarūpa paricaya va vācana kā bodha*। (1-15)
- *dhāturūpa paricaya va vācana kā bodha*। (1-15)
- *sāhitya evaṃ buddhacaritam- 1-4 sarga kā jñāna*।

साहित्य - बुद्धचरितम्- 1-4 सर्ग

व्याकरण - वर्णोच्चारण शिक्षासूत्राणि, संज्ञा प्रकरणम्, सन्धि प्रकरणम्, 15 शब्दरूप व 15 धातुरूप  
अनुवाद, अलंकार प्रदीप (विश्वेश्वर सूरी)

**Course Outcomes-**

- *saṃdhiprakaraṇa kā paricaya*।
- *śabdarūpa paricaya va vācana*। (1-15)
- *dhāturūpa paricaya va vācana*। (1-15)
- *sāhitya evaṃ buddhacaritam- 1-4 sarga kā paricaya*।

सन्दर्भग्रन्थ- व्याकरण प्रवेश- प्रारम्भिक रचनानुवाद कौमुदी व रचनानुवाद कौमुदी

## Paper -4- hindī-1

### Paper Code- 104

(70+30=100)

#### Course Objectives-

- *hindī bhāṣā kā sāmānya bodha*।
- *kāla-vibhājana evaṃ nāmakaṛaṇa kā bodha*।
- *bhakti āṃdolanarū udbhava aura vikāsa kā jñāna*।
- *madhyakālīna bodha tathā ādhunika bodha- saṃkramaṇa kī paristhitiyoṃ kā bodha*।

#### इकाई-1 हिन्दी भाषा

- हिन्दी भाषा का सामान्य परिचय
- हिन्दी की विभिन्न बोलियों का सामान्य परिचय।
- खड़ी बोली का स्वरूप व क्षेत्र का संक्षिप्त परिचय

#### इकाई-2 आदिकाल

- काल-विभाजन एवं नामकरण
- आदिकाल की प्रमुख प्रवृत्तियाँ

#### इकाई-3 मध्यकाल

- भक्ति आंदोलन : उद्भव और विकास
- भक्तिकाल की प्रमुख प्रवृत्तियाँ
- रीतिकाल : नामकरण
- रीतिकाल की प्रमुख प्रवृत्तियाँ

#### इकाई-4 मध्यकालीन बोध तथा आधुनिक बोध- संक्रमण की परिस्थितियाँ

- आधुनिक हिंदी कविता की प्रमुख प्रवृत्तियाँ
- उपन्यास, कहानी, नाटक, निबंध, आलोचना तथा अन्य गद्य रूप।

#### Course Outcomes-

- *hindī bhāṣā kā sāmānya paricaya*।
- *kāla-vibhājana evaṃ nāmakaṛaṇa*।
- *bhakti āṃdolanarū udbhava aura vikāsa*।
- *madhyakālīna bodha tathā ādhunika bodha- saṃkramaṇa kī paristhitiyāṃ*।

#### सहायक ग्रन्थ-

1. हिन्दी भाषा- धीरेन्द्र वर्मा
2. हिन्दी भाषा की संरचना - भोलानाथ तिवारी
3. हिन्दी साहित्य का इतिहास - रामचन्द्र शुक्ल
4. हिन्दी साहित्य का इतिहास - डॉ. नगेन्द्र
5. आदिकालीन हिंदी साहित्य के अध्ययन की दिशाएं - अनिल राय

# Paper-5- Communicative English -1

Paper Code- BD-105

(70+30=100)

## Course Objectives

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

## Language :

- Communication : Process, Methods, and Interpersonal Communication .
- Definition & Concept, Elements, Verbal, Written, Non Verbal, Flow, Barriers.
- Listening: Definition, Difference between hearing and listening, Advantages.
- Grammar: Parts of Speech, Using one word as different parts of Speech.

## Literature : • William Wordsworth, Lines Written in Early Spring.

- Swami Ramdev. • Lord Ganesha

## Course Outcomes

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

पतञ्जलि विश्वविद्यालय, हरिद्वार  
पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) प्रथम वर्ष  
Semester -II

**Paper -1- sāmkyakārikā**

**Paper Code- 201**

(70+30=100)

**Course Objectives-**

- *sāmkyakārikā ke mūla ślokoṃ ke vācana kā bodha*
- *sāmkyakārikā ke mūla ślokoṃ ke lekhana kā bodha*
- *sāmkyakārikā ke ślokoṃ ke arthoṃ kā jñāna*
- *sāmkyā kī paribhāṣā kā bodha*

सम्पूर्ण सांख्यकारिका

(70+30=100)

(कण्ठस्थीकरण, कारिकार्थ एवं विषय परिचय)

**Course Outcomes-**

- *sāmkyakārikā ke mūla ślokoṃ kā vācana*
- *sāmkyakārikā ke mūla ślokoṃ kā lekhana*
- *sāmkyakārikā ke ślokoṃ ke arthoṃ kā paricaya*
- *sāmkyā kī paribhāṣā*
- *sampūrṇa sāmkyakārikā*

सन्दर्भग्रन्थ - सांख्यकारिका (श्रीमदीश्वरकृष्णविरचिता)

**Paper -2- sāmkyadarśana-2**

**Paper Code- BD-202**

(70+30=100)

**Course Objectives-**

- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ ke vācana kā bodha*
- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ ke lekhana kā bodha*
- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ ke sūtrartha kā jñāna*
- *tīna prakāra ke pramāṇoṃ kā jñāna*

सांख्यसूत्र (4-6 अध्याय)

(70+30=100)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ kā vācana*
- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ kā lekhana*
- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ kā sūtrartha*
- *tīna prakāra ke pramāṇa kā paricaya*

सन्दर्भग्रन्थ -दर्शनप्रवेश- आचार्य आनन्दप्रकाश जी, विद्योदय भाष्य सहित सांख्यदर्शन (आचार्य उदयवीर शास्त्री जी)

**Paper -3- saṃskṛta-2**

**Paper Code-BD-203**

(70+30=100)

**Course Objectives-**

- *sāhitya kā bodha*।
- *anuvāda kā jñāna*।
- *1 se 15 śabda rūpoṃ va dhātu rūpoṃ kā bodha*।
- *buddhacaritam-5 se 8 sarga kā jñāna*।

साहित्य - बुद्धचरितम्- 5-8 सर्ग

व्याकरण - सामासिक, नामिक, अनुवाद, 15 शब्दरूप, 15 धातुरूप  
अनुवाद, अलंकारप्रदीप (विश्वेश्वरसूरि)

**Course Outcomes-**

- *sāhitya kā paricaya*।
- *anuvāda kā paricaya va vivaraṇa*।
- *1 se 15 śabda rūpoṃ va dhātu rūpoṃ kā paricaya*।
- *buddhacaritam-5 se 8 sarga kā paricaya*।

सन्दर्भग्रन्थ- व्याकरणप्रवेश- प्रारम्भिक रचनानुवादकौमुदी व रचनानुवादकौमुदी

**Paper -4- hindī-2**  
**Paper Code- BD-204**

(70+30=100)

**Course Objectives-**

- *bhāṣā kī paribhāṣā, prakṛti evaṃ vividha rūpoṃ kā jñāna*
- *hindī kī varṇa-vyavasthā: svara evaṃ vyaṃjana*
- *varṇoṃ kā uccāraṇa sthāna: kaṇṭhya, tālavya, mūrddhanya, dantya, oṣṭhya tathā dantyoṣṭhya varṇoṃ kā jñāna*
- *bhāvārtha aura vyākhyā, āśaya lekhana, vividha prakāra ke patra lekhana kā bodha*

1. भाषा की परिभाषा, प्रकृति एवं विविध रूप।
2. हिन्दी भाषा की विशेषताएँ : क्रिया, विभक्ति, सर्वनाम, विशेषण एवं अव्यय सम्बन्धी।
3. हिन्दी की वर्ण-व्यवस्था : स्वर एवं व्यंजन।
4. स्वर के प्रकार - ह्रस्व, दीर्घ तथा संयुक्त।
5. व्यंजन के प्रकार - स्पर्श, अन्तस्थ, ऊष्म, अल्प्राण, महाप्राण, घोष तथा अघोष।
6. वर्णों का उच्चारण स्थान : कण्ठ्य, तालव्य, मूर्द्धन्य, दन्त्य, ओष्ठ्य तथा दन्त्योष्ठ्य वर्ण।
7. बलाघात, संगम, अनुतान तथा संधि।
8. भाषा संप्रेषण के चरण : श्रवण, अभिव्यक्ति, वाचन तथा लेखन।
9. हिंदी वाक्य रचना, वाक्य और उपवाक्य, वाक्यभेद, वाक्य का रूपान्तर।
10. भावार्थ और व्याख्या, आशय लेखन, विविध प्रकार के पत्र लेखन।

**Course Outcomes-**

- *bhāṣā kī paribhāṣā, prakṛti evaṃ vividha rūpa*
- *hindī kī varṇa-vyavasthā: svara evaṃ vyaṃjana*
- *varṇoṃ kā uccāraṇa sthāna: kaṇṭhya, tālavya, mūrddhanya, dantya, oṣṭhya tathā dantyoṣṭhya varṇa*
- *bhāvārtha aura vyākhyā, āśaya lekhana, vividha prakāra ke patra lekhana*

**सहायक ग्रन्थ-**

1. सामान्य हिन्दी - डॉ० द्वारिका प्रसाद सक्सेना
2. अपनी हिन्दी सुधारें - डॉ० विजय अग्रवाल
3. व्यवहारिक हिन्दी - डॉ० महेन्द्र मित्तल
4. अच्छी हिन्दी - डॉ० रामकुमार वर्मा

## Paper -5- Communicative English -2

### Paper Code- BD-205

(70+30=100)

#### Course Objectives

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### Language :

- Words used and Misused, Tense, Subject Verb Agreement, Correction of Incorrect Sentences
- One word Substitution, Active Passive Voice, Direct Indirect Speech, Idioms & Proverbs  
Antonym & Synonym.

#### Literature :

- William Wordsworth, **The Solitary Reaper**
- **Swami Dayanad Saraswati.**
- R.K. Narayan, **The Guide**
- **Swami Vivekanand.**

#### Course Outcomes

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English.

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) द्वितीय वर्ष**  
**Semester -III**

**Paper -1- nyāya darśana-1**

**Paper Code- BD-301**

(70+30=100)

**Course Objectives-**

- *nyāya darśana mūla sūtreṃ ke prathama, dviṭīya aura tṛtīya adhyāya kā vācana kā bodha।*
- *nyāya darśana mūla sūtreṃ ke prathama, dviṭīya aura dviṭīya adhyāya kā lekhaṇa kā jñāna।*
- *nyāya darśana ke mūla sūtreṃ ke arthoṃ kā bodha।*
- *nyāya kī paribhāṣā kā jñāna।*

न्याय सूत्र (प्रथम व द्वितीय अध्याय)  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *nyāya darśana mūla sūtreṃ ke prathama, dviṭīya aura tṛtīya adhyāya kā vācana।*
- *nyāya darśana mūla sūtreṃ ke prathama, dviṭīya aura dviṭīya adhyāya kā lekhaṇa।*
- *nyāya darśana ke mūla sūtreṃ ke arthoṃ kā paricaya।*
- *nyāya kī paribhāṣā।*

सन्दर्भग्रन्थ - विद्योदय भाष्य सहित न्यायदर्शन (आचार्य उदयवीर शास्त्री जी)

**Paper -2- vaiśeṣika darśana-1**

**Paper Code- BD-302**

(70+30=100)

**Course Objectives-**

- *vaiśeṣika darśana ke sūtroṃ kā vācana kā bodha।*
- *vaiśeṣika darśana ke sūtroṃ kā vācana kā jñāna।*
- *vaiśeṣika darśana ke sūtroṃ ke arthoṃ kā bodha।*
- *dravyādi padārthoṃ kā jñāna।*

वैशेषिक सूत्र- (1-5 अध्याय)  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *vaiśeṣika darśana ke sūtroṃ kā vācana।*
- *vaiśeṣika darśana ke sūtroṃ kā vācana।*
- *vaiśeṣika darśana ke sūtroṃ ke arthoṃ kā paricaya।*
- *dravyādi padārthoṃ kā paricaya।*

सन्दर्भग्रन्थ - वैशेषिक दर्शन - आचार्य उदयवीर शास्त्री।

**Paper -3- saṃskṛta-3**

**Course Objectives-**

- *buddhacaritam ke 9-12 sarga kā jñāna*
- *mudrārākṣasam prathama aṅka kā sāmānya bodha*
- *kāraḱīya sabhī gaṇoṃ se 20 dhāturūpa aura 20 śabdarūpa kā jñāna*
- *kāraḱīya, racanānūvāda kaumudī kā (1-30) adhyāya kā lekhana kā bodha*

साहित्य

बुद्धचरितम्- 9-12 सर्ग

मुद्राराक्षसम् - प्रथम अंक

व्याकरण - कारकीय, सभी गणों से 20 धातुरूप, 20 शब्दरूप

रचनानुवाद कौमुदी (1-30 अध्याय)

**Course Outcomes-**

- *buddhacaritam ke 9-12 sarga kā paricaya*
- *mudrārākṣasam prathama aṅka kā sāmānya paricaya*
- *kāraḱīya sabhī gaṇoṃ se 20 dhāturūpa aura 20 śabdarūpa kā paricaya*
- *kāraḱīya, racanānūvāda kaumudī kā (1-30) adhyāya kā lekhana*

सन्दर्भग्रन्थ - कारकीय, रचनानुवादकौमुदी।

**Paper -4- hindī-3**  
**Paper Code- BD-304**

(70+30=100)

**Course Objectives-**

- *kabīra- kabīra kī sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, kabīra kā samāja-darśana, bhakti bhāvanā, kabīra kī bhāṣā kā bodha!*
- *sūradāsa- sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, sūra kā vātsalya varṇana, śṛṅgāra varṇana- saṃyoga evaṃ viyoga, sūra kā bhramara gīta, sūra kī bhakti bhāvanā, kāvya kalā kā jñāna!*
- *tulasīdāsa- sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, tulasī kī bhaktibhāvanā, tulasī kā samanvaya, tulasī kā loka maṅgala, kāvya kalā kā bodha!*
- *maithilīśaraṇa gupta- sāhityika paricaya, rāṣṭrīyatā, sāhityika viśeṣatāoṃ kā jñāna!*

पाठ्य पुस्तक- 1. प्राचीन एवं मध्यकालीन हिन्दी कविता, सम्पादक- डॉ० सुरेन्द्र कुमार

2. आधुनिक हिन्दी कविता सम्पादक- डॉ० सुरेन्द्र कुमार

निर्धारित कवि- कबीरदास, सूरदास, तुलसीदास, जयशंकर प्रसाद, सूर्यकान्त त्रिपाठी, मैथिलीशरण गुप्त।

इकाई-1 कबीर- कबीर की साहित्यिक रचनाएँ एवं उनकी साहित्यिक विशेषताएँ, कबीर का समाज-दर्शन, भक्ति भावना, कबीर की भाषा।

इकाई-2 सूरदास- साहित्यिक रचनाएँ एवं उनकी साहित्यिक विशेषताएँ, सूर का वात्सल्य वर्णन, शृंगार वर्णन- संयोग एवं वियोग, सूर का भ्रमर गीत, सूर की भक्ति भावना, काव्य कला।

इकाई-3 तुलसीदास- साहित्यिक रचनाएँ एवं उनकी साहित्यिक विशेषताएँ, तुलसी की भक्तिभावना, तुलसी का समन्वय, तुलसी का लोक मंगल, काव्य कला।

इकाई-4 जयशंकर प्रसाद- साहित्यिक परिचय, छायावाद के प्रवर्तक, काव्य कला सौन्दर्य चेतना।

इकाई-5 सूर्यकान्त त्रिपाठी 'निराला'- साहित्यिक परिचय, वैविध्य के कवि, काव्यगत विशेषताएं, प्रगतिशील चेतना और निराला।

इकाई-6 मैथिलीशरण गुप्त- साहित्यिक परिचय, राष्ट्रीयता, साहित्यिक विशेषताएं।

**Course Outcomes-**

- *kabīra- kabīra kī sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, kabīra kā samāja-darśana, bhakti bhāvanā, kabīra kī bhāṣā kā paricaya!*
- *sūradāsa- sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, sūra kā vātsalya varṇana, śṛṅgāra varṇana- saṃyoga evaṃ viyoga, sūra kā bhramara gīta, sūra kī bhakti bhāvanā, kāvya kalā kā vivaraṇa!*
- *tulasīdāsa- sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, tulasī kī bhaktibhāvanā, tulasī kā samanvaya, tulasī kā loka maṅgala, kāvya kalā kā paricaya!*
- *maithilīśaraṇa gupta- sāhityika paricaya, rāṣṭrīyatā, sāhityika viśeṣatāoṃ kā vivaraṇa!*

सहायक ग्रन्थ- 1. कबीर मीमांसा - डॉ० रामचन्द्र तिवारी, कबीर एक नयी दृष्टि- डॉ० रघुवंश, कबीर-हजारीप्रसाद द्विवेदी, सूरदास- डॉ० हरवंश लाल शर्मा, सूर की सांस्कृतिक चेतना और उनका युगबोध- डॉ० सन्तराम वैश्य।

## Paper -5- COMMUNICATIVE ENGLISH -3

### Paper Code- BD-305

(70+30=100)

#### Course Objectives

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### Language :

- Writing Skills: Paragraph, Message, Circular, Editorial, Application, Email, Reprot.

#### Literature :

- Anita Desai's **The Voices in the City.**
- **Pt. Madan Mohan Malaviya.**
- **Mahatma Gandhi, (Extracts of his Speeches).**

#### Course Outcomes

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English.

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) द्वितीय वर्ष**  
**Semester -IV**

**Paper -1- nyāya darśana-2**

**Paper Code- BD-401**

(70+30=100)

**Course Objectives-**

- *nyāyadarśana-2 ke tṛtīya adhyāya kā bodha /*
- *nyāyadarśana-2 ke caturtha adhyāya kā jñāna /*
- *nyāyadarśana-2 ke pa×cama adhyāya kā bodha /*
- *nyāyadarśana-2 ke tṛtīya, caturtha, pa×cama adhyāya ke sūtrārtha kā bodha /*  
न्याय सूत्र- तृतीय, चतुर्थ एवं पञ्चम अध्याय-  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *nyāyadarśana-2 ke tṛtīya adhyāya kā paricaya /*
- *nyāyadarśana-2 ke caturtha adhyāya kā paricaya /*
- *nyāyadarśana-2 ke pañcama adhyāya kā paricaya /*
- *nyāyadarśana-2 ke tṛtīya, caturtha, pañcama adhyāya ke sūtrārtha kā vācana /*

सन्दर्भग्रन्थ - विद्योदयभाष्य सहित न्यायदर्शन (आचार्य आनन्दप्रकाश जी)

**Paper -2- vaiśeṣika darśana-2**

**Paper Code- BD-402**

(70+30=100)

**Course Objectives-**

- *vaiśeṣika darśana-2 ke 06-08 adhyāya kā bodha /*
- *vaiśeṣika darśana-2 ke 09-10 adhyāya kā jñāna /*
- *vaiśeṣika sūtra-2 ke 06-08 adhyāya kā vācana va lekhana kā bodha /*
- *vaiśeṣika sūtra-2 ke 09-10 adhyāya kā vācana va lekhana kā jñāna /*  
वैशेषिक सूत्र -(6-10 अध्याय)-  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *vaiśeṣika darśana-2 ke 06-08 adhyāya kā paricaya /*
- *vaiśeṣika darśana-2 ke 09-10 adhyāya kā paricaya /*
- *vaiśeṣika sūtra-2 ke 06-08 adhyāya kā vācana va lekhana /*
- *vaiśeṣika sūtra-2 ke 09-10 adhyāya kā vācana va lekhana /*

सन्दर्भग्रन्थ - वैशेषिक दर्शन - आचार्य उदयवीर शास्त्री।

**Paper -3- saṃskṛta-4**

**Paper Code- BD-403**

(70+30=100)

**Course Objectives-**

- *buddhacaritam ke 13-14 sarga kā bodha /*
- *mudrārākṣasam dviitīya aṃka kā sāmānya jñāna /*
- *kārakīya sabhī gaṇoṃ se 20 dhāturūpa aura 20 śabdarūpa kā bodha /*
- *kārakīya, racanānuvāda kaumudī kā (31-60) adhyāya kā lekhana kā jñāna /*

साहित्य

बुद्धचरितम्- 13-14 सर्ग,

मुद्राराक्षसम् - द्वितीय अंक

व्याकरण - छन्द परिचय, अलंकारप्रदीप, रचनानुवाद कौमुदी (31-60 अध्याय) 20 धातुरूप

**Course Outcomes-**

- *buddhacaritam ke 13-14 sarga kā paricaya*
- *mudrārākṣasam dviitīya aṃka kā sāmānya paricaya*
- *kārakīya sabhī gaṇoṃ se 20 dhāturūpa aura 20 śabdarūpa kā paricaya /*
- *kārakīya, racanānuvāda kaumudī kā (31-60) adhyāya kā lekhana /*

सन्दर्भग्रन्थ - कारकीय, रचनानुवाद कौमुदी।

## Paper -4- hindī-4

### Paper Code- BD-404

(70+30=100)

#### Course Objectives-

- *hindī gadya rūpoṃ kā sāmānya jñāna /*
- *premacaṃda prasāda mohana rākeśa bhaṃḍārī ke sāhitya kā bodha /*
- *bālakṛṣṇa bhaṭṭa ācārya rāmacaṃdra śukla hajārī prasāda dvivedī, vidyānivāsa miśra ke sāhitya kā jñāna /*
- *bhāratemdu hariścaṃdra mahādevī varmā hariśaṃkara parasāt ke sāhitya kā bodha /*

इकाई-1 : हिन्दी गद्य रूपों का सामान्य परिचय

इकाई-2 : प्रेमचंद (गोदान), प्रसाद (पुरस्कार), मोहन राकेश (मलबे का मालिक), मनु भंडारी (मैं हार गई)

इकाई-3 : बालकृष्ण भट्ट (साहित्य जन-समूह के हृदय का विकास है), आचार्य रामचंद्र शुक्ल (उत्साह), हजारी प्रसाद द्विवेदी (नाखून क्यों बढ़ते हैं), विद्यानिवास मिश्र (मेरे राम का मुकुट भीग रहा है)

इकाई-4 : भारतेंदु हरिश्चंद्र (अंधेर नगरी), महादेवी वर्मा (घीसा), हरिशंकर परसाई (भोलाराम का जीव)

#### Course Outcomes-

- *hindī gadya rūpoṃ kā sāmānya paricaya /*
- *premacaṃda prasāda mohana rākeśa bhaṃḍārī ke sāhitya kā vivaraṇa /*
- *bālakṛṣṇa bhaṭṭa ācārya rāmacaṃdra śukla hajārī prasāda dvivedī, vidyānivāsa miśra ke sāhitya kā vivaraṇa /*
- *bhāratemdu hariścaṃdra mahādevī varmā hariśaṃkara parasāt ke sāhitya kā paricaya /*

#### सहायक ग्रन्थ-

1. हिन्दी का गद्य साहित्य - रामचंद्र तिवारी
2. हिंदी साहित्य का दूसरा इतिहास-बच्चन सिंह
3. निबंधों की दुनिया- विजयदेव नारायण साही; निर्मला जैन/हरिमोहन शर्मा
4. छायावादोत्तर हिन्दी गद्य साहित्य - विश्वनाथ प्रसाद तिवारी
5. हिन्दी रेखाचित्र- हरवंश लाल शर्मा
6. निबंधों की दुनिया- शिवपूजन सहाय; निर्मला जैन/अनिल राय।

## Paper -5- COMMUNICATIVE ENGLISH - 4

### Paper Code- BD-405

(70+30=100)

#### Course Objectives

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.]

#### Language :

- Business Letter, Letter of Enquiry, Placing Order, Replacement / Cancellation Letter Complaint Letter, Drafting Advertisement, Poster Making.

#### Literature :

- P.B. Shelley's **Ode to the West Wind.**
- **Chapter from "Light of Asia".**
- **Indian Traditional Knowledge on Environmental Conservation.**

#### Course Outcomes

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

पतञ्जलि विश्वविद्यालय, हरिद्वार  
पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) तृतीय वर्ष  
Semester -V

**Paper -1- vedānta darśana-1**

**Paper Code- BD-501**

(70+30=100)

**Course Objectives-**

- *vedānta darśana ke prathama adhyāya ke sūtreṃ ke vācana kā bodha /*
- *vedānta darśana ke prathama adhyāya ke sūtreṃ ke lekhana kā bodha /*
- *vedānta darśana ke dvitīya adhyāya ke sūtreṃ ke vācana kā jñāna /*
- *vedānta darśana ke dvitīya adhyāya ke sūtreṃ ke lekhana kā jñāna /*

वेदान्त सूत्र ( प्रथम व द्वितीय अध्याय )

( कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय )

**Course Outcomes-**

- *vedānta darśana ke prathama adhyāya ke sūtreṃ kā vācana /*
- *vedānta darśana ke prathama adhyāya ke sūtreṃ kā lekhana /*
- *vedānta darśana ke dvitīya adhyāya ke sūtreṃ kā vācana /*
- *vedānta darśana ke dvitīya adhyāya ke sūtreṃ kā lekhana /*

सन्दर्भग्रन्थ - वैदिक मुनिभाष्य

**Paper -2- mīmāṃsā darśana-1**

**Paper Code- BD-502**

(70+30=100)

**Course Objectives-**

- *mīmāṃsā darśana kā jñāna /*
- *mīmāṃsā darśana ke ācāryaṃ kā bodha /*
- *catussūtrī ke vācana kā bodha /*
- *catussūtrī ke lekhana kā bodha /*

मीमांसा सूत्र- चतुस्सूत्री + 46 सूत्र, ( कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय )

**Course Outcomes-**

- *mīmāṃsā darśana kā paricaya /*
- *mīmāṃsā darśana ke ācāryaṃ kā paricaya /*
- *catussūtrī kā vācana /*
- *catussūtrī kā lekhana /*

सन्दर्भग्रन्थ -मीमांसा दर्शन

**Paper -3- saṃskṛta-5**

**Paper Code- BD-503**

(70+30=100)

**Course Objectives-**

- *śukanāśopadeśa ke yauvana avasthā kā varṇana kā jñāna /*
- *mudrārākṣasam ke tṛtīya aṃka kā bodha /*
- *prakṛti pratyaya kā nirūpaṇa kā jñāna /*
- *nibandha lekhana kā bodha /*

साहित्य – शुकनासोपदेश

मुद्राराक्षसम्- तृतीय अंक

व्याकरण- प्रत्यय निरूपणम्, संक्षिप्त धातुकोष, पत्रलेखन, निबन्ध माला।

**Course Outcomes-**

- *śukanāśopadeśa ke yauvana avasthā kā varṇana /*
- *mudrārākṣasam ke tṛtīya aṃka kā paricaya /*
- *prakṛti pratyaya kā nirūpaṇa /*
- *nibandha lekhana kā paricaya*

सन्दर्भग्रन्थ – रचनानुवाद कौमुदी।

**Course Objectives-**

- *vijñāpana: svarūpa evaṃ avadhāraṇā kā jñāna /*
- *vijñāpanaḥ vividha mādhyama kā vivaraṇa kā bodha /*
- *vijñāpana kī bhāṣā kā jñāna /*
- *vijñāpana-nirmāṇa kā abhyāsa kā bodha /*

**इकाई-1 : विज्ञापन : स्वरूप एवं अवधारणा**

विज्ञापन : अर्थ व परिभाषा। विज्ञापन का महत्त्व। विज्ञापन के सामाजिक तथा व्यावसायिक उद्देश्य, मार्केटिंग और ब्रांड-निर्माण विज्ञापन के नए संदर्भ, प्रायोजित कार्यक्रम।

**इकाई-2 : विज्ञापन: विविध माध्यम**

सामान्य परिचय। विज्ञापन माध्यम का चयन। प्रिंट, रेडियो एवं टेलीविजन के लिए कॉपी लेखन।

**इकाई-3 : विज्ञापन की भाषा**

विज्ञापन की भाषा का स्वरूप। विज्ञापन की भाषागत विशेषताएँ। विज्ञापन की भाषा के विभिन्न पक्ष- सादृश्य विधान, अलंकरण, तुकांतता, समानांतरता, विचलन, मुहावरे-लोकोक्तियाँ, भाषासंकर, हिन्दी विज्ञापनों की भाषा।

**इकाई-4 : विज्ञापन-निर्माण का अभ्यास**

प्रिंट माध्यम : वर्गीकृत एवं सजावटी विज्ञापन-निर्माण। रेडियो जिंगल लेखन। टेलीविजन के स्टोरी बोर्ड निर्माण।

**Course Outcomes-**

- *vijñāpana: svarūpa evaṃ avadhāraṇā kā paricaya /*
- *vijñāpanaḥ vividha mādhyama kā vivaraṇa /*
- *vijñāpana kī bhāṣā kā paricaya /*
- *vijñāpana-nirmāṇa kā abhyāsa kā paricaya*

**सहायक ग्रन्थ-**

1. जनसंपर्क, प्रचार एवं विज्ञापन- विजय कुलश्रेष्ठ
2. जनसंचार माध्यम : भाषा और साहित्य- सुधीश पचौरी
3. डिजिटल युग में विज्ञापन - सुधा सिंह, जगदीश्वर चतुर्वेदी।

## **Paper -5- Communicative English -5**

### **Paper Code- BD-505**

(70+30=100)

#### **Course Objectives**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### **Language :**

- Unseen Passage, Comprehension, Note Making, Summarizing, Referring to Encyclopaedia, Dictionary, thesaurus, academic reading material, Debate, Speech, Article, Paragraph.

#### **Literature :**

- Chanakya
- Ramanujan
- **Oscar Wild's The Importance of Being Earnest (Act I)**

#### **Interview Training Program :**

- GD, Personal Interview, Presentation.

#### **Course Outcomes**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) तृतीय वर्ष**  
**Semester -VI**

**Paper -1- vedānta sūtra (Check This)**  
**Paper Code- BD-601**

(70+30=100)

**Course Objectives-**

- *vedānta sūtra ke dvitīya adhyāya kā bodha /*
- *vedānta darśana ke caturtha adhyāya kā jñāna /*
- *vedānta darśana ke tṛtīya adhyāya ke lekhana kā bodha /*
- *vedānta darśana ke caturtha adhyāya ke vācana kā jñāna /*

**प्रश्नपत्र- ( 1 ) वेदान्त दर्शन-2**

वेदान्त सूत्र- (तृतीय व चतुर्थ अध्याय)

(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *vedānta sūtra ke dvitīya adhyāya kā paricaya /*
- *vedānta darśana ke caturtha adhyāya kā paricaya /*
- *vedānta darśana ke tṛtīya adhyāya kā lekhana /*
- *vedānta darśana ke caturtha adhyāya kā vācana /*

**सन्दर्भग्रन्थ - वैदिक मुनि भाष्य**

**Paper -2- nighaṇṭu**

**Paper Code- BD-602**

(70+30=100)

**Course Objectives-**

- *nighaṇṭu ke 1 se 5 adhyāya kā vācana kā bodha /*
- *nighaṇṭu ke 1 se 5 adhyāya kā vācana kā jñāna /*
- *nighaṇṭu ke 1 se 2 adhyāya kā śabdārthabodha /*
- *nighaṇṭu ke 3 se 5 adhyāya kā śabdārthabodha /*

निघण्टु 1 से 5 अध्याय  
प्रथम व द्वितीय अध्याय,  
(कण्ठस्थीकरण एवं शब्दार्थ बोध)

**Course Outcomes-**

- *nighaṇṭu ke 1 se 5 adhyāya kā vācana /*
- *nighaṇṭu ke 1 se 5 adhyāya kā vācana /*
- *nighaṇṭu ke 1 se 2 adhyāya kā śabdārthabodha /*
- *nighaṇṭu ke 3 se 5 adhyāya kā śabdārthabodha /*

सन्दर्भग्रन्थ -निघण्टु

## Paper -3- saṃskṛta-6

### Paper Code- BD-603

(70+30=100)

#### Course Objectives-

- *raghuvamśam ke prathama sarga meṃ rājā dilīpa kā viśiṣṭa ke āśrama meṃ jāne ke vivaraṇa kā bodha /*
- *nandinī gāya dvārā rājā dilīpa ko putra varadāna kā jñāna /*
- *mudrārājasam ke caturtha aṅka kā sāmānya bodha /*
- *saundaranandam prathama, dvitīya sarga kā sāmānya jñāna /*

साहित्य - रघुवंशम् (प्रथम सर्ग)

मुद्राराक्षसम्- चतुर्थ अंक

सौन्दरनन्दम्- प्रथम, द्वितीय सर्ग

व्याकरण- अनुवाद

#### Course Outcomes-

- *raghuvamśam ke prathama sarga meṃ rājā dilīpa kā viśiṣṭa ke āśrama meṃ jāne kā vivaraṇa /*
- *nandinī gāya dvārā rājā dilīpa ko putra varadāna kā varṇana /*
- *mudrārājasam ke caturtha aṅka kā sāmānya vivaraṇa /*
- *saundaranandam prathama, dvitīya sarga kā sāmānya vivaraṇa /*

सन्दर्भग्रन्थ - रचनानुवाद कौमुदी।

**Course Objectives-**

- *kampyūṭara kā vikāsa aura hindī kā bodha /*
- *hindī bhāṣā aura praudyogikī kā jñāna /*
- *hindī bhāṣā, kampyūṭara aura gavarnēṃsa kā bodha /*

**इकाई-1 : कम्प्यूटर का विकास और हिन्दी**

कम्प्यूटर का परिचय और विकास। कम्प्यूटर में हिन्दी का आरम्भ एवं विकास। हिन्दी के विविध फॉन्ट। कम्प्यूटर में हिन्दी की चुनौतियाँ और संभावनाएँ।

**इकाई-2 : हिन्दी भाषा और प्रौद्योगिकी**

इंटरनेट पर हिन्दी।  
यूनिकोड, देवनागरी लिपि और हिन्दी भाषा।  
हिन्दी और वेब डिजाइनिंग।  
हिन्दी की वेबसाइट्स।

**इकाई-3 : हिन्दी भाषा, कम्प्यूटर और गवर्नेंस**

राजभाषा हिन्दी के प्रसार में कम्प्यूटर की भूमिका।  
ई-गवर्नेंस, इंटरनेट।  
एस.एम.एस.(लघुसंदेश सेवा) की हिन्दी।  
न्यू मीडिया और हिन्दी भाषा।  
हिन्दी के विभिन्न की-बोर्ड।

**Course Outcomes-**

- *kampyūṭara kā vikāsa aura hindī kā paricaya /*
- *hindī bhāṣā aura praudyogikī kā vivaraṇa /*
- *hindī bhāṣā, kampyūṭara aura gavarnēṃsa kā paricaya /*

**सहायक ग्रन्थ-**

1. कम्प्यूटर के भाषिक अनुप्रयोग - विजय कुमार मल्होत्रा।
2. कम्प्यूटर और हिन्दी - हरिमोहन।
3. ऑनलाइन मीडिया - श्री सुरेशकुमार (आजतक के उपसम्पादक)
4. इंटरनेट पत्रकारिता - श्री सुरेशकुमार (आजतक के उपसम्पादक)

## **Paper -5- COMMUNICATIVE ENGLISH -6**

### **Paper Code- BD-605**

(70+30=100)

#### **Course Objectives**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach..

**Language :** Oral Practice, Role Play, GD, Listening to recorded passage, Reading Comprehension, MCQ.

#### **Literature :**

- **Guru Govind Singh.**
- **Ayurveda of Life (Article).**
- **Oscar Wild's The Importance of Being Earnest (Act II and Act III)**

#### **Interview Training Program :**

- CV, Resume, H R, Telephonic Interview.

#### **Course Outcomes**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English.

**UNIVERSITY OF PATANJALI  
HARIDWAR**



**DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS  
UNDER GRADUATE PROGRAM  
Bachelor in Physical Education and Sports  
(B.P.E.S)  
SYLLABUS 2018-19**



**Preamble:**

Physical Education is a form of one of the most effective means of education imparted through physical exercises, recreational activities and sports. It is an integral part of education. Which by mere participation in it gives the outcomes? These outcomes are both instant as well as have strong carry over values in the life. The children as well as the adults and the old enjoy physical activities & sports and gets benefit in the form of stronger muscles and bones, increased energy, coordination level and most importantly the decreased risk of developing chronic diseases. The UNESCO in its General Conference in 1978 was convinced that, everyone should be free to develop and preserve his or her physical, intellectual and moral powers. Physical Education and Sport should consequently be assured and guaranteed for all human beings. Physical Education is now a regular feature in the primary and secondary schools as well as it is gaining popularity in the higher education. The course opted for this is elective as well as the core at the college and the university level in India. The graduate level course in Physical Education and Sports contains subjects varying from foundation of Physical Education to Anatomy, Physiology, Kinesiology, Officiating & coaching, Test & Measurement, Nutrition, Rehabilitation, Psychology, Sports Training, Sports Biomechanics, Methods of Teachings etc. which are aimed to give thorough knowledge and skills to the students. Students perusing physical education courses are fit to join the jobs as physical trainers, coaches, game officials, referees, umpires, curators, gym trainers, lifeguards, personal trainers etc. During their course of education the students also develops the expertise to establish their own business as entrepreneurs in the field of sports, fitness, recreation, adventure sports, Camping, event management etc.

**Aims of the Bachelor's degree program in Physical Education**

Physical education is not only concerned with the physical outcome that

accrue from participation in physical activities but also the development of knowledge and attitude conducive to lifelong learning and participation in motor activities. The overall aim of bachelor's degree program in Physical Education is;

1. The acquisition and refinement of motor skills,
2. To equip the students with the scientific knowledge of body response to various types of exercise.
3. Maintenance of fitness for optimal health and well being,
4. Attainment of knowledge and the growth of positive attitude towards physical activity and sports.

### **Nature and extent of the B.P.E.S degree program**

Physical Education is normally referred to as the science that aims to develop all-inclusive aspects of human personality through physical and sports activities. Physical education practical, Is a Multidisciplinary subject that cannot be studied in seclusion under the scope of one or two subjects. The scope of Physical Education as a subject is very broad. It caters to the need for developing capability of the students on physical, mental and social aspects. Physical education also aims to develop activity as an alternate and prophylactic medicine. The key areas of study within the Physical Education are 'Exercise Physiology, Sports Psychology, Sports Sociology, Sports Management, Sports Journalism, Kinesiology- Biomechanics, Sports Training, Sports Medicine, Kinanthropometry, yoga etc.

Degree program in Physical Education covers topics that overlap with the areas outlined above and that address the interfaces of Physical Education with other subjects such as Physiology, Bio- Chemistry, Physics, Physiotherapy, Psychology, Management, and Sociology along with training pedagogy employed for enhancing the functional status of individuals with varied needs. As a part of the effort, to enhance the employability of graduates of Physical Education, programs include learning experiences that offer opportunities in various spheres of human.

### **Program Outcomes:**

## **Program Specific Outcomes of Bachelor's Degree Program in Physical Education**

After successful completion of the program, an individual will be able to :

**PO-1** Interpret practical and sports skills required for physical education  
Development

**PO-2** Able to officiate in the tournaments

**PO-3** Able to understand functioning of various internal organs of the human  
body.

**PO-4** Appraise food safety and prevention of injury to maintain a safe and  
health Environment

**PO-5** Able to applicant and interpret ant of applied psychology

**PO-6** Develop long write goals and strategies that the action needed to each  
year to meet the objectives

**PO-7** To conduct the rehabilitation program for the players and society

**PO-8** Able to take anthropometric measurement in the field of sports and  
physical Education

**PO-9** Able to help responsible authorities during natural disaster in their  
Management.

## **Program Specific Objectives**

### **Program Specific Objectives of Bachelor's Degree Program in Physical Education.**

- To enable students to understand history, philosophy, values, ethics and functions of Physical Education profession, and its linkages with other social science& science disciplines;
- To equip students with knowledge on core and ancillary methods of professional work, and its practice base;
- To inculcate in the student's values of enquiry and research; and thereby develop problem solving and decision making abilities;

- To prepare professionals to practice in diverse field settings and also address contemporary issues and concerns such as of games and sports;
- To make learners- the young professionals sensitive to the needs of the people at individuals, group and community levels and to social problems in changing social, cultural and techno-economic context;
- To develop young professionals with good communication skills and quest for a self-motivated life-long learning, focusing on skilling and re-skilling in their respective field of Physical Education.

### **Program Specific Outcomes (PSOs)**

## **Program Specific Outcomes of Bachelor's Degree Program in Physical Education.**

The learning and abilities or skills that a student would have developed by the end of three-year **B.P.E.S. (three Year Degree Program):**

- PSO-1** Remembering and Understanding the concepts, theories, functions, structures, terminology and skills of physical education and sports sciences.
- PSO-2** Applying and demonstrating various concepts, theories, procedures and skills in different sports situations.
- PSO-3** Analyzing and relating the valuable knowledge about the Health, related issues various communicable disease, its preventive measures, Nutrition, its role in weight management and healthy life..
- PSO-4** Evaluating and measuring the important methods used for teaching in Physical Education.
- PSO-5** Creating and designing research problem, training sessions, diet plans.

### **I. ELIGIBILITY:**

1. Candidate who has passed +2 Examination with minimum 50% any other examination as equivalent thereto.
2. Preference will be given to those candidates who are sportsman or had participated in Co-curricular Activities.

## II. AGE:

- i) No student who has crossed the age of 23 years as on 1<sup>st</sup> July of the relevant year will be allowed admission to B.P.E.S. (Bachelor of Physical Education & Sports 3 Years Course) However, the vice-chancellor, University of Patanjali, Haridwar has the power to relax the upper age limit by 6 months on the recommendation of the Head of the Institution.
- ii) The upper age limit can be relaxed by 3 years in the case of SC and ST candidates.

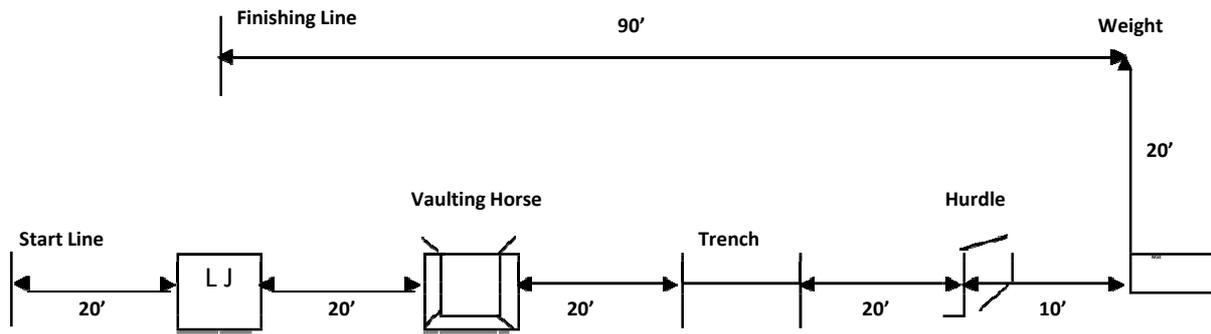
## III. PHYSICAL EFFICIENCY TEST:

The candidate for admission to B.P.E.S shall have to qualify the physical efficiency test conducted by the concerned college through the Principal. The details of the test are given as under:

ITEM	MEN	WOMEN	
Long Jump	10'	8'	Report against the end line within 35 seconds. Carrying weight equal to half of his/her own body weight in buckets
Vaulting horse	5'	4'	
Trench (7 Times)	5'	4'	
Hurdle	3'	2'	
Mat (1-Front Roll)			

# The candidate will start running from the starting line, cover the distance/obstacles as per the requirements of the chart. In case the candidate does not cover the required distance/obstacles within 35 seconds, he will be declared unfit for qualifying the Physical Efficiency Test. Not more than two chances will be given to clear Physical Efficiency Test.

## DIAGRAM OF PHYSICAL EFFICIENCY TEST



**Note:-** i) Any candidate who has appeared in qualifying examination can appear in the Physical Efficiency Test but his/her candidature for admission will be considered only if the candidate produces the qualifying examination original certificate at the time of personal interview in addition to other Academic/Sports Certificates authenticated by the concerned state agencies/authorities.

ii) The physical efficiency test is only qualifying test for the admission in BPES No marks will be awarded for this test.

### IV. ADMISSION PROCEDURE:

After qualifying physical efficiency test being conducted by concerned by The H.O.D. of The University of Patanjali'

The admission will be made on merit to be determined on the basis of total percentage of marks in qualifying examination + the weight age of the overall achievement in different sports/games given as under:

#### 1. Senior National:

1 <sup>st</sup> Position	50 Points
2 <sup>nd</sup> Position	45 Points
3 <sup>rd</sup> Position	40 Points
Participation	30 Points

#### 2. Junior National/School National:

1 <sup>st</sup> Position	35 Points
2 <sup>nd</sup> Position	30 Points
3 <sup>rd</sup> Position	25 Points
Participation	20 Points

### 3. State Level:

1 <sup>st</sup> Position	25 Points
2 <sup>nd</sup> Position	20 Points
3 <sup>rd</sup> Position	15 Points
Participation	10 Points

### 4. District/School Level:

1 <sup>st</sup> Position	20 Points
2 <sup>nd</sup> Position	15 Points
3 <sup>rd</sup> Position	10 Points
Participation	5 Points

**Note:-** The weightage of achievement in sports/games shall be given to only those sports/games which are approved and recognized by University of Patanjali, Haridwar Sports and Co-Curricular Activity Council.

## V. EXAMINATION

### 1. Duration (Time Frame):

The UG (TDC) program for a regular student shall be for a minimum period of three years and a maximum of five years from the date of admission of the candidate. Each academic year shall comprise of two semesters, viz. Odd and Even semesters. Odd Semesters shall be from June / July to October / November and the Even Semester shall be from November / December to April / May on the dates to be notified by the Controller of Examinations.

### 2. Evaluation

Evaluation system has the following two components:-

- A. **Continuous Comprehensive Assessment (CCA)** accounting for 50% of the final grade that a student gets in a course; and
- B. **End-Semester Examination (ESE)** accounting for the remaining 50% of the final grade that the student gets in a course.

A. Continuous **Comprehensive Assessment (CCA)**: This would have the following components:

(i) **Classroom Attendance** – Each student will have to attend a minimum of 75%

Lectures / Tutorials / Practicals. A student having less than 75% attendance will not be allowed to appear in the End-Semester Examination (ESE).

- γ Provided that those having between 74% and 65% attendance will apply for exemption in a prescribed form accompanied by clear reason(s) for absence to the authorized functionaries.
- γ Provided that those having between 64% and 50% attendance will apply for exemption in a prescribed form accompanied by a Medical Certificate from a Government Hospital.
- γ Provided that exemption from 75% attendance will be given to those participating in prescribed co-curricular activities (e.g. NCC, NSS, Youth Festivals, Sports etc.) to the extent of 25% (making the necessary attendance as 50% in these cases). However, the claim for this exemption should be supported by authenticated certificate from the concerned college authorities.
- γ Provided further that those getting the exemptions, except for those getting exemptions for co-curricular activities, will not be entitled for getting the CCA marks for classroom attendance as given below.

(ii) **Classroom Attendance Incentive**: Those having greater than 75% attendance

(for those participating in Co-curricular activities, 25% will be added to per cent attendance) will be awarded CCA marks as follows:-

≥ 75% but < 80%	1 marks
≥ 80% but <85%	2 marks
≥ 85 but <90%	3 marks
≥ 90% but < 95%	4 marks
≥95%	5 marks

(iii) **Mid-Term (Minor) Tests** – There will be two mid-term tests, first after 48 teaching days (8 weeks) covering the syllabus covered so far, and second after 90 teaching

days (15 weeks) covering the syllabus after the first minor test. **Each of these mid-term tests will be for 15 marks.**

(iv) **Seminar / Assignment / Term Paper** – The remaining 15 marks of the CCA will be awarded on the basis of seminar / assignment / term paper etc. that the course teacher might give to the students.

(v) **End-Semester Examination (ESE)**: The remaining 50% of the final grade of the student in a course will be on the basis of an end-semester examination (ESE) that will be for three hours duration and will be covering the whole syllabus of the course.

γ For the Odd Semesters the ESE will be in the month of October / November and for Even Semesters it will be in the month of April / May.

γ A candidate who does not pass the examination (ESE) in any course(s) (or due to some reason is not able to appear in the ESE, other conditions being fulfilled, and so is considered as 'Fail'), shall be permitted to appear in such failed course(s)' ESE in the subsequent ESE to be held in the following October / November or April / May as the case may be.

γ The registration for the ESE will be done at the time of the enrollment for the course at the beginning of the semester. The fee for the ESE will also be collected at that time as decided by the university from time to time.

γ If a student is not permitted to appear in the ESE due to shortage of attendance beyond the exemption limit (< 50% attendance) shall be deemed to have 'dropped' the course. However such candidate, on his / her written request to be made immediately, can be permitted to redo the missed semester after completing the rest of the programme or whenever the course is offered subsequently. This redoing would mean complete course including CCA and ESE.

The question paper for the ESE will have the following pattern:

γ **Part A**

Compulsory of 18 marks consisting of 10 objective type questions (in MCQ/True False/Fill in the blanks or such type) and four short answer questions of 2 marks each covering whole of the syllabus.

γ **Part B (UNIT I)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part C (UNIT II)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part D (UNIT III)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part E (UNIT IV)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be of long type

**Total marks (A + B + C + D+E)**

**18 + 8 + 8 + 8 + 8 = 50 marks.**

### OUTLINES OF SEMESTER WISE COURSES

SEMESTER-I					
S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course I	Compulsory Course Hindi	CC 101	4	Compulsory – 4  Major Core – 8  Elective – 16  <b>Total = 4 + 8 + 16 = 28</b>
2.	Major Core Course I	Human Anatomy and Physiology-I	BPE 102	4	
3.	Major Core Course II	History of Physical Education and Sports	BPE 103	4	
4.	Elective Course I	(i) Foundation of Yoga	BPE 104	4	
		Or (ii) Sports Journalism	BPE 105		
5.	Elective Ground Course I	Games Practicals : (on any one of the following games) 1. Volleyball 2. Kabaddi 3. Woodball 4. Badminton	BPE-P-106	4	
6.	Elective Ground Course II	General Lessons Practicals : (on any one of the following activities) 1. Marching 2. Calisthenics 3. Dumb-Bell 4. Band & Flute	BPE-P-107	4	
7.	Minor Elective Course I	Yog Practical	BPE-P-108	4	

## SEMESTER-II

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course II	Compulsory Course English	CC 201	4	Compulsory – 4
2.	Major Core Course III	Yoga and Holistic Health	BPE 202	4	Major Core – 8
3.	Major Core Course IV	Introduction to Physical Education	BPE 203	4	
4.	Elective Course II	(i) Health Education and Nutrition Or (ii) Exercise Physiology (Any One)	BPE 204 BPE 205	4	Elective – 16
5.	Elective Ground Course III	Athletics Practicals : (on any one of the following athletic events) 1. Discus Throw 2. Triple Jump 3. Hurdles 4. Middle and Long distance races	BPE-P-206	4	<b>Total = 4 +8 + 16 = 28</b>
6.	Elective Ground Course IV	Athletics Practicals : (on any one of the following athletic events) 1. Sprints 2. Long Jump 3. Shot Put 4. Relay	BPE-P-207	4	
7.	Minor Elective Course II	Yoga Practical	BPE-P-208	4	

SEMESTER-III					
S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course III	Environmental Science (Self Study Mode)	CC 301	4	Compulsory – 4
2.	Major Core Course V	Methods of Teaching Yoga	BPE 302	4	
3.	Major Core Course VI	Methods in Physical Education	BPE 303	4	Major Core – 8
4.	Elective Course III	(i) Fundamentals of Biomechanics in Sports Or (ii) Adapted Physical Education	BPE 304 BPE 305	4	
5.	Elective Ground Course V	Games Practicals : (on any one of the following games) 1. Kho-Kho 2. Basketball 3. Judo 4. Boxing 5. Table Tennis	BPE-P- 306	4	Elective – 16
6.	Elective Ground Course VI	Gymnastics Practicals : (on any one of the following activity) 1. Floor Exercises 2. Vaulting Horse 3. Parallel Bar 4. Balancing	BPE-P- 307	4	
4 7.	Minor Elective Course III	Yoga Practical	BPE-P- 308	4	<b>Total = 4 + 8 + 16 = 28</b>

### SEMESTER-IV

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course VII	Remedial and Massage	BPE 401	4	Major Core – 8  Elective – 20  <b>Total = 8 + 20 = 28</b>
2.	Major Core Course VIII	Organization and Administration of Phy. Edu.	BPE 402	4	
3.	Elective Course IV	(i) Basis of Yoga Therapy Or (ii) Officiating and Coaching (Any One)	BPE 403  BPE 404	4	
4.	Elective Course V	Specialization in the Games : (on any one of the following games) 1. Woodball 2. Kabaddi 3. Judo 4. Badminton	BPE 405 BPE 406 BPE 407 BPE 408	4	
5.	Elective Ground Course VII	General Lessons Practicals : (on any one of the following athletic events) 1. Class Formation 2. Lazium 3. Indian Clubs & Rings 4. Aerobics	BPE-P- 409	4	
6.	Elective Ground Course VIII	Gymnastics Practicals : (on any one of the following athletic events) 1. Uneven Bar (for Women) 2. Rhythmic Gymnastics (for Women) 3. Horizontal Bar (for Men) 4. Pomell Horse (for Men)	BPE-P-410	4	

7.	Minor Elective Course IV	Yoga Practical	BPE-P-411	4
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<b>SEMESTER-V</b>					
<b>S.N.</b>	<b>Course</b>	<b>Course Name</b>	<b>Course Code</b>	<b>Credit</b>	<b>Cumulated Credits Category wise</b>
1.	Major Core Course IX	Kinesiology	BPE 501	4	Major Core – 12
2.	Major Core Course X	Fundamental of Sports Training	BPE 502	4	
3.	Major Core Course XI	Common Sports Injuries Prevention and Cure	BPE 503	4	Elective – 16
4.	Elective Course VI	Specialization in the Game : (on any one of the following games) 1. Kho-Kho 2. Basketball 3. Boxing 4. Taekwondo	BPE 504 BPE 505 BPE 506 BPE 507	4	
5.	Elective Ground Course IX	Games Practical : (on any one of the following games) 1. Cricket 2. Handball 3. Taekwondo 4. Weightlifting 5. Football	BPE-P- 508	4	<b>Total = 12 + 16 = 28</b>
6.	Elective Ground Course X	Athletics Practicals : (on any one of the following athletic events) 1. High Jump 2. Hammer Throw 3. Javelin 4. Competitive walking	BPE-P- 509	4	
7.	Minor Elective Course V	<u>Yoga Practical</u>	<u>BPE-P- 510</u>	4	

**SEMESTER-VI**

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course XII	Fundamental of Computer Application in Physical Education	BPE 601	4	Major Core – 12 Elective – 16 <b>Total = 12 + 16 = 28</b>
2.	Major Core Course XIII	Sports Psychology	BPE 602	4	
3.	Major Core Course XIV	Test, Measurement & Evaluation	BPE 603	4	
4.	Elective Course VII	Specialization in the Games : (on any one of the following games) 1. Yoga 2. Hand Ball 3. Volley Ball 4. Foot Ball	BPE 604 BPE 605 BPE 606 BPE 607	4	
5.	Elective Ground Course XI	Marking & Officiating in any Two Games (Covered in course contents of Semester I-V)	BPE-P- 608	4	
6.	Elective Ground Course XII	Marking & Officiating in Athletics  (i.e. one track event & one field event covered in course contents of Semester I-V)	BPE-P- 609	4	
7.	Minor Elective Course VI	Fundamental of Computer Application in Physical Education Practical	BPE-P- 610	4	

## **COURSE CONTENTS IN DETAIL**

### **SEMESTER-1**

**COURSE CODE:CC101**

**(COMPULSORY COURSE-I)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **HINDI**

#### **COURSE OBJECTIVES:**

1. Understand the aspects of linguistic behavior in Hindi language.
2. Understand the position and content of Hindi language taught at secondary level.
3. Understand the constitutional provisions and historical preview of Hindi language.
4. Understand the role of Hindi in India; in nation and in International arena.
5. Understand and develop linguistic systems and other language skills of Hindi language used in classroom teaching.
6. Understand the use of different strategies used in Hindi teaching.

#### **THE COURSE LEARNING OUTCOMES (COs):**

**CO-1.**The students are able to get an in-depth knowledge of this ancient Indian language and its literature.

**CO-2.**The students must get an overview about the poetry grammar and history of its literature.

### हिंदी भाषा और साहित्य :

- क. आधुनिक भारतीय भाषाओं का उद्भव और विकास
- ख. हिंदी भाषा का परिचय एवं विकास
- ग. हिंदी साहित्य का इतिहास, आदिकाल, मध्यकाल : सामान्य परिचय
- घ. हिंदी साहित्य का इतिहास, आधुनिक काल : सामान्य परिचय

### पाठ्य-विषय -

#### 01. हिन्दी ध्वनियों का स्वरूप -

- क. स्वर और व्यंजन
- ख. संज्ञा, सर्वनाम, क्रिया, विशेषण
- ग. वाक्य संरचना

#### 02. उपसर्ग, प्रत्यय

03. हिन्दी शब्द संरचना - पर्यायवाची, समानार्थक, विलोमार्थक, अनेक शब्दों के स्थान पर एक शब्द समूहार्थक शब्दों के प्रयोग, निकटार्थी शब्दों के सूक्ष्म अर्थ-भेद, समानार्थक शब्दों के भेद।

#### 04. लिंग विधान और कारक प्रयोग -

- क. वर्तनी।
- ख. विरामादि चिन्हों के प्रयोग।
- ग. मुहावरे और लोकोत्तियों तथा उनके रचनात्मक प्रयोग।

05. निबन्ध - निबन्ध की परिभाषा, हिन्दी निबन्ध लेखन महत्व, निबन्ध का अंग, निबन्ध के प्रकार, निबन्ध की विशेषता।

#### सन्दर्भ

- 01. राजभाषा हिंदी - गोविन्ददास - हिन्दी साहित्य सम्मेलन, प्रयाग।
- 02. राष्ट्रभाषा आन्दोलन- गोपाल परशुराम- महाराष्ट्र सभा।
- 03. आधुनिक हिन्दी व्याकरण एवं रचना- वासुदेव नन्दन प्रसाद, पटना।
- 04. हिन्दी शब्द मीमांसा- किशोरी प्रसाद बाजपेयी।
- 05. हिन्दी का सामान्य ज्ञान भाग-2, हरदेव बाहरी, लोकभारती, इलाहाबाद।
- 06. शुद्ध हिन्दी- जगदीश प्रसाद कौशिक।
- 07. अच्छी हिन्दी- रामचन्द्र वर्मा।
- 08. निबन्ध के रूप और तत्व- देवमित्र।
- 09. हिन्दी साहित्य का इतिहास- आचार्य रामचन्द्र शुक्ल।
- 10. सामान्य हिन्दी- अरिहन्त पब्लिकेशन पृथ्वीनाथ सिंह।

**COURSE CODE: BPE102**

**(MAJOR COURSE-I)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **HUMAN ANATOMY AND PHYSIOLOGY-I**

#### **Objectives:-**

- Fundamentals of Anatomy & Physiology gives students in-depth instruction in the organization, structures, and functions of the human body.
- Students will learn the terminology, anatomy and physiology, and pathology of each body system and how they interrelate to maintain homeostasis.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will

be learning and able to do/perform the following.....

**CO-1.**Describing the concept, need and importance of anatomy and physiology in physical education.

**CO-2.**Describing and define the cell, tissue, organs and systems.

**CO-3.**Explaining the circulatory systems and its functions.

**CO-4.**Describing the respiratory systems and its functions.

**CO-5.**Explainingthe digestive systems and its functions.

#### **Unit-I Introduction: (14 Hours)**

1. Meaning and Concept of Anatomy & Physiology.
2. Its importance in the field of physical education and sports.
3. Meaning and definition of cell, tissue, organ and system.
4. Microscopic structure and functions of cell.
5. Properties of living cell.

#### **Unit-II Skeletal System: (16 Hours)**

1. General structure of bone, classification of bones and functions of the bones.
2. Location of various bones in skeleton.
3. Joints, their structure and classification.

#### **Unit-III Muscular System: (15 Hours)**

1. Meaning of muscle.
2. Various types of muscle, their structure and functions.

3. Microscopic structure of skeletal muscle.
4. Mechanism of muscular contraction of skeletal muscle.

**Unit-IV      Cardiovascular System:    (15 Hours)**

1. Heart, its location, structure and function.
2. Major blood vessels of the body.
3. Mechanism of blood circulation.
4. Systemic, pulmonary and coronary circulatory.
5. Blood pressure, cardiac output, cardiac cycle, heart rate, pulse rate and athletes heart.

**Reference Books:**

1. Pearce E., "Anatomy and Physiology for Nurses." Delhi Oxford University Press 1989.
2. Parrot, J.W. , "Anatomy for the students and teachers of Physical Education." London Edward Arnold Ltd. 1973.
3. Miller, A. and Leavel L.C., "Kimber-Grey-Stack pole's, Anatomy and Physiology." Amerind Publishing Co. Pvt. Ltd. New Delhi, Bombay, Calcutta, new York 1973.
4. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers Ludhiana Second revised addition 2008.
5. Grays Anatomy.
6. Characids, B.D., " Handbook of General Anatomy." CAS Publication, New Delhi.
7. Fox, E.L, "Physiological Basis of Physical Education and Athletic" Brown Publication, 1989.

## SEMESTER-I

COURSE CODE: BPE103

(MAJOR COURSE-II)

Credit:

4Marks:(ESE=70+CCA=30)=100

### HISTORY OF PHYSICAL EDUCATION AND SPORTS

#### Learning Objectives

- -This aims to develop the students into better-rounded, balanced individuals.
- -Including martial arts and self-defense.
- -Not only do these activities capture the interest of the students
- They also promote their safety and well-being.
- -This is a practical improvement on the usual Physical Education program.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Describing the meaning, definition, need, scope, and historical perspective of physical education.

**CO-2.** Describe and define the aims and objectives of physical education.

**CO-3.** Explaining the development of physical education at the global level.

**CO-4.** Interpreting the philosophical aspect of physical education.

**CO-5.** Explaining the sports institution in India before and after independence.

**CO-6.** Classifying the different committees and schemes in the field of physical education.

**CO-7.** Discussing the different awards and honors.

#### **Unit-I History of Physical Education in India in Ancient Period: (13 Hours)**

1. Physical education in Indus Valley civilization (3250BC – 2500 BC).
2. Physical Education in Vedic Period (2500 BC – 600 BC).
3. Physical Education in Early Hindu Period (600 BC – 320 AD).
4. Physical Education in Later Hindu Period (320 AD – 1000 AD).
5. Physical Education in Medieval Period (100 AD – 1757 AD).

#### **Unit-II History of Physical Education in Pre & Post Independence Era in India:**

(15 Hours)

1. Physical Education during British Period (till 1947).
2. Physical Education in India after independence.

3. Kothari Commission and its recommendation.
4. National policy on Education (1986).
5. Role of the following organization in promoting Physical Education and Sports:
  - a. Y.M.C.A.
  - b. S.N.I.P.E.S.
  - c. L.N.I.P.E.
  - d. N.S.N.I.S.
  - e. S.A.I.

**Unit-III Historical Perspective of Physical Education World Wide: (15 Hours)**

1. Physical Education in Rome.
2. Physical Education in Germany.
3. Physical Education in USA.
4. Physical Education IN English.
5. Physical Education in Japan.
6. Physical Education in China.

#### **Unit-IV Historical Perspective of Physical Education with special reference to Greece**

(17 Hours)

1. Physical Education in Athens.
2. Ancient Olympic Movement.
3. Modern Olympic Games.
  - a. Olympic Motto
  - b. Governing body
  - c. Olympic torch and flag
  - d. Opening ceremony
  - e. Awards
  - f. Closing ceremony

#### **Reference Books:**

1. Kamlesh M.L., "Physical Education, Facts and foundations" Faridabad P.B. Publications.
2. Barrow Harold M., "Man and movements principles of Physical Education" 1978.
3. Ravanes R.S., "Foundation of Physical Education" Houghton Millin Co. Boston USA(1978)
4. Krishana Murthy V. and Paramesara Ram, N., "Educational Dimensions of Physical Education", 2<sup>nd</sup> Revised edition, Print India, New Delhi 1990.
5. Singh Ajmer et.al., "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised Addition 2008.
6. Deleh V.A., "World History of Physical Education", prentice Hall Inc.
7. HallInc.

## SEMESTER-I

**COURSECODE:BPE-104**

**(ELECTIVECOURSE-I)**

**Credit: 4Marks:(ESE=70+CCA=30)=100**

### **Foundation of Yoga**

**Objectives:** Following the completion of this course, students shall be able to..

- Understand the basic principles of Teaching Methods.
- Have knowledge of different aspects of teaching methods used in Yoga.

#### **Learning outcomes :**

**CO-1** Demonstrate basic skills associated with yoga and Pilates.

**CO-2** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3** Apply the knowledge of basic choreography, and effective group management.

**CO-4** Demonstrate the ability to create and present various yoga activities.

**Unit-I: General introduction to yoga [15Hrs.]**

1. Brief about origin of Yoga: Psychological aspects and Mythological concepts;
2. History and Development of Yoga: prior to the Vedic period, Vedic period, Medieval period, modern era;
3. Etymology and Definitions of Yoga, Aim and Objectives of Yoga,
4. Misconceptions of Yoga; Brief about Streams of Yoga; Principles of Yoga, Importance of Yoga.

**Unit - II: General introduction to Indian philosophy [15Hrs.]**

1. Philosophy: meaning, definitions and scope;
2. Indian Philosophy: Salient features, Branches (Astika and Nastika Darshanas),
3. Distinction from Religion and Science,
4. Brief introduction to Prasthanatrayee and Purushartha Chatushtaya;
5. Relationship between Yoga and Indian Philosophy.

**Unit - III: Brief about Yoga in texts – I [15Hrs.]**

1. Brief to Upanishads and Yoga in Principal Upanishads,
2. Yoga in Yogopanishad; Yogic perspective of Epics: Ramayana, Adhyatma Ramayana and Mahabharata;
3. Yogic perspective: Bhagavad Gita, Yoga Vasishtha, Narada Bhakti Sutras.

**Unit-IV: Brief about Yoga in texts – II [15 Hrs.]**

1. Yogic perspective: Smritis, Puranas with emphasis to Bhagavat Purana;
2. Yogic perspective to Shad-darshanas;
3. Emphasis to Vedantic approach of Shankara, Ramanuja, Madhva and Vallabha;
4. Brief: Agamas, Tantras, Shaiva Siddhanta.

**TEXT BOOKS**

1. Lal Basant Kumar : Contemporary Indian Philosophy, Motilal Banarsidas Publishers Pvt. Ltd, Delhi, 2013
2. Dasgupta S. N : History of Indian Philosophy, Motilal Banarsidas, Delhi, 2012
3. Singh S. P : History of Yoga, PHISPC, Centre for Studies in Civilization Ist, 2010
4. Singh S. P & Yogi Mukesh: Foundation of Yoga, Standard Publication, New Delhi, 2010.

## SEMESTER 1

COURSE CODE: BPE105

(ELECTIVE COURSE-I)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPORTS JOURNALISM

#### Objective:-

- Basically, the primary objective of sports journalism is not to know about the environment of games or sports, but to present the facts. A sports enthusiast's first concern is the statistics related to a sporting event.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will

be learning and able to do/perform the following.....

**CO-1.** Describing the Meaning and Definition of Journalism.

**CO-2.** Explaining the role of Sports News agencies.

**CO-3.** Determining the Concept of Sports Bulletin.

**CO-4.** Comparing the General news reporting and sports reporting.

**CO-5.** Editorializing and evaluating of Reported News.

#### Unit-I (15 Hours)

1. Introduction to Mass Media.
2. Purpose of Mass Media for the propagation/promotion of sports.
3. Growth of sports communication.
4. Coverage of sports:
  - a. In daily newspapers.
  - b. General magazines and sports magazines.
  - c. Radio and Television.

#### Unit-II (12 Hours)

1. Space allocation for sports sections in a daily news paper.
2. News agency.
3. Magazine office.
4. Sports personalities, their pictures and thumbnail sketches in news papers.

#### Unit-III (17 Hours)

1. Journalistic techniques:
  - a. News writing and news story.
  - b. Reporting various schemes.

- c. Editing and headings of news.
  - d. Picture section and editing sports page makeup
- 2. Characteristics of News
- 3. Writing a sports features:
  - a. Types of sports features.
  - b. Exclusive picture feature

**Unit-IV** (16 Hours)

1. Ethics of sports writing.
2. Sportsman's gratuities.
3. Amateurism V/s Professionalism.
4. Invasion of private life.
5. Sports for charity.
6. Writing a weekly or fortnightly common.
7. Writing sports editorials.

**Reference Books:**

1. Health. Jr. Gelfand: How to cover, write and edit sports, Ames Lowe USA, 1951
2. Woodward, S: Sports page Simon a and Schuster, New York, 1949.
3. Juries, John R: This writing game, New York, Columbia University, Press, 1969.
4. "Sports" by Bhola Singh Thakur (pp 1124) in the Indain reports Guide by Richard Critchfield, Allied Pacific Pvt. Ltd. Bombay, 1962.
5. Nea, Robest," News Gathering and new writing, New York, Prentice Hall, inc., 1949.



**SEMESTER I  
PRACTICAL  
GAMES LESSON**

**COURSE CODE: BPE-P-106**

**(ELECTIVE GROUND COURSE-I)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Change management. ...
- Problem solving. ...
- Morale building. ...

**The Course learning outcomes :**

- Experiencing the General & Specific warming up for games.
- Acquiring the Basic skills of games
- Demonstration and application of various techniques of games Warming up: - General & Specific
- Specific conditioning program for games
- Basic skills- offensive & defensive.

Lesson on any one of the following games:-

1. VolleyBall
2. Kabaddi
3. Hockey
4. Badminton

**SEMESTER-I**  
**PRACTICAL**  
**GENERAL LESSONS PRACTICAL**

**(ELECTIVE GROUND COURSE-II)**

**COURSE CODE: BPE-P-107**

**Credit:4**

**Marks=100**

(120Hours)

Objectives:-

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Communication. ...
- Change management. ...
- Problem solving. ...
- Flexible thinking. ...

Morale building

**Course learning outcomes :**

**CO-1.** Define the meaning and general principles of Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

General Lessons Practical:

(on any one of the following activities)

1. Marching
2. Calisthenics
3. Dumb-Bell
4. Band&Flute

## **SEMESTER I**

### **PRACTICAL**

#### **YOGA**

### **PRACTICAL**

**COURSE CODE: BPE-P-0107**

**(MINOR ELECTIVE COURSE-I)**

**Credit:4**

**Marks=100**

**(120Hours)**

#### **Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

### **Course learning outcomes :**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Understand and apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

### **ASANA**

Siddhasana , Vajrasana , Veerasana , Udarakarshanasana , Janushirasana , Gomukhasana , Ushtrasana , Naukasana , Katichraasana , Tadasana , Vrikshasana , Garudasana , Padhastasana , Ardhhdhanurasana , Marjari asana , Ardhshalabhasana , Bhujangasana , Shavasana , Samkonasana , Setubandasana , Shashankasana , Mandukasana , Ardhhallasana, Ardhpadmasana

### **PRANAYAMA**

Deep Breath Inhale – Exhale  
Diaphragm Breathing  
Nadi Shodhan Pranayama  
Suryabhedhi Pranayam

## **SATKARMA**

Jal Neti  
Rubber Neti

## **MUDHRA AND BANDH**

Gyan Mudra  
Viparita Karani Mudra

## **DHYAN**



## SEMESTER-II

**COURSE CODE:CC201**

**(COMPULSORY COURSE-II)**

**Credit:4(T+P)**

**Marks:(ESE=70+CCA=30)=100**

## ENGLISH

### Objectives:

- Improve pronunciation and Use English Grammar worksheets and exercises to improve grammatical knowledge for competitive exams
- Enhance reading, understanding and writing abilities in English
- Develop the ability to read, understand and improve English vocabulary
- Demonstrate conversational skills, Asking Questions

### The Course Learning Outcomes (COs):

**CO-1.** Improve and widen employment prospects.

**CO-2.** Explore the world with confidence

**CO-3.** Increase cognitive ability.

**CO-4.** Access world-class education system and establishment.

**Method of Teaching & Assessment-** Videos, Audio clippings, discussion, written and oral exercises

### **UNIT-I      VOCABULARY BUILDING      (12 Hours)**

1. Vocabulary Building / Synonyms / Antonyms
2. Syntax (Spell Correction & Sentence Correction)
3. Formation of Words

### **UNIT-II      READING COMPREHENSION      (12 Hours)**

#### **Unseen Long Passage**

The total length of the passage will be between 800 - 900 words. The passage will include following questions:

- 5 - MCQs
- 9 - Short answer type questions

#### **Unseen Short Passage**

A second passage of 400-500 words. There will be two Descriptive questions

### **UNIT-III WRITING      (16 Hours)**

1. Paragraphs / Essays / Composition
2. Application Letter / Personal Letter

3. Make a Notice, Report, Newspaper Article, Project Front Page Making

**UNIT-IV      SPEAKING & PRESENTATION SKILLS      (20 Hours)**

1. How to improve Speaking Skills
2. Different types of Speaking
3. Different types of Speech
4. Spoken English in British Style
5. Spoken English in American Style
6. Types of Presentation
7. How to improve Presentation Skills
8. How to prepare presentation
9. Prepare Presentation any one topic of Yoga & Sports

## References

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1. Wren, P.C. & Martin, H.; (Edition 2015). High School English Grammar & Composition; S. Chand Publishing.
2. Wren, P.C. & Martin, H.& Prasada Rao, N.D.V. ; (Edition 2015). High School English Grammar & Composition; Blackie.
3. Eastwood, John (2003).Oxford Guide to English Grammar; Oxford.
4. Biber, Douglas ; Finegan, Edward ; Johansson, Stig ; Conrad, Susan ; Leech, Geoffrey (1999) Longman Grammar Spoken & Written English Cased; Longman.
5. Aarts, Bas (2011) Oxford Modern English Grammar; OUP Oxford
6. Orion, Gertrude (2<sup>nd</sup> Edition 1999) Pronouncing American English: Sounds, Stress, and Intonation; Heinle & Heinle Pub.
7. Carter, Ronald & McCarthy, Michael (2006) Cambridge Grammar of English: A Comprehensive Guide; Cambridge University Press.
8. Huddleston, Rodney & K. Pullum ,Geoffrey (2002) The Cambridge Grammar of the English Language; Cambridge University Press.
9. Dictionaries, Oxford (1884) Oxford English Dictionary; Oxford University Press, United Kingdom.
10. Simpson, John & Weiner, Edmund (2<sup>nd</sup> Edition 1989) The Oxford English Dictionary (Oxford English Dictionary (20 Vols.)); Clarendon Press.
11. Stevenson, Angus (3<sup>rd</sup> Revised ed. Edition 2010) Oxford Dictionary of English; Oxford University Press, USA.
12. Dictionaries (7<sup>th</sup> Edition 2011 ) Oxford English Mini Dictionary - Indian Edition; Oxford.

## SEMESTER-II

**COURSE CODE: BPE202**

**(MAJOR COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

## **YOGA AND HOLISTIC HEALTH**

### **Objective:-**

- **Yoga is a holistic science that embodies the union of our physical, mental and spiritual health. It can help us achieve mental equilibrium, as well as providing numerous health benefits for our body.**
- **Yoga as a practice encourages a lifestyle that focuses on balance, harmony, positive thinking and health**

### **The Course learning outcomes (COs):**

**CO-1.**Approach of holistic health in physical education.

**CO-2.** Five components of holistic health.

**CO-3.** Principles of holistic health.

**CO-4.** To promote health living and to facilitate prevention early detection and management of disease.

**CO-5.**Explore transfer and career opportunity in health related profession.

**Unit-I: Concept of Body, Health and Disease [15 Hrs.]**

1. Definition & Importance of Health According to WHO.
2. Dimension of Health: Physical, Mental, Social and Spiritual.
3. Concept of Body, Health & Disease in Yoga-Yogic concept of Body from Taittiriya Upanishad.
4. Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi according Yoga Vasistha and remedial measures; Holistic health care through Yoga.
5. Concept of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing.
6. Concept of Pancha-koshas & Shat-chakra and their role in Health & Healing.

**Unit - II: Causes of Ill Health & Remedial Measures as per Patanjali [15 Hrs.]**

1. Potential causes of Ill-health: Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Dukkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva;
2. Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi).

**Unit - III: Yogic Principles & Practices of Healthy Living - I [15 Hrs.]**

1. Dietary regulation according to Hatha yoga and Bhagavadgitha;
2. shatkriyas and tatva shuddhi;
3. Asana for mind body and spirit;
4. Practice for pranamaya kosha– pranayama;
5. Definition of Mental Health & Mental Hygiene & Total Health ;
6. Indian approach to personality and personality integration Psycho-Social Implications of yoga;
7. Adjustment Personal and interpersonal adjustment through yogic methods Niyamas & Yamas.

**Unit - IV: Yogic Principles & Practices of Healthy Living - II [15 Hrs.]**

1. Attitude change towards yoga through individualized counselling.
2. Psychological & yogic method Tackling ill effects of conflict and Frustration;
3. Yogic methods Yoga Psychology for Adjustment: Psychological, philosophical and yogic counselling;
4. the remedial measures; Action in relaxation-the secret of Karma Yoga;
5. Unattached action, not to the fruits of action, equanimity in success and failure.

**TEXT BOOK**

1. Ghosh. Shyam : The Original Yoga Munshiram Manoharlal, New Delhi. 1999)
2. Jnanananda Bharati : Essence of Yoga Vasishta Pub: Sanata Books, Chennai
3. Hatha Ratnavali: Tirumala Tirupathi Devasthanam, Andhra Pradesh.

## SEMESTER-II

COURSE CODE: BPE203

(MAJOR COURSE-IV)

Credit:4

Marks:(ESE=70+CCA=30)=100

### INTRODUCTION TO PHYSICAL EDUCATION

#### Objective:-

Develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.

#### The Course Learning outcomes (COs):

**CO-1.** The pass out would be able to compare the relationship between general education and

Physical education.

**CO-2.** He/she would be able to identify and relate with the History of Physical Education.

**CO-3.** He/she would be able to comprehend the relationship between Philosophy, Education and Physical Education.

**CO-4.** He/she would able to identify the works of Philosophers of Education and Physical Education.

**CO-5.** He /she would know recent developments and academic foundation of Physical Education.

#### Unit-I Introduction: (15 Hours)

1. Definition, aim and objectives of Physical Education.
2. Principles of Physical Education.
3. Relationship of Physical Education with general education.
4. Misconception, regarding Physical Education.
5. Personality development of an individual.

#### Unit-II Philosophical aspect of Physical Education (17 Hours)

1. Meaning of Philosophy.
2. Different philosophies applied to Physical Education:
  - a. Idealism.
  - b. Pragmatism.
  - c. Realism.
  - d. Naturalism.

- e. Existentialism.
- 3. Need and importance of different philosophies in modern Physical Education program.

**Unit-III      Biological Concept of Physical Education:**                      (14 Hours)

- 1. Biological principles of Physical Education.
  - a. Growth and development.
  - b. Heredity and environment.
  - c. Somatic types.
  - d. Sex differences.
  - e. Use, disuse and over use.
  - f. Chronological, physiological and anatomical ages

**Unit-IV      Emerging Trends in Physical Education      (14 Hours)**

1. Career opportunities in Physical Education and Sports:
  - a. As a Physical Education teacher.
  - b. Coach / trainee.
  - c. Gym instructor.
  - d. Physiotherapist.
  - e. Psychologist.
  - f. Dietitian.
  - g. Sports administrator/manager
  - h. Rehabilitator
2. Adventure Sports
3. Water Sports
4. Worldwide therapeutic acceptance of Yoga
5. Fast growing professional in sports

**Reference Books:**

1. Kamlesh M.L., “Physical Education, Facts and foundations”, Faridabad P.B. Publications.
2. Barrow Harold M., “Man and movements principles of Physical Education”, 1978.
3. Ravanes R.S., “Foundation of Physical Education”, Houghton Millin Co. Boston USA(1978)
4. Krishana Murthy V. and Paramesara Ram, N. “Educational Dimensions of Physical Education”, 2<sup>nd</sup> Revised edition, Print India, New Delhi 1990.
5. Singh Ajmer et.al., “Essentials of Physical Education”, Kalyani Publishers LudhianaSecond revised Addition 2008.
6. Deleh V.A., “World History of Physical Education”, prentice Hall Inc.

## SEMESTER-II

**COURSECODE: BPE204**

**(ELECTIVE COURSE-II)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### HEALTH EDUCATION AND NUTRITION

#### Objective:-

- They are to promote health and reduce the risk of developing chronic diseases by encouraging Americans to consume healthful diets and to achieve and maintain healthy body weights. Nutrition criteria are reflective of a solid scientific foundation for health and weight management

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Defining the concepts and principles of health education.

**CO-2.** Explaining the meaning, definition, and importance of health education.

**CO-3.**Classifying hygiene and its types.

**CO-4.** Writing about the role and uses of pollution.

**CO-5.** Discussing the types of natural resources.

#### **Unit-I Introduction: (12 Hours)**

1. Concept of health, meaning, definition and scope of health education.
2. Objective of health education.
3. Principles of health education.
4. Need and significance of health education.

#### **Unit-II Personal health and Hygiene: (17 Hours)**

1. Meaning of personal hygiene.
2. Personal care of:
  - a. Skin.
  - b. Hair.
  - c. Ear.
  - d. Eyes.
  - e. Nose.
  - f. Teeth.
  - g. Feet.



- c. Centers of communicable disease.

**3. Health instructions related to:**

- a. Personal care.
- b. Communicable disease.
- c. Nutrition.
- d. Healthful living.

**4. Nutrition:**

- a. Balanced diet and its elements:
  - i. Carbohydrates, proteins, fats, vitamins, minerals, salts and water.
- b. Daily energy/calorie requirements of healthy person.

**Unit-IV Communicable Disease: (15 Hours)**

1. Meaning and definition of communicable disease.
2. Mode of transmission, prevention and cure and sanitation of communicable disease.
3. Common Communicable Diseases:
  - a. Influenza.
  - b. Malaria.
  - c. Small pox.
  - d. Tuberculosis.
  - e. Typhoid.
  - f. Cholera.
  - g. Measles.

**Reference Books**

1. Klander H.F., "School Health Education", The Mac Million Co. 1962.
2. Pande P.K. and Gango Padhyay S.R., "Health Education for School Children."
3. S. Dheer and Others, "Introduction to Health Education, AP Publishers 9, Books Market Chowk Adda, Tande, Jalandhar 1989.
4. Nebmir. A. "The school Health Education, New York: Harper and Brothers.
5. Park, JE and park, K., "Text Books of Preventive and Social medicine" Tenth Edition, Banarsi Dass Bhanot, Habalpur 1985.



## SEMESTER-II

COURSE CODE: BPE205

(ELECTIVE COURSE-II)

Credit: 4

Marks: (ESE=70+CCA=30)=100

### EXERCISE PHYSIOLOGY

#### Objective:-

- Exercise physiology serves to empower individuals to understand how to safely move their body, how frequently they should exercise and how to measure their outcomes to see the improvement over time.

#### The Course Learning Outcomes (COs):

**CO-1.** He/she would be able to Relate and interpret the role of exercise on body systems and its relation

to well being, through literature reviews and physical conditioning exercises.

**CO-2.** Adapt the art to apply the knowledge of physiology in physical activity classes at school level.

Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

#### Unit-I (14 Hours)

1. Meaning and definition of exercise physiology
2. Need and importance of exercise physiology in the field of Physical Education.
3. Energy sources
  - a. Definition of energy
  - b. Adenocine triphosphete (ATP)
  - c. Creative phosphate
  - d. Metabolism

#### Unit-II (17 Hours)

1. Structure of skeletal muscle
2. Sliding filament theory of skeletal muscle
3. Effect of exercises of muscular system
4. Fatigue

5. Symptoms of fatigue
6. Factors responsible for fatigue

**Unit-III** (14 Hours)

1. Effect of exercise on circulatory system
2. Effect of exercise on respiratory system
3. Effect of exercise on digestive system
4. Cardiac output, heart rate, vital capacity, second wind, oxygen debt, dead space & tidal volume.

**Unit-IV** (15 Hours)

**1. Balance between heat loss and heat production**

- a. Radiation
- b. Convection
- c. Evaporation
- d. Conduction

**2. Measurement of body temperature**

- a. Effects of high altitude on sports performance, heat cramps
- b. Dehydration, heat stroke and shivering
- c. Acclimatization with hot and cold temperature

**Reference Books:**

1. Brooks, G. Fahey, T. and Baldwin, K. (2004). Exercise physiology, MC Graw Hill. USA
2. McArdle, WD, Katch, FI and Katch VL (2000), Essentials of Exercise physiology 2<sup>nd</sup> edition Lippincott Williams and Wilkins, USA.
3. Powers, S. and Howley, E. (2006), "Exercise Physiology" MC Graw Hill. USA.
4. Wilmore Hack Hand Costil David L. (2004), "Physiology of sports and exercise Human Kinetics.
5. Rowland Thomas W. Children's (2005), "Exercise Physiology" 2<sup>nd</sup> edition Human Kinetics.

## **SEMESTER II**

### **PRACTICAL**

### **ATHLETICS**

#### **LESSON**

**COURSE CODE: BPE-P-206**

**(ELECTIVE GROUND COURSE-III)**

**Credit:4**

**Marks=100**

Objective:-

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

- Demonstrate an expert knowledge of the strategies and skills of the sport and use critical thinking skills to apply this knowledge in competitive situations in order to participate to the best of one's ability in competition.
- Demonstrate traits of good sportsmanship and teamwork in both competition and practice.

On any one of the following athletic activities:-

(120 Hours)

1. Discus Throw
2. Triple Jump
3. Hurdles
4. Middle and Long distance races

## **SEMESTER-II**

### **PRACTICAL**

### **ATHLETICS LESSON**

**COURSE CODE: BPE-P-0206**

**(ELECTIVE GROUND COURSE-IV)**

**Credit:4**

**Marks=100**

Objective:-

- **To enhance the sports performance:** It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

**CO-1** Demonstrate an expert knowledge of the strategies and skills of the sport and use critical thinking skills to apply this knowledge in

competitive situations in order to participate to the best of one's ability in competition.

**CO-2** Demonstrate traits of good sportsmanship and teamwork in both competition and practice.

Lessons on any one of the following athletic events:-

(120 Hours)

1. Sprints
2. Long Jump
3. Shot put
4. Relay

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in athletics and general lesson activities (5 lessons each in athletics and general lesson). In addition each trainee shall complete 1 assignment each in athletics and general lesson.
2. For the purpose of examination in practicals, one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weightage.

The contents of teaching for each activity are as follows:-

1. History of athletics.

2. Measurements of track & field events.
3. Equipments & specification of equipments.
4. Fundamental skills and lead up activities.
5. Rules and regulations of athletic events.
6. Tournaments at national and international level.
7. Records (World, Olympics, Asian and National games)
8. Awards in athletics.
9. Related books and magazines.
10. Officiating: -
  - a. Duties of official
  - b. Knowledge of score sheet
  - c. Officiating signals
  - d. Technical equipment for officiating.

**SEMESTER-II**  
**PRACTICAL**  
**YOGA PRACTICAL**

**COURSE CODE: BPE-P-208**

**(MINOR ELECTIVE COURSE-II)**

**Credit:4**

**Marks=100**

(120Hours)

(120Hours)

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

**The Course Learning Outcomes:**

**CO-1** Demonstrate basic skills associated with yoga and Pilates.

**CO-2** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3** Apply the knowledge of basic choreography, and effective group management.

**CO-4** Demonstrate the ability to create and present various yoga activities.

**ASANA**

Pawan Muktasana , Padmasana , Swastik Asanas , Bhadrasana , Uttanpadasana , Sarvangasana, Halasana, Matsyasana, Suptvajasana, Chakrasana, TiryakaTadasana, EkPadPranamasana, Hastottanasana, Makarasana, Balasana, Sarpasana, Hanumanasana, Sukhasana, Markatasana, VipritNaukasana, ParshvaTadasana, Sinhasana

**PRANAYAMA**

Chandra Bhedi Pranayama  
UjjayiPranayam

**SATKARMA**

Vaman Dhauti / Kunjal  
KriyaVatkram/Kapalbhati

**MUDHRAAND BANDH**

Jalandhar  
BandhaUddiyana  
BandhaMulbandha  
Yog Murda

## SEMESTER-III

**COURSE CODE:CC-301**

**(COMPULSORY COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### ENVIRONMENTAL SCIENCE

#### Objectives:

- Students will integrate knowledge from multiple disciplines representing physical and life sciences perspectives, political and economic perspectives, and social and cultural perspectives on humans' interactions with their environments;
- Students will contribute to and facilitate interdisciplinary research and problem solving, through independent and collaborative work; and
- Students will use quantitative and qualitative research tools and techniques to analyze, implement, envision, assess, and report sustainability efforts.

#### The Course Learning Outcomes (COs):

- CO-1.** Articulate the interconnected and interdisciplinary nature of environmental studies;
- CO-2.** Demonstrate an integrative approach to environmental issues with a focus on sustainability;
- CO-3.** Use critical thinking, problem solving, and the methodological approaches of the social sciences, natural sciences, and humanities in environmental problem solving;
- CO-4.** Communicate complex environmental information to both technical and non-technical audiences;
- CO-5.** Understand and evaluate the global scale of environmental issues & problems; and
- CO-6.** Reflect critically on their roles, responsibilities, and identities as citizens, consumers and environmental actors in a complex, interconnected world.

#### **Unit- 1: Introduction to environmental studies and Ecosystem**

**[15 Hrs.]**

Multidisciplinary nature of environmental studies; Scope and importance; Need for public awareness; What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

#### **Unit-2: Natural Resources: Renewable & Non-renewable Resources**

**[15 Hrs.]**

Land resources and land use change; Land degradation, soil erosion and desertification; Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations; Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state); Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

**Unit-3: Biodiversity & Conservation****[15 Hrs.]**

Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots; India as a mega-biodiversity nation; Endangered and endemic species of India; Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity; Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

**Unit 4: Environmental Pollution, policies & practices****[15 Hrs.]**

Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution; Nuclear hazards and human health risks; Solid waste management: Control measures of urban and industrial waste; Environmental Policies & Practices; Sustainability and sustainable development; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture; Environment Laws: environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

## **TEXT BOOKS**

1. Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.
2. Carson, Rachel. 1962. Silent Spring (Boston: Houghton Mifflin, 1962), Mariner Books, 2002.
3. Economy, Elizabeth. 2010. The River Runs Black: The Environmental Challenge to China's Future.
4. Gadgil, M. & Ramachandra, G. 1993. This fissured land: an ecological history of India. Univ of California Press.

## **REFERENCE BOOKS:**

1. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
2. Grumbine, R. Edward, and Pandit, M.K. Threats from India's Himalaya dams. Science 339.6115 (2013): 36-37.
3. Heywood V.H. & Watson, R.T. 1995. Global Biodiversity Assessment. Cambridge University Press.
4. Mc Cully, P. 1996. Silenced rivers: the ecology and politics of large dams. Zed Books.



**SEMESTER-III**

**COURSECODE: BPE 302**

**(MAJORCOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

**METHODOFTEACHINGYOGA**

**Objectives:** Following the completion of this course, students shall be able to

- Understand the basic principles of Teaching Methods.
- Have knowledge of different aspects of teaching methods used in Yoga.

**Course Outcomes:-**

**CO-1** To enable the student to have good health

**CO-2** To practice mental hygiene.

**CO-3** To possess emotional stability.

**CO-4** To integrate moral values.

**Unit-I: Principles and methods of teaching yoga [15 Hrs.]**

1. Teaching and Learning : Concepts and Relationship between the two;
2. Principles of Teaching: Levels and Phases of Teaching,
3. Quality of perfect Yoga Guru; Yogic levels of learning, Vidyaarhi, Shishya, Mumuksha;
4. Meaning and scope of Teaching methods, and factors influencing them;
5. Sources of Teaching methods; Role of Yoga Teachers and Teacher training.

**Unit-II: Basics of yoga class management [15 Hrs.]**

1. Practice of Yoga at different levels (Beginners, Advanced, School Children, Youth, Women and Special attention group);
2. Techniques of mass instructions;
3. Techniques of Individualised teaching;
4. Techniques of group teaching;
5. Organisation of teaching (Time Management, Discipline etc.).

**Unit-III: Lesson planning in yoga [15 hrs.]**

1. Essentials of Good Lesson Plan: concepts, needs, planning of teaching Yoga (Shatkriya, Asana, Mudra, Pranayama & Meditation);
2. Models of Lesson Plan;
3. Action Research of Yoga: Meaning, Roles, Steps in action research in Yoga Teaching;
4. Effective use of Library and other resources; Lesson Plan and its Practical applications.

**Unit-IV: Educational tools of yoga teaching [15 hrs.]**

1. Yoga classroom: Essential features, Area, Sitting arrangement in Yoga class etc.;
2. Class room problems: Types and Solutions, Characteristics and essentials of good Yoga teaching;
3. Time table: Need, Types, Principles of Time table construction; Time Table for Yoga teaching;
4. Meaning, Importance and Types of Educational technology; Role of Educational Technology in Yoga.

**TEXT BOOKS**

1. Dr. Shri Krishna : Notes on basic principles & methods of teaching as applied to yogic practices and a ready reckoner of yogic practices, Kaivalyadhama, Lonavala, 2009

**BOOKS FOR REFERENCE**

1. Dr. Gharote M L : Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007
2. Dr. Raj Kumar : Principles & methods of Teaching, Printo graphics, Delhi,
3. Saket Raman Tiwari & others : Teaching of Yoga, DPH Publishing Corporation, Delhi, 2007

### SEMESTER-III

**COURSE CODE: BPE 303**

**(MAJOR COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

#### METHOD IN PHYSICAL EDUCATION

##### Objective:-

- Develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.

**The Course learning outcomes (COs):**On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the Meaning and types of Teaching Methods.

**CO-2.** Discuss the Presentation Techniques in Physical Education.

**CO-3.** Generalizing the Methods of Words of command.

**CO-4.** Determining the knowledge to Lesson Planning.

**CO-5.** Applying the knowledge to take Lesson Plan in different categories.

**CO-6.** Reviewing the impact of all units in conduction of competitions

1

##### Unit-I (17 Hours)

1. Meaning, scope and importance of teaching methods in physical education.
2. Basic types of teaching methods.
3. Factors affecting teaching methods.
4. Command and types of command:
  - a. For beginners
  - b. For advance groups
  - c. For large groups
  - d. For complicated exercises
5. Techniques of commanding:
  - a. Counting
  - b. Continuous counting
  - c. Counting the beat
  - d. Rhythmic counting
  - e. Counting aloud
  - f. Use of whistle
  - g. Procession instruments and music

##### Unit-II (13 Hours)

###### 1. Preliminary preparation:

- a. Personal preparation

- b. Technical preparation
- c. Steps of preparation

**2. *Presentation Techniques:***

- a. Orientation
- b. Verbal explanation
- c. Demonstration
- d. Explanation

- e. Discussion
- f. Supervision
- g. Evaluation

**3. *Teaching aids and types of teaching aids***

- a. Motion pictures
- b. Charts & diagrams
- c. Models and exhibitions
- d. Musical instruments and recording

**Unit-III** (17 Hours)

1. Lesson planning and objectives of lesson planning.
2. Parts of lesson planning and their order:
  - a. Introductory part
  - b. Fundamental or main body part
  - c. Concluding part
3. Types of lesson planning:
  - a. General lesson plan
  - b. Specific lesson plan
4. Principles of lesson planning.
5. Lesson plan evaluation and re-planning.

**Unit-IV** (17 Hours)

1. Class formation, its values and types of class formation:
  - a. Single line
  - b. Double line
  - c. File formation
  - d. Semi-circle
  - e. Circle formation
  - f. Spoke
  - g. Horse shoe
  - h. L- shape
  - i. Triangular
  - j. Rectangular
  - k. Double sided
  - l. Three sided
  - m. Free formation

2. Supervision and inspection of teaching methods.
3. Methods of supervision and qualities of a supervisor.
4. Evaluation of teaching methods.
5. Need and importance of evaluation.

**Reference Books:**

1. Kamalesh M.L. and Sangral M.S., "Methods in Physical Education" Parkash Brothers, 5,6 Books Market Ludhinana 1986.
2. Tirunarayan and Hariharan, "Methods in Physical Education." M/S C.T. and S.H. Allagappa College of Physical Education Karaikudi-4.
3. Kazmer, H.C. and Cassidy, R., "Methods in Physical Education" W.B. Saunders andCo. Philadelphia, London 1958.
4. Charrles, E. Forrythe and Irrn A. Keller, "Administration of High School Athletics." Prentice Hall Inc. Englewood, N.J. 1979.

### SEMESTER-III

**COURSE CODE: BPE304**

**(ELECTIVE COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

#### **FUNDAMENTALS OF BIOMECHANICS IN SPORTS**

Objectives:-

- The major goal of biomechanics of sport and physical exercise is to **improve performance in given sport or physical exercise**.
- In a wider context the goal of biomechanics of sport and physical exercise is also to increase physical fitness.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

- CO-1.** Memorizing the Meaning, nature, role and scope of Biomechanics.
- CO-2.** Explaining the CG, Line of gravity Vectors and Scalars Quantities.
- CO-3.** Acquiring the knowledge of Linear and Angular Kinematics.
- CO-4.** Acquiring the knowledge of Linear and Angular Kinetics.
- CO-5.** Applying the concept of Lever & Equilibrium in game situation.
- CO-6.** Estimating the role of resistance in sports.

#### **Unit-I (15 Hours)**

1. Meaning, definition and importance of biomechanics in the field of sports.
2. Fundamental mechanical concept of:
  - a. Mass
  - b. Weight
  - c. Volume
  - d. Density
  - e. Pressure
3. Introduction to kinematics and its related terms:
  - a. Time
  - b. Displacement
  - c. speed
4. Role of kinematics in the field of sports.

#### **Unit-II (17 Hours)**

1. Fundamental biomechanical terms:
  - a. Friction
  - b. Inertia

- c. Force
  - d. Centripetal force
  - e. Centrifugal force
  - f. Center of gravity
2. Equilibrium, types of equilibrium and principles of equilibrium.
  3. Kinetics and its role in the field of sports.

**Unit-III** (17 Hours)

1. Motion and types of motion.
2. Newton's laws of motion and their implications in the field of physical education and sports.

3. Lever and types of lever.
4. Advantages of lever.

**Unit-IV** (17 Hours)

1. A brief description of mechanical principles:
  - a. Projectile
  - b. Aerodynamics
2. Mechanical analysis of following:
  - a. Walking
  - b. Running
  - c. Jumping
  - d. Throwing
3. Application of Biomechanics in the field of sports.

**Reference Books:**

1. Barrlea, R. (20047), "Introduction to Sports Biomechanics." Ran sedge Publishers, USA.
2. Blazeovich, A. (2007), "Sports Biomechanics." A and C Black Publishers USA.
3. Beer and Zarmicks (1979), "Efficiency of Human Movement." WIB Sounders CO. USA.
4. Hamill. J and Knutzen, K.M. (2003), "Biomechanical Basis of Human Movement." Lippincott Williams and Wilkins USA.
5. McGimsis, P. (2004), "Biomechanics of Sports and Exercise." Human Kinetics, USA.
6. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers Ludhiana second revised addition 2008.

## SEMESTER-III

**COURSE CODE: BPE 305**

**(ELECTIVE COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **ADAPTED PHYSICAL EDUCATION**

#### **Objectives:-**

- To develop a healthy level of balance, flexibility, muscular strength, body composition, and cardio-respiratory endurance.
- To learn new games and their rules and to demonstrate it correctly in the game settings.

**The Course learning outcomes (COs):**An individualized program of developmental activities, exercises, games, rhythms, and sport designed to meet the unique physical education needs of individuals.

#### **A sub discipline of PE or emerging field of studying**

- 1) Designed to meet long term unique needs
- 2) May take place in mainstream classes or segregated classes
- 3) An active program rather than a passive one
- 4) Adapted or modified sport can be used in APE program
- 5) Adapted means to adjust and to fit
- 6) Service to 3-21 years old (IEP) and may include 0-2 (IFSP)

#### **Unit-I (15 Hours)**

1. Introduction :
  - a. Meaning and aim of adapted physical education.
  - b. Objectives of the adapted physical education.
  - c. Basis for adapted physical education.
  - d. Functions of adapted physical education.
2. The adapted program in action :
  - a. Scope of adapted program.
  - b. Adapted program for elementary schools, high/secondary schools, colleges and university.

#### **Unit-II (16 Hours)**

1. Personal preparation :
  - a. Guiding principles of adapted physical education.
  - b. The policies for adapted physical education.
  - c. Preparation of personal.

- d. In-service training programe.

**Unit-III** (14 Hours)

- 1. Evaluation and measurement :
  - a. Selection of evaluation procedures.
  - b. Classification of handicapped and disabled individuals.
  - c. Determination of specific disabilities.
  - d. Need based program emphasis for individual handicapped.

**Unit-IV** (17 Hours)

- 1. Social and psychological adjustment :
  - a. Courses of maladjustment.

- b. Role of physical education in preventing maladjustment and in the promotion of adjustment.
- c. Recreation for the handicapped.
- d. Postural defects-flat foot, spinal defects and shoulder deformities and their rehabilitation.
- e. Special physical education programs for blind, deaf, dumb and mentally challenged children.
- f. Rehabilitation programs for bone and joint injuries, ankle, knee, shoulder, elbow and hand injuries.
- g. Neurological disabilities- Spastic poliomyelitis (Cerebral Palsy).

**References Books:**

1. H.H. Clark and D.H. Clark, "Development and Adapted Physical Education", Englewood, Prentice Hall, 1964.
2. A.S. Daniels, "Adapted Physical Education", New York, Harpers and Brothers, 1972.
3. G.T. Stafford, "Prevention and Corrective Physical Education", New York, A.S. Barnes and Co. 1970.
4. V.V. Hunt, "Recreation for the Handicapped", Prentice Hall inc. 174.
5. B.J. Gratty, "Adapted Physical Education in the Main Stream" Move Publisher Co. Denver Colorado-802222, 1989.

**SEMESTER-III**  
**PRACTICAL**  
**GAMES LESSON**

**COURSE CODE: BPE-P-306**

**(ELECTIVE GROUND COURSE-V)**

**Credit:4**

**Marks=100**

**Objectives:-**

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Communication. ...
- Change management. ...
- Problem solving. ...
- Flexible thinking. ...
- Morale building. ...

**The Course learning outcomes:**

**CO-1** Experiencing the General & Specific warming up for games

**CO-2** Acquiring the Basic skills of games.

**CO-3** Demonstration and application of various techniques of games

**CO-4** Warming up: - General & Specific

**CO-5** Specific conditioning program for games

**CO-6** Basic skills- offensive & defensive

Lesson on any one of the following games:- (120Hours)

1. Kho-Kho
2. BasketBall
3. Judo
4. Boxing
5. Table tennis

**SEMESTER-III**  
**PRACTICALS**  
**GYMNASTICS**  
**LESSON**

**COURSE CODE: BPE-P-307**

**(ELECTIVE GROUND COURSE-VI)**

**Credit:4**

**Marks=100**

**Objectives:-**

(120Hours)

- Helping members to develop physical confidence.

- Helping members to develop mentally.
- Promoting balance and co-ordination.
- Developing strength, improving flexibility.
- Improving body posture.
- Developing social skills.

## **The Course learning outcomes:**

**CO-1.** Define the meaning and general principles of

Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

On any one of the following gymnastics activities:-

1. Floor Exercises (Both for men&women)
2. Vaulting Horse (Both for men&women)
3. Parallel Bar (For men only)
4. Balancing Beam (For women only)

The contents of teaching for each activity are as follows:-

1. History of game/ gymnastic.
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.

7. Tournaments at national and international level.
8. Records (world, Olympic, Asian games and National Games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating: -
  - a. Duties of official.
  - b. Knowledge of score sheets.
  - c. Signals officiating.
  - d. Technical equipment for officiating.

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastics activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weightage.



**SEMESTER-III**  
**PRACTICALS**  
**YOGA PRACTICAL**

**COURSE CODE: BPE-P-308**

**(MINORELECTIVE COURSE-III)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

**The Course learning outcomes:**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

**ASANA**

Utkatasana , Chakrasana , Vrishabhasana , Kukkutasana , Vakrasana , Hasta Padangusthasana ,Paravatasana , Bhunamanasana , Konasana , Vatayanasana , Tulasana , Garbhasana , Mandukasana ,TiryakBhujangasana,Ardhchandrasana

**PRANAYAMA**

Shitali  
PranayamaShitkariPranay  
am

**SATKARMA**

Aganisar Kriya Shitkram  
Kapalbhati SutraNeti

**MUDHRAAND BANDH**

Shambhavi MurdaTadagi  
MurdaPran Murda

Kaki Murda

## SEMESTER-IV

COURSE CODE:BPE-401

(MAJOR COURSE-VII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### REMEDIAL AND MASSAGE

#### Objectives:

- Reducing stress and increasing relaxation.
- Reducing pain and muscle soreness and tension.
- Improving circulation, energy and alertness.
- Lowering heart rate and blood pressure.

#### The Course learning outcomes (COs):

**CO-1.** Use observation, verbal and other assessment tool to plan and perform a general relaxation massage.

**CO-2.** Apply the detailed knowledge of anatomy as it relates to the study of muscles, joint and ligament.

**CO-3.** Use the knowledge of physiological principles as it relates to the different system of the body and massage therapy.

**CO-4.** Apply the knowledge of pathological condition as they indicate or contraindicate the application of massage therapy

#### Unit-I (15 Hours)

1. Definition of Remedial, physiotherapy and corrective exercises.
2. Concept of posture, its meaning and characteristics of correct and incorrect posture.
3. Causes of incorrect posture
4. Necessity and importance of correct posture.
5. Principles of correct posture.
6. Tests for correct posture.

#### Unit-II (16 Hours)

##### 1. *Classification of posture :*

- a. Good Type
- b. Bantom Type
- c. Fatigue Type

##### 2. *Postural deformities and their causes :*

- a. Kyphosis
- b. Lordosis
- c. Scoliosis

- d. Bow legs
- e. Knock knee
- f. Flat foot

**3. *Preventive and remedial measures for postural defects :***

- a. Psychological and habitual consideration in preventing and correcting postural defects.
- b. Corrective exercises for various postural defects.
- c. Physiotherapist treatment in correcting postural defects.

**Unit-III** (17 Hours)

1. Massage :
  - a. Meaning, definition and a brief history of massage.
  - b. Massage as means of relaxation and points to be considered while giving massage.
  - c. General effects of massage.
  - d. Classification of the manipulation and movements in the massage :
    - i. Effleurage and stroking
    - ii. Petrissage
    - iii. Percussion/Tapotement
    - iv. Vibration and shaking
  - e. Effects of manipulation and movements on the different systems of humanbody.

**Unit-IV** (13 Hours)

1. ***Classification of positions :***
  - a. Fundamental positions
  - b. Derived positions
  - c. Modified positions
2. ***Classification of exercises along with their practical instructions :***
  - a. Free mobility exercises
  - b. Assisted exercise
  - c. Resisted exercises

**Reference Books:**

1. Smith Lara K. and Others, "Srunnstrem's Clinical Kinesiology", Jaypee Brothers P.B.No-7193 New Delhi 1998.
2. J.L. Rathoore, "Corrective Physical Education", Philadelphia W.B. Saunders Co.1968.
3. P.G. Rasch and R.K. Burke, "Kinesiology and Applied Anatomy", Lee and Febriger, Philadelphia 1978.
4. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana,Second revised addition 2008.

## SEMESTER-IV

**COURSE CODE: BPE402**

**(MAJOR COURSE-VIII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION**

#### **Objectives:**

- It is the education that concerns physical activities, which develop and maintain human body
- Activity
- Teaching.
- Direction, coordination and control of group efforts

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the Students will be learning and able to do/perform the following.....

**CO-1.** Memorizing the Importance of Organization and Administration.

**CO-2.** Describing the Scope, Need and Importance of Organization and Administration.

**CO-3.** Acquiring the knowledge of Leadership in Physical Education and Sports.

**CO-4.** Determining the Role of Reports and records.

**CO-5.** Estimating the concept of drawing Fixtures.

#### **Unit-I** (15 Hours)

1. Meaning and definition of planning, organization, administration and management and their nature and scope.
2. Importance of management in educational institution.
3. Principles of management.
4. Theories of management.
5. Scheme of organization in school, college and university.

#### **Unit-II** (16 Hours)

##### **1. Facilities and equipment :**

- a. Layout of physical education facilities and sports facilities.
- b. Need and importance of equipment for physical education.
- c. Procedure for the purchase of equipment.
- d. Development of improvised equipment.

- e. Care, maintenance and disposal of unserviceable equipment.

**2. *Office management and budget :***

- a. Maintenance of records.
- b. Office correspondence and reports.
- c. Physical education budget and its preparation.
- d. Income and expenditure.
- e. Petty cash.

**Unit-III** (14 Hours)

**1. *Intramurals and extramural :***

- a. Intramurals :
  - i. Its importance and planning.
  - ii. Events of competitions, time and facility factor.

- b. Extramurals :
  - i. Planning and conduct.
  - ii. Outcomes of participations (Educational).
  - iii. Limitations in participations.
  - iv. Selection and training of teams.
  - v. Participation, finance and other aspects.

**Unit-IV** (18 Hours)

**1. Curriculum designing:**

- a) Curriculum designing its need and importance.
- b) Factors affecting time table.
- c) Place of physical education periods in curriculum and teacher-pupil ratio.

**2. Tournament organization:**

- a) Conduct of tournaments and athletic meet.
- b) Types of tournaments.
  - i. Elimination (knockout).
  - ii. League.
  - iii. Combination.

**Reference Books:**

1. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers Ludhiana Second revised addition 2008.
2. Kamlesh M. L. and Sangral M.S., "Methods in Physical Education", Parkash Brothers, 5,6 Book Market Ludhiana 1986.
3. Kamlesh M. L. "Principles and history of physical Education" , ParkashBrother Paliala, 1991.
4. Charles, E. Foxythe and Irrn A. Keuer, "Administration of High School Athletics" , Prentice Hall Inc. Englewood, N.J. 1979.

## SEMESTER-IV

**COURSE CODE: BPE403**

**(ELECTIVE COURSE-IV)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **BASIS OF YOGA THERAPY**

#### **Objectives:**

- the application of Yogic principles to a particular person with the objective of achieving a particular spiritual, psychological, or physiological goal.

#### **The course learning outcomes (COs):**

- CO-1.**Effect of yoga in different factors
- CO-2.** Physical activity implement in asana and pranayama
- CO-3.** Yoga help in improves strength, balance and flexibility
- CO-4.** Yoga therapy benefits with disabilities and limitations.

**Unit-I: Yogic concepts of health and disease [15 Hrs.]**

1. Definition & Importance of Health According to WHO;
2. Dimensions of Health: Physical, Mental, Social and Spiritual;
3. Concept of Health and Disease in Indian Systems of Medicine i.e. Ayurveda, Naturopathy and Siddha Systems of Medicine, Utility and Limitations of these systems in health and healing;
4. Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi, Yogic concept of Health and Disease, role of Yoga in preventive health care – Heyam dukham anagatam;
5. Potential causes of Ill-health: Tapatrayas and Kleshas. Physical and Physiological manifestation of Disease: Vyadhi, Alasya, Angamejayatva and Svasa-prashvasa. Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva;
6. Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi).

**Unit-II: Yogic concepts for health and healing [15 Hrs.]**

1. Concepts of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing;
2. Concept of Pancha-koshas & Shat-chakra and their role in Health and Healing;
3. Concept of Abhyas and Vairagya, Chitta and Chitta Prasadana, Kriya-yoga, Ashtanga Yoga of Patanjali for Health and Healing;
4. Concept of Cleansing (Shuddhi), its role and importance in Health and Healing;
5. Concept of Swara Yoga and its efficacy in Health and Healing.

**Unit-III: Yogic principles and practices of healthy living [15 Hrs.]**

1. Yogic Principles of Healthy Living: Aahara, Vihara, Aachara and Vichara;
2. Role of Yogic Positive Attitudes (Maitri, Karuna, Mudita and Upeksha) for Healthy Living,
3. Concept of Bhavas and Bhavanas with its relevance in Health and well-being;
4. Yogic principles of Lifestyle management and its role in prevention of disease and health promotion;
5. Yogic Principles of Diet and its role in Healthy living;
6. Yogic Practices of Healthy living : i.e. Yama, Niyama, Shatkarma, Asana, Mudra & Bandha Pranayama, Pratyahara, Dharna and Dhyana, and their role in Healthy living.

**Unit-IV: Health benefits of yogic practices [15 Hrs.]**

Psycho-physiological effects and health benefits of Yogasana , Pranayama, Shatkarma, Bandha and Mudra, and Meditation.

### **TEXT BOOKS**

1. Preeti Goel and Rita Jain : Spectrum of Health (Sports Publications, New Delhi, 2003)
2. M. M. Gore : Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008)
3. Dr. K. Krishna Bhat: The power of Yoga

### **BOOKS FOR REFERENCE**

1. Dr. R. S. Bhogal : Yoga Psychology, Kaivalyadhama Publication
2. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
3. T.S. Rukmani: Patanjala Yoga Sutra
4. Sahay, G. S.: Hatha Yoga Pradeepika, MDNIY Publication, 2013
5. Kdham : Gheranda Samhita, Kaivalyadhama, Lonavla.

## SEMESTER-IV

COURSE CODE: BPE404

(ELECTIVE COURSE-IV)

Credit:4

Marks:(ESE=70+CCA=30)=100

### OFFICIATING AND COACHING

#### Objectives:

- They provide leadership and guidance to participants, ensuring that the competition is conducted in a safe and fair manner.
- to unlock people's potential to maximize their own performance.

**The Course learning outcomes (COs):**On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the meaning and general principles of Officiating.

**CO-2.** Discuss financial and legal aspects of officiating.

**CO-3.** Describe the qualification and qualities of an officiating.

**CO-4.** Classify the duties of officials.

**CO-5.** Define the ingredients of officiating.

**CO- 6.** Discuss enforcement, Facilities, Arrangement, and environment for officiating

**CO-7.** Explain the relations of officials with management, players, coaches, captains, spectators, and fans.

**CO-8.** Classify the preparations of officials before, during and after the game.

#### Unit-I (14 Hours)

1. Coaching :
  - a. Meaning and definition of coaching.
  - b. Principles of coaching.
  - c. Qualification and Qualities of a good coach.
  - d. Duties and responsibilities of a good coach.
  - e. Measures for improving the standard of coaching in India.

#### Unit-II (17 Hours)

1. Training Schedule :
  - a. Concept of Training Schedule.
  - b. Types of Training Schedule (Plan) :
    - i. Short term.
    - ii. Long term.
  - c. Periodization : Meaning of single and double periodization.
  - d. Principles of training schedule.

- e. Preparation of training schedule.

**Unit-III** (13 Hours)

1. Officiating :

- a. Meaning and definition of officiating.
- b. Principles of officiating.
- c. Qualification and qualities of a good official.
- d. Duties and responsibilities of an official.
- e. Measures for improving the standard of officiating in India.

**Unit-IV** (18 Hours)

1. Rules, regulations and plan of the following athletic events :
  - a) Sprints
  - b) Long jump
  - c) Shot put
  - d) Relay races
  - e) Middle and long distance races
  - f) Hope step and jump
  - g) Discus throw
  - h) Hurdles.
2. Score sheets and award of points for the above mentioned athletic events

**Reference Books:**

1. AAFB, "Officiating in Athletics", 2012.
2. Bunn, J.N. "Art of officiating in Sports", Prentice Hall Englewood N.J. 1968.
3. "Pearson G.F. Athletics", Thomson Nelson and sons ltd. London.
4. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, LudhianaSecond revised addition 2008.

## SEMESTER-IV

COURSE CODE: BPE405

(ELECTIVE COURSE-V)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPECIALIZATION IN WOODBALL

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, ground marking, rules and duties of officials, etc.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Chapter-I Introduction

Brief introduction of Woodball, Meaning & Definition of Woodball, History of Woodball (Invention, Player etc.), Woodball in India (origin Player etc.), Working Federation of Woodball in International, National, State Level.

#### Chapter-II Woodball-Equipments & Course

General Principles of woodball. Woodball course design (Figure), Specifications of course, layout plans of different woodball course, Shape & Size of Mallet, Ball & Gate.

#### Chapter-III Woodball Skill :

Player movement, Rules of Hitting & Penalties Putting  
, Penalties

Short Distance stroke. Mid

Distance stroke. Long

Distance stroke. Stoke

completion

**Penalties :** Penalties Rules in 1<sup>st</sup> shot.

Penalties Rules of Hitting

Penalties Rules in play Penalties

Rule in gate area.

#### Chapter-IV

Organization of woodball team & Dress, referee in woodball & recording methods.

##### Tournaments

State Level, National Level, International Level, AIU & SGFI Games, Distribution of Medals

##### Teams in Woodball

About woodball team, Manager Coach, Single event, Double event, Mix Double event

##### Players dress

Function of referee & chief referee line man

International Referee: Hand signs & Referee Marking

methods in score sheet, Results making

## **Chapter-V**

### **Yoga & Exercise for Woodball Player**

Asana, Pranayama, Mudra & Bandha, Dhyan, Shatkarma

#### **Reference :**

1. Woodball Association of India <[woodballindia.com](http://woodballindia.com)>
2. International Woodball Federation <[www.iwbf-woodball.org](http://www.iwbf-woodball.org)>
- 3.

## SEMESTER-IV

COURSE CODE: BPE0406

(ELECTIVECOURSE-V)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPECIALIZATION IN KABADDI

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

- CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of various team games.
- CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Kabbadi
2. Development of Kabaddi in India and worldwide.
3. Establishment of national and international federations/associations of Kabaddi.
4. Major tournaments of Kabaddi.
5. Awards associated with Kabaddi.

#### Unit-II (16 Hours)

1. Measurements and marking of Kabaddi court.
2. Preparation and maintenance of Kabaddi court.
3. Officials, no. of officials and duties of officials in the game of Kabaddi.
4. Technical equipments for officiating.

#### Unit-III (16 Hours)

1. Fundamental skills of Kabaddi:
  - a) Holding
  - b) Dodging
  - c) Kicking

- d) Chain formation
- e) Raiding
- 2. Lead-up games.
- 3. AAHPERD Youth Fitness Test.

**Unit-IV** (16 Hours)

- 1. Major rules and regulations of Kabaddi.
- 2. Important Signals in Kabaddi.
- 3. Knowledge of score sheet.
- 4. Related sports terminologies.
- 5. Eminent sports personalities associated with Kabaddi.

**Reference Books:**

1. “Training Manual of Kabaddi”, NSNIS, Patiala.
2. Mishra S.C. (2007), “Teach Yourself Kabaddi”, Sports Publishers, New Delhi.
3. Rao, C.V. (1983), “Kabaddi : Native Indian Sports”, NSNIS, Patiala Publishers, Patiala.
4. Rao, E.P. (1994), “Modern Coaching in Kabaddi”, DVS Publishers, New Delhi.
5. “Official Rule Book of Kabaddi”, International Kabaddi Federation.

## SEMESTER-IV

**COURSECODE: BPE407**

**(ELECTIVECOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN JUDO

#### Course Objectives

- Judo, Japanese jūdō, system of unarmed combat, now primarily a sport.
- The rules of the sport of judo are complex.
- The objective is to cleanly throw, to pin, or to master the opponent, the latter being done by applying pressure to arm joints or to the neck to cause the opponent to yield.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques,

stances, forms, rules and duties of officials, etc. in the event of Judo.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Judo.
2. Development of Judo in India and worldwide.
3. Contribution of 'Jigaro Kano' in the promotion of Judo.
4. Establishment of national and international federations/associations of Judo.
5. Major tournaments of Judo.
6. Awards associated with Judo.

#### Unit-II (16 Hours)

1. Measurements of Competition Area for Judo.
2. Preparation and maintenance of Competition area of Judo.
3. Officials/Judges, no. of officials and duties of officials in the game of Judo.
4. Technical equipments for officiating.

#### Unit-III (17 Hours)

1. Fundamental skills of Judo:
  - a) Rolling.
  - b) Rei.

- c) Kumikata.
  - d) Ushiro Ukemi.
  - e) Yoko Ukemi.
  - f) Mai Ukemi.
2. Lead-up game.
  3. AAHPERD Youth Fitness Test.

**Unit-IV** (17 Hours)

1. Major rules and regulations of Judo.
2. Important Signals in Judo.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Judo.

**Reference Books:**

1. "Training Manual of Judo", NSNIS, Patiala.
2. Law, M. (2009), "Falling Hard : A Journey in to the world of Judo", Trumperer Publishers, Japan.
3. Takahashi, M. (2005), "Mastering Judo", Human Kinetics, USA.
4. Harison, E.J. (2002), "Coaching Successfully Judo", Sports Publishers, New Delhi.
5. "Official Rule Book of Judo", International Judo Federation.

## SEMESTER-IV

**COURSE CODE: BPE408**

**(ELECTIVE COURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN BADMINTON

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of fundamental skills, techniques,

stance, rules and their interpretation and duties of officials in the event of badminton.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Badminton.
2. Development of Badminton in India and worldwide.
3. Establishment of national and international federations/associations of Badminton.
4. Major tournaments of Badminton.
5. Awards associated with Badminton.

#### Unit-II (17 Hours)

1. Measurements and marking of Badminton court.
2. Specifications of equipments related to Badminton.
3. Preparation and maintenance of Badminton court.
4. Officials, no. of officials and duties of officials in the game of Badminton.
5. Technical equipments for officiating.

#### Unit-III (16 Hours)

1. Fundamental skills of Badminton:
  - a) Holding (Grip) of the racket
  - b) Service
  - c) Smash
  - d) Drop
2. Lead-up games.
3. AAHPERD Youth Fitness Test.

**Unit-IV****(17 Hours)**

1. Major rules and regulations of Badminton.
2. Important Signals in Badminton.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Badminton.

**Reference Books:**

1. "Training Manual of Badminton", NSNIS, Patiala.
2. Grice, T. (2007), "Badminton : Steps to Success", 2<sup>nd</sup> Ed., Human Kinetics, USA.
3. Singh, M.K.(2006), "A to Z Badminton", Friends Publication, New Delhi.
4. Jain, D. (2001), "Teaching and Coaching Badminton", Khel Sahitya Kendra, New Delhi.
5. "Official Rule Book of Badminton", International Badminton Federation.

**SEMESTER-IV**

**PRACTICAL**

**GENERAL**

**LESSON**

**COURSE CODE: BPE-P-409**

**(ELECTIVE GROUND COURSE-VII)**

**Credit:4**

**Marks=100**

**Objectives:**

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

**The Course Learning Outcomes:**

**CO-1.** Define the meaning and general principles of Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

Lesson on any one of the following general lesson activities:- (120Hours)

1. Class formation
2. Lazium
3. Indian club&rings
4. Aerobics.

**SEMESTER-IV**

**PRACTICAL**

**GYMNASTICS PRACTICAL**

**COURSECODE: BPE-P-410**

**(ELECTIVE GROUND COURSE-VIII)**

**Credit:4**

**Marks=100**

**Objectives:-**

**(120Hours)**

- Gymnastics, the performance of systematic exercises—often with the use of rings, bars, and other apparatus—either as a competitive sport or to improve strength, agility, coordination, and physical conditioning.

## **The Course Learning Outcomes:**

- CO-1.** Define the meaning and general principles of Rhythmic activities.
- CO-2.** Discuss the Rules and their interpretation.
- CO-3.** Describe the types of exercises.
- CO-4.** Examine the performance of skills.

Lessons on any one of the following gymnastics activities:-

1. Uneven bar (for women)
2. Rhythmic gymnastics ( for women)
3. Horizontal bar ( for men)
4. Pommel horse ( for men)
5. Roman rings ( for men)

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastic activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weight age.

The contents of teaching for each activity are as follows:-

1. History of game/gymnastics.
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead-up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.
7. Tournaments at national and international level.
8. Records (World, Olympic, Asian and National games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating :-
  - a. Duties of the official.
  - b. Knowledge of score sheets.
  - c. Officiating signals.
  - d. Technical equipment for officiating.

e. .

## SEMESTER- IV YOGA

### PRACTICAL

COURSE CODE: BPE-P-411

(MINOR ELECTIVE COURSE-IV)

Credit:4

Marks=100

(120Hours)

#### Objectives:-

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values

#### The Course Learning Outcomes:

**CO1-** Demonstrate basic skills associated with yoga and Pilates.

**CO2-** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO3-** Apply the knowledge of basic choreography, and effective group management.

**CO4-** Demonstrate the ability to create and present various yoga activities.

#### ASANA

Paschimottanasana , Natarajasana , Kurmasana , Uthit Padmasana , Padangusthasana , AkarnDhanurasana, BaddhaPadmasana, Astavakrasana, Guptpadmasana, Sarpasana, ArdhaChandrasana , ParivrttaJanushirasana, Sankatasana

#### PRANAYAMA

Bahyavriti  
pranayamaAbhyantaraVritipranayama

#### SATKARMA

VyutkramaKapalbhatiTratak

#### MUDHRAAND BANDH

MahamudraMahabandhaM  
urdaMahavedh Murda

## SEMESTER-V

**COURSECODE: BPE501**

**(MAJORCOURSE-IX)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

## KINESIOLOGY

### Objectives:-

- Kinesiology studies the mechanics of human movement and how they impact our health and wellbeing.
- During classes, students learn how to combine a holistic approach with Anatomy, Biomechanics, and Psychology principles to help increase or repair the physical mobility of patients.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be

learning and

able to do/perform the following:

**CO-1.** Describe the definition and meaning of kinesiology.

**CO-2.** Discuss the aims and objectives of kinesiology.

**CO-3.** Explain the role of kinesiology in physical education.

**CO-4.** Interpret the fundamental concept of center of gravity, line of gravity, axis, and planes.

**CO-5.** Write about the composition, and classification of bones and Muscles

### Unit-I (13 Hours)

1. Meaning and definition of Kinesiology
2. Origin and development of kinesiology
3. Aim and objectives of kinesiology
4. Need and scope of kinesiology
5. Importance of kinesiology in Physical Education

### Unit-II (17 Hours)

1. Planes and axis
2. Joint and types of joints
3. Various fundamental movements
4. Movements around various joints :
  - a. Neck
  - b. Shoulder
  - c. Elbow
  - d. Wrist
  - e. Hip

- f. Ankle

**Unit-III** (15 Hours)

**1. *Muscle contraction and its types:***

- a. Isotonic
- b. Isometric
- c. Isokinetic

**2. *Corrective/therapeutic exercises:***

- a. Passive exercises
- b. Active assistive exercises
- c. Active exercise

- d. Resistive exercise
- e. Stretching exercises

**3. *Application of kinesiology in the field of physical education and sports***

**Unit-IV (17 Hours)**

1. Structural classification of skeletal muscles
2. Functional classification of skeletal muscles
  - a. Agonist
  - b. Antagonist
  - c. Stabilizer
  - d. Neutralizer
3. Location, origin, insertion and action of the following muscles :
  - a. Deltoid
  - b. Biceps
  - c. Gastrocnemius
  - d. Latissimus dorsi
  - e. Trapezius major
  - f. Sternocleidomastoid

**Reference Books:**

1. Rasch, P.I. and Burke R.K., "Kinesiology and Applied Anatomy", Lee and Febiger.
2. Wells K., "Kinesiology", Philadelphia W.B. Saunders Co. 1986.
3. Cooper and Cleseo, "Kinesiology", St. Louis C.V. Mosby Co.1968.
4. Smith Lara K. and Others, "Srunnstrem's Clinical kinesiology", Jaypee Brothers P.B.No-7193 New Delhi 1982.
5. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised addition 2008.

## SEMESTER-V

**COURSECODE: BPE502**

**(MAJORCOURSE-X)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### FUNDAMENTALS OF SPORTS TRAINING

#### Objectives:-

- Every sport activity needs specific type of physical fitness, and hence, the improvement of various components of physical and skills related fitness like strength, speed, coordination, endurance and flexibility is an important aim and objective of sports training.

#### The Course Learning Outcomes (COs):

**CO-1.** The learners will be able to identify the fundamental concepts, theories and principles of human body training related to sports performance.

**CO-2.** The learners will be able to demonstrate the skills to train different fitness components and related planning.

**CO-3.** The learners will be able to understand the organization to achieve high performance in sports.

#### Unit-I (15 Hours)

1. Meaning, definition, aim and objectives of sports training.
2. Characteristics of sports training.
3. Principles of sports training.
4. Concept of warming up and cooling down, its use and importance.

#### Unit-II (17 Hours)

1. Meaning and definition of physical fitness and its components :
  - a. Speed.
  - b. Strength.
  - c. Endurance.
  - d. Flexibility.
  - e. Co-ordinative ability/agility.
2. Speed training :
  - a. Meaning of speed training, types of speed and methods of speed training.
  - b. Factors influencing speed.
3. Strength training :
  - a. Meaning of strength training, types of strength and methods of strength training.

- b. Factors influencing strength.

**Unit-III** (17 Hours)

1. Endurance training :
  - a. Meaning of endurance training, types of endurance and methods of endurance training.
  - b. Factors influencing endurance.
2. Concept of training load, adaptation and recovery :
  - a. Definition of load and training load.

- b. Types of load.
- c. Symptoms, causes and measures to overcome overload.
- d. Meaning, definition and benefits of adaptation.
- e. Meaning, definition and benefits of recovery.

**Unit-IV** (16 Hours)

- 1. Meaning and definition of technique, skill and style.
- 2. Implications of technical training in various phases.
- 3. Stages of technical training.
- 4. Meaning and definition of tactical training.
- 5. Methodology of tactical training, strategy and tactics.
- 6. Relationship between technical training and tactical training.

**Reference Books:**

- 1. "Fundamentals of sports training, progress publishers", Moscow, 1977.
- 2. Dyson, "The mechanics of Warwick square, Athletics."
- 3. Buwn J. "Scientific Principles of coaching." Prentice Hall.
- 4. Broer, M. "Efficiency of Human movement." Philadelphia W.B. Saunders Co. 1978.
- 5. "Science of Coaching" By Hardy Singh.
- 6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana Second revised addition 2008.

## SEMESTER-V

**COURSE CODE: BPE503**

**(MAJOR COURSE-XI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **COMMON SPORTS INJURIES ,PREVENTION AND CURE**

#### **Objectives:-**

- The ultimate goal of the rehabilitation process is to limit the extent of the injury, reduce or reverse the impairment and functional loss, and prevent, correct or eliminate altogether the disability

#### **The Course Learning Outcomes (COs):**

**CO-1.** To know the different type of injuries and illness associated with sports participation

**CO-2.** Understand risks and hazards associated with sports participation

**CO-3.** Be able to undertake a risk assessment relevant to sports

**CO-4.** Pupils will be able to recognize the common sign and symptoms for injuries

**CO-5.** Pupils will understand the difference between a chronic and acute injury.

#### **Unit-I (15 Hours)**

1. Sports injuries and its types:
  - a. Acute injuries
  - b. Overuse injuries
2. Common sport injuries:
  - a. Sprain
  - b. Strain
  - c. Fracture
  - d. Dislocations
  - e. Abrasion
  - f. Contusion
  - g. Bruise
  - h. Blisters
  - i. Corn
  - j. Athletes foot
  - k. Tennis elbow
  - l. Footballers Knee
  - m. Footballers Ankle
3. Preventive measures for common sports injuries
4. Treatment for common sports injuries

**Unit-II** (15 Hours)

1. Meaning, aim and objectives of first aid
2. First aid box and its articles
3. Types of bandages and splinters
4. Qualities and functions of a first aider
5. Principles of first aid
6. Causes of sports injuries

7. First aid for the common sports injuries
8. Concept of PRICE.

**Unit-III** (15 Hours)

1. Emergency treatment for common accidents:
  - a. Drowning
  - b. Burning
  - c. Insect stings & bitings
  - d. Snake bite
  - e. Dog bite
  - f. Poisoning
  - g. Unconsciousness
  - h. Fainting
  - i. Hysteria
  - j. Sunstroke
  - k. Shock
  - l. Electric shock
  - m. Acid burn
2. Ergogenic aids in sports and their ill effects :
  - a. Anabolic agents
  - b. Stimulants
  - c. Beta blockers
  - d. Narcotic analgesics
  - e. Diuretics
  - f. Blood doping

**Unit-IV** (15 Hours)

1. Rehabilitory exercises for sports injuries
2. Rehabilitation procedures of sports injuries :
  - a. Cold Therapy
  - b. Heat Therapy
  - c. Hydrotherapy
  - d. Electron radiotherapy
  - e. Ionization Therapy
  - f. Exercise Therapy
  - g. Massage

## Reference Books

1. Armstrong and Tuckler; "Injuries in sport", London, Staples press, 1964.
2. Bolan J.P., "Treatment and prevention of athletic injuries".
3. More house, L.E. and Resch, P.J., "Sports medicine for Trainers, Philadelphia".
4. Ryans Allan; "Medical Care of the Athlete", McGraw Hill.
5. Evans, A. William; "Everyday safety", Chicago: Iyan and Chamaha.
6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana, Second revised addition 2008.

## SEMESTER-V

**COURSE CODE: BPE504**

**(ELECTIVE COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN KHO-KHO**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills of running and chasing, techniques, sitting positions, field dimensions, rules of the games and duties of officials in the event of kho-kho.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Kho-Kho.
2. Development of Kho-Kho in India and worldwide.
3. Establishment of national and international federations/associations of Kho-Kho.
4. Major tournaments of Kho-Kho.
5. Awards associated with Kho-Kho.

#### **Unit-II (15 Hours)**

1. Measurements and marking of Kho-Kho playfield.
2. Preparation and maintenance of Kho-Kho playfield.
3. Officials, no. of officials and duties of officials in the game of Kho-Kho.
4. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Kho-Kho :
  - a. Offensive skills :
    - i. Giving Kho
    - ii. Covering

- iii. Tapping
- iv. Diving
- b. Defensive skills :
  - i. Running
  - ii. Chain
  - iii. Ring
- 2. Lead-up games.
- 3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Kho-Kho.
2. Important Signals in Kho-Kho.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Kho-Kho.

**Reference Books:**

1. "Training Manual of Kho-Kho", NSNIS, Patiala.
2. Chakaraborty, G.(2002), "Kho-Kho Avlokan", Khel Sahitya Kendra, New Delhi.
3. Pandey, L. (1982), "Kho-Kho Sarvaswa", Metropoliton, New Delhi.
4. "Official Rule Book of Kho-Kho", International Kho-Kho Federation.

## SEMESTER-V

**COURSECODE: BPE505**

**(ELECTIVECOURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALISATION IN BASKETBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of basketball.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of BasketBall.
2. Development of BasketBall in India and worldwide.
3. Establishment of national and international federations/associations of BasketBall.
4. Major tournaments of BasketBall.
5. Awards associated with BasketBall.

#### **Unit-II (15 Hours)**

1. Measurements and marking of BasketBall court.
2. Specifications of Basketball.
3. Preparation and maintenance of BasketBall court.
4. Officials, no. of officials and duties of officials in the game of BasketBall.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of BasketBall :

- a. Dribbling
    - b. Passing
    - c. Shooting
  - d. Defense
2. Lead-up games.
  3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of BasketBall.
2. Important Signals in BasketBall.
3. Knowledge of score sheet.
4. Related sports terminologies.
6. Eminent sports personalities associated with BasketBall.

**Reference Books:**

1. “Training Manual of Basketball”, NSNIS, Patiala.
2. Drewelt, J. (2007), “How to improve Basketball”, Crabtree Publishing Co., USA.
3. Sharma, O.P. (2003), “Basketball Skills and Rules”, Khel Sahitya Kendra, New Delhi.
4. Thani, Lokesh (1995), “Skills and Tactics of Basketball” , Sports Publication, NewDelhi.
5. “Official Rule Book of Basketball”, International Basketball Federation.

## SEMESTER-V

**COURSECODE: BPE506**

**(ELECTIVECOURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALISATIONIN BOXING**

#### **Objectives:-**

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, apparatus

used, court markings and dimensions, rules and duties of officials, etc. in the individual

event of boxing.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Boxing.
2. Development of Boxing in India and worldwide.
3. Establishment of national and international federations/associations of Boxing.
4. Major tournaments of Boxing.
5. Awards associated with Boxing.

#### **Unit-II (15 Hours)**

1. Measurements of Boxing Arena/Ring.
2. Specifications of equipments related to Boxing.
3. Preparation and maintenance of Boxing Arena/Ring.
4. Officials, no. of officials and duties of officials in the game of Boxing.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Boxing :
  - a. Shot Ring Boxing
  - b. Middle Ring Boxing

- c. Long Ring Boxing
2. Lead-up games.
3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Boxing.
2. Important Signals in Boxing.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Boxing.

**Reference Books:**

1. "Training Manual of Boxing", NSNIS, Patiala.
2. Gotay, A.L.(2008), "Boxing Basics", Outskirts Press, USA.
3. "Official Rule Book of Basketball", International Basketball Federation.

## SEMESTER-V

**COURSE CODE: BPE507**

**(ELECTIVE COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN TAEKWONDO**

#### **Objectives:-**

- **To enhance the sports performance:** It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Taekwondo.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Taekwondo.
2. Development of Taekwondo in India and worldwide.
3. Establishment of national and international federations/associations of Taekwondo.
4. Major tournaments of Taekwondo.
5. Awards associated with Taekwondo.

#### **Unit-II (15 Hours)**

1. Measurements of Competition Arena for Taekwondo.
2. Specifications of equipments related to Taekwondo.
3. Preparation and maintenance of Competition area of Taekwondo.
4. Officials, no. of officials and duties of officials in the game of Taekwondo.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Taekwondo :
  - a. Blocking

- b. Open & Closed Stance
  - c. Kicking & Striking
  - d. Punching
  - e. Stepping
  - f. Offensive & Defensive Techniques
  - g. Kicking Combinations
2. Introduction of Gyeorugi & Poomsae.
  3. Motor Ability Test.

## **Unit-IV**

(15 Hours)

1. Specific Taekwondo Goals for Individual Grades
2. Major rules and regulations of Taekwondo.
3. Important Signals in Taekwondo.
4. Knowledge of Score Sheet.
5. Related Sports Terminologies.
6. Eminent sports personalities associated with Taekwondo.

### **Reference Books:**

1. Anslow, Stuart (2013). From Creation to Unification: The Complete Histories Behind the Ch'ang Hon (Itf) Patterns: CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
2. Anslow, Stuart (2nd Edition 2009). Ch'ang Hon Taekwon-Do Hae Sul: Real Applications to the Itf Patterns; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
3. Kim, Bok Man (1<sup>st</sup> Edition 2015). Taekwon-Do: Origins of the Art: BOK Man Kim's Historic Photospective (1955-2015) ; Moosul Publishing, LLC.
4. Chun, Richard (2<sup>nd</sup> edition 2007). Tae Kwon Do: The Korean Martial Art ; Ymaa Publication Center.
5. Son, Duk Sung & Clark, Robert J.(1st edition 1968).Korean Karate: The Art of Tae Kwan Do ; Prentice-Hall.
6. Chun, Richard (1<sup>st</sup> Edition 2013). Tae Kwon Do Black Belt Poomsae: Original Koryo and Koryo ; Ymaa Publication Center.
7. Kim, Sang H (2010). Taekwondo Step Sparring ; Turtle Press.
8. Kim, Sang H (2009). Taekwondo Self Defense: Taekwondo Hoshinsool ; Turtle Press.
9. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 1 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
10. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 2 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
11. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 3 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
12. Cook, Doug (3<sup>rd</sup> Edition 2001). Taekwondo: Ancient Wisdom for the Modern Warrior ; Ymaa Publication Center.

13. Cook, Doug (1<sup>st</sup> Edition 2006). Traditional Taekwondo: Core Techniques, History and Philosophy ; Ymaa Publication Center.
14. Cook, Doug (1<sup>st</sup> Edition 2009). Taekwondo: A Path to Excellence ; Ymaa Publication Center.
15. Gillis, Alex (1<sup>st</sup> Edition 2008). A Killing Art: The Untold History of Tae Kwon Do ; ECW Press, Canada.
16. Park, Yeon Hwan & Gerrard, Jon (Updated Edition 1999). Tae Kwon Do: The Ultimate Reference Guide to the World's Most Popular Martial Art; Checkmark Books.
17. Park, Yeon Hwan & Gerrard, Jon (1<sup>st</sup> Edition 2013). Black Belt Tae Kwon Do: The Ultimate Reference Guide to the World's Most Popular Black Belt Martial Art; Skyhorse.
18. Lee, Kyu Hyung & H. Kim, Sang (1<sup>st</sup> Edition 2007). Complete Taekwondo Poomsae: The Official Taegeuk, Palgwae and Black Belt Forms of Taekwondo ; Turtle Press, U.S.
19. Hornsey, Kevin (1<sup>st</sup> Edition 2003). Taekwondo: A Step-by-Step Guide to the Korean Art of Self-Defense ; Tuttle Publishing.
20. Park, Dong Keun & Schein, Allan (1<sup>st</sup> Edition 2006). Tae Kwon Do: The Indomitable Martial Art of Korea : Basics, Techniques, and Forms ; Invisible Cities Press Llc.

“Official Rule Book of Taekwondo”, World Taekwondo Federation. [www.worldtaekwondo.org](http://www.worldtaekwondo.org) ,  
[www.taekwondofederationofindia.com](http://www.taekwondofederationofindia.com)

**SEMESTER-V**  
**PRACTICAL**  
**GAMES LESSON**

**COURSECODE:BPE-P-508**

**(ELECTIVE GROUND COURSE-IX)**

**Credit:4**

**Marks=100**

(120Hours)

Objectives:-

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

**The Course Learning Outcomes:**

- Experiencing and Immiting the General & Specific warming up for games
  - Acquiring the Basic skills of games
  - Demonstration and application of various techniques of games.
- Warming up: - General & Specific
- Specific conditioning program for games
- Basic skills- offensive & defensive

Lesson on any one of the following games:-

1. Cricket
2. HandBall
3. Taekwondo
4. Weight Lifting
5. Football.

## **SEMESTER-V**

### **PRACTICAL**

#### **ATHLETICS LESSON**

**COURSE CODE: BPE-P-0509**

**(ELECTIVE GROUND COURSE-X)**

**Credit:4**

**Marks=100**

#### **Objectives:-**

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

**CO-1.**Administrating of the skill performance.

**CO-2.**Practicing of the skill performance.

**CO-3.**Summarizing record file

Lesson on any one of the following athletics events:-

(120 Hours)

1. High Jump.
2. Hammer Throw
3. Javelin
4. Competitive walking.

#### **Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastics activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsion for each candidate which will be assessed by external examiner appointed by the university.

3. Each group of practical examination will be of three hours duration irrespective of its weight age.

The contents of teaching for each activity are as follows:-

1. History of Game/Athletics .
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead-up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.
7. Tournaments at national and international level.
8. Records (World, Olympic, Asian games and national games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating: -
  - a. Duties of official
  - b. Knowledge of score sheets
  - c. Signals officiating
  - d. Technical equipment for officiating.

**SEMESTER-V**  
**PRACTICALSYOGAPRAC**  
**TICAL**

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**COURSECODE: BPE-P-510**

**(MINORELECTIVECOURSE-V)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values

**The Course Learning Outcomes:**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

**ASANA**

Mayurasana, Shirshasana, Eka Pada Skandasana, Vatayanasana, Titibasana, Garbhasana, Shirsha Padangusthasana, Guptasana, Padambakasana, Purna Ustrasana, Vibhaktapaschimottanasana, Karnapidasana

**PRANAYAMA**

Bhramari  
Pranayama Bhastrika  
Pranayama Udgeeth  
Pranayama Murcha Pranayama

**SATKARMA**

Shankh  
Prakshalan Nauli Kriya  
Vastra Dhauti

**DHYAN**

YogaNidra

## SEMESTER-VI

**COURSE CODE: BPE601**

**(MAJOR COURSE-XII)**

**Credit:4**

**Marks: (ESE=70+CCA=30)=100**

### **FUNDAMENTALS OF COMPUTER APPLICATIONS IN PHYSICAL EDUCATION**

#### **Objectives:-**

- **Operate a variety of advanced spreadsheet, operating system and word processing functions.**  
Solve a range of problems using office productivity applications, and adapt quickly to new software releases. Maintain quality assurance through critically evaluating procedures and results.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Memorizing the Importance of Computer, characteristics and application.

**CO-2.** Describing the block diagram and classification of the computers.

**CO-3.** Acquiring the knowledge of software, hardware, and storage devices of the computers.

**CO-4.** Determining the role of MS-Word, MS-Excel & MS Power point.

**CO-5.** Define Word processor and its types.

**CO-6.** Applying the concept of prepare the presentation and slide show, animation with function.

**CO-7.** Estimating the working with graph.

#### **Unit-I Concepts of Computer and its basics: (15 Hours)**

1. History, application, characteristics, types of computer (Analog, Digital, Hybrid) and generations of Computer.
2. Physical structure of computer.
3. Use of computer
4. Human V/s Computer
5. Role of computer in various fields
6. Aspects and need of computer in Physical Education.

#### **Unit-II Component of Computer System: An Introduction of Hardware and Soft ware**

**(15 Hours)**

1. Components of computer system
2. CPU (CU, ALU and Main memory)
3. Input devices (Keyboard, Mouse and Track Ball, Touchpad, Joysticks, Touch Sensitive Screens, Data Scanning Device, Bar Code Readers, Optical Mark Reader (OMR) and Magnetic Ink Character Reader (MICR))

4. Output Devices (Monitor, Printer, LCD)
5. Hardcopy Devices (Printers and Plotter)
6. UPS and types of UPS
7. Operating System Programme Languages translator.
8. Application program/package

**Unit-III Operating System :** (15 Hours)

1. Operating system and its functions.
2. DOS, Internal and External DOS Commands
3. Window features
4. Windows accessories- Calculator, notepad, word-pad and paint.
5. Structure of window screen (Desktop, wallpaper, taskbar and icons)
6. Start button

7. Programme, documents, setting search, help and support, run, concept of file and folders and shut down.
8. Virus- Types, symptoms, effects and protection.

#### **Unit-IV MS Office :**

(15 Hours)

1. Work-Introduction to word processor, creating and saving documents, editing and formatting a document, including color, size, font, alignment of text, printing a document, inserting word art, clip art and picture, page sorting, bullets and numbering, inserting tables, creating rows and columns and mail-merge.
2. Power point.
3. Excel- Introduction to excel, need of spreadsheet, creating, opening and saving workbook, editing worksheet, using links, applying different views and types of functions.
4. Internet and its benefits.
5. Types of connections: dial up, dedicated or leased lines, Wi-Fi.
6. Using search engine downloading the information
7. Communication on the Internet: e-mail, chatting and internet newsgroups.

#### **Reference Books**

1. Arora S., "Introduction to Information and Technology", Dhanpat Rai and Co. (Pvt.) Ltd. Education and Technical Publisher (2002).
2. Nasib Fill, "Essential of Computer and Network Technologies", Khana Book Publishing Company Darya Ganj New Delhi.
3. Hussain; "Computer Technology and Application", 1996.
4. Carter Roger, "The Information Technology Handbook", Heinmar Professional Publishing (Ltd.) 1987.
5. Raja Raman V; "Fundamentals of Computer", Prentice Hall of India (Pct) Ltd. 1982.
6. Raja Gopalan R., "Understanding Computers", Tata McGraw Hill Publishing Company Ltd. 1920.

## SEMESTER-VI

COURSE CODE: BPE602

(MAJOR COURSE-XIII)

Credit: 4

Marks: (ESE=70+CCA=30)=100

### SPORTS PSYCHOLOGY

#### Objectives:-

Most people study sport and exercise psychology with two objectives in mind:

(1) to understand how psychological and social factors influence an individual's behavioural outcomes (e.g., sport performance, exercise motivation)

(2) to understand how participation in sport and exercise influences psychological

**The Course learning outcomes (COs):** On completion of the four years B.P.E.S, program, the students will be learning and able to do/perform the following.....

State the Meaning and Definition of Psychology.

**CO-1.** Estimating the stages of Growth and Development.

**CO-2.** Acquiring the knowledge of Individual Differences.

**CO-3.** Estimating the Learning curves.

**CO-4.** Acquiring the knowledge of Individual differences and body types.

**CO-5.** Determining the factors of motivation in Physical Education & Sports.

**CO-6.** Estimating the knowledge of Mental Preparation Strategies.

**CO-7.** Combining the knowledge of Mental Preparation Strategies in relation to Sports performance.

#### Unit-I (13 Hours)

1. Meaning, definition, scope and importance Sports Psychology.
2. Relationship of sports psychology with other sports sciences.
3. Development of sports psychology in India.
4. Psychological factors effecting physical performance.
5. Utility of sports psychology in the field of physical education and sports.

#### Unit-II (16 Hours)

1. Concept of growth and development.
2. Physical, mental, social, intellectual and emotional development in infancy, later childhood and adolescence stages.
3. Learning: meaning, definition and nature of learning.
4. Laws of learning and learning curve.
5. Theories of learning.

#### Unit-III (16 Hours)

1. Meaning and definition of motivation.
2. Types of motivation and motivation in learning.
3. Individual differences its type and nature.
4. Determinants of individual difference:
  - a. Heredity
  - b. Environment
5. Intelligence, its meaning and types.

**Unit-IV** (15 Hours)

1. Meaning, definition and characteristics of personality.
2. Types of personality.
3. Factors affecting personality development.

4. Role of Physical Education and sports in the development of personality.
5. Description of Important psychological terms:
  - a. Anxiety
  - b. Stress
  - c. Self Confidence
  - d. Group Dynamic
  - e. Group Cohesion

### **Reference Books**

1. "Educational Psychology", Little Field Adms OC. 1979.
2. Cratty B.J., "Psychology in contemporary sports", Prentice Hall, Englewood Cliffs
3. Kamlesh M.L., "Psychology of Physical Education and sports", MetropolitanBook Co. (P) Ltd. New Delhi 1983.
4. Sharma Y.P., "Psychology in Physical Education and sports", Reliance PublishingHouse New Delhi 2000.
5. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised addition 2008.

## SEMESTER-VI

**COURSE CODE: BPE603**

**(MAJOR COURSE-XIV)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **TEST MEASUREMENT AND EVALUATION**

#### **Objectives:-**

- To frame the objectives –
- Test and Measurement helps in setting the target or goal according to the need and requirement.
- By adopting the Test and Measurement techniques the physical education teachers gets an accurate idea about the progress made by the students.

**The Course learning outcomes(COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the meaning and general principles of Test, Measurement &Evaluation

**CO-2.** Discuss the role and Importance of Test, Measurement & Evaluation.

**CO-3.** Acquiring the knowledge of Concept of Physical Fitness

**CO-4.** Determining the role of Endurance

**CO-5.** Calculating and examine the Anthropometric Measurements

#### **Unit-I** (15 Hours)

1. Meaning and definition of test, measurement and evaluation
2. Relationship between test, measurement and evaluation
3. Principles of evaluation
4. Need and importance of test, measurement and evaluation in the field of physical education

#### **Unit-II** (15 Hours)

1. Criteria for test selection
2. Characteristics of an effective test:
  - a. Validity
  - b. Reliability
  - c. Objectivity
  - d. Norms/subjectivity
3. Classification of tests :
  - a. Standardized test
  - b. Teacher made test
4. Construction of a test:

- a. Knowledge test
  - b. Skill test
5. Administration of a test:
- a. Advance preparations
  - b. During test duties
  - c. After test duties

**Unit-III** (15 Hours)

- 1. Meaning and definition of motor ability
- 2. Tests for motor ability:

- a. Barrow motor ability test
- b. Scott motor ability test
3. Meaning and definition of physical fitness
4. Test of physical fitness and cardiovascular endurance test:
  - a. AAHPERD test
  - b. Harvard step test

**Unit-IV** (15 Hours)

1. Specific sports skill test:
  - a. Badminton- French short serve and clear test.
  - b. Basket ball- Johnson basket ball test.
  - c. Kabaddi- Schmithals French test in field Kabaddi.
  - d. Volley ball- SAI Volleyball Test.

**Reference Books:**

1. Clarks H. Harrison; "Application of measurement to health and Physical Education" Prentice Hall Inc., Englewood Cliffs, N.J. 5<sup>th</sup> Edition, 1976.
2. Scott Gladys and French; "Measurement and Evaluation in Physical Education", W.M.C. Brown Co. Publishers, Dubuque, Iowa, 1959.
3. Mathews K. Donald; "Measurement in Physical Education" W.B. Saunders Co., Philadelphia, London (Second Edition).
4. Mayer J.C; "Tests and Measurements in health and Physical Education", AppletonCentury Crafts, Inc. Third Edition.
5. Johnson, Barry L. and Nelso Jack K; "Practical Measurement for Evaluation in Physical Education", Surjeet Publications, 1982.

## SEMESTER-VI

COURSE CODE: BPE604

(ELECTIVE COURSE-VII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPECIALIZATION IN YOGA

#### Objectives:-

- 1- To enable the student to have good health.
- 2- To practice mental hygiene.
- 3-To possess emotional stability.
- 4- To integrate moral values

#### The Course Learning Outcomes (COs):

**CO-1.** The purpose of this course is to create awareness among everyone about yoga that helps in

transforming body and mind and promoting well-being of the society.

**CO-2.** To teach knowledge, skills, proficiency and

teaching techniques necessary for teaching Yoga.

#### Unit-I (16 Hours)

1. Meaning, definition and origin of Yoga.
2. Aims, objectives and scope of yoga.
3. Historical development of yoga in India.
4. Importance of yoga in the modern era.
5. Types of Yoga:
  - a. Gyana Yoga
  - b. Karam Yoga
  - c. Bhakti yoga
  - d. Raj Yoga
  - e. Hatha Yoga
  - f. Mantra Yoga
  - g. Laya Yoga

#### Unit-II (14 Hours)

1. Concept and philosophy of Asthanga Yoga.
2. Constituents of Asthanga Yoga & Shat Chakras :
  - a. Yama
  - b. Niyama
  - c. Asana

- d. Pranayama
- e. Pratyahar
- f. Dharma
- g. Dhyana
- h. Smadhi

3. Role and mode of practice of each step in the attainment of goal.

**Unit-III** (14 Hours)

- 1. Asanas and their importance.
- 2. Classification of asanas:

- a. Meditative
  - b. Relaxative
  - c. Cultural
3. General techniques and benefits with lesson plan any one of the following: Padmasana, Vajrasana, Halasana, Bhujangasana, Sarvangasana, Chakrasana, Dhanurasana, Salabhasana, Paschimotanasana, Mayurasana, Shirshasana.
  4. Technique and benefits of Surya namaskar.
  5. Difference between yoga and general exercises.

#### **Unit-IV** (16 Hours)

1. Lesson Plan (any one)
2. Concept of Shat Karma (Shudhi Kriyas), Hast Mudras and brief description of the following:  
Neti, Dhوتي, Basti, Nauli, Tratak, Kapalbhathi
3. Meaning and definition of Pranayama, general techniques and physiological benefits of the following :  
Ujjai, Sitkari, Shitali, Bhastrika, Bhramari, Kapalbhathi, Anlom-Vilom
4. Meaning and definition of Hast Mudra and Bandhas.
5. Rule & Regulation of Yoga Competition (All India Yoga Society Reg.)
6. Equipments, Officiating & Coaching

#### **Reference Books:**

1. "Facts about Yoga", By Shri Jogindera, The Yoga Institute, Santa Cruz, Bombay-55(1975)
2. "The Complete Book of Yoga", By Shre Anand Publishers Orient.
3. "Yoga in Modern Life", By Shri Jogindera, The Yoga Institute Santa Cruz, Bombay-55 (1966).
4. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers, Ludhiana, second revised addition 2008.
5. Ramdev, S. (2006). *Yoga Sadhana and Yoga Chikitsa Rahasya*. Haridwar, India: Divya Prakashan.
6. Ramdev, S. (2009). *Pranayam Rahasya*. Haridwar, India: Divya Prakashan.

## SEMESTER-VI

**COURSE CODE: BPE605**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN HANDBALL

#### Objectives:-

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### The Course Learning Outcomes:

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, Techniques, stances, forms, rules and duties of officials, etc. in the event of Handball.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (14 Hours)

1. Origin and brief history of Handball.
2. Development of Handball in India and worldwide.
3. Establishment of national and international federations/associations of Handball.
4. Major tournaments of Handball.
5. Awards associated with Handball.

#### Unit-II (17 Hours)

1. Measurements and marking of Handball court.
2. Specifications of Handball.
3. Preparation and maintenance of Handball court.
4. Officials, no. of officials and duties of officials in the game of Handball.
5. Technical equipments for officiating.

**Unit-III** (14 Hours)

1. Fundamental skills of Handball :
  - a. Dribbling
  - b. Passing
  - c. Shooting
  - d. Defense
2. Lead-up games.
3. Barrow motor ability test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Handball.
2. Important Signals in Handball.
3. Knowledge of score sheet.
4. Related sports terminologies.

5. Eminent sports personalities associated with Handball.

**Reference Books:**

1. Training Manual of Handball”, NSNIS, Patiala.
2. Phillips, B. E. (2009), “Fundamental Handball”, Kessinger Publishers, USA.
3. Jain, D. (2003), “Play and Learn Handball”, Khel Sahitya Kendra, New Delhi.
4. Surbone, L.M. et. al. (2010),“Team Handball ”, Betascript Publishing Co.,USA.
5. “Official Rule Book of Handball”, International Handball Federation.
6. .

## SEMESTER-VI

**COURSECODE: BPE606**

**(ELECTIVECOURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN VOLLEYBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

- CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Volleyball.
- CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of VolleyBall.
2. Development of VolleyBall in India and worldwide.
3. Establishment of national and international federations/associations of VolleyBall.
4. Major tournaments of VolleyBall.
5. Awards associated with VolleyBall.

#### **Unit-II** (16 Hours)

1. Measurements and marking of VolleyBall court.
2. Specifications of VolleyBall.
3. Preparation and maintenance of VolleyBall court.
4. Officials, no. of officials and duties of officials in the game of VolleyBall.
5. Technical equipments for officiating.

#### **Unit-III** (15 Hours)

1. Fundamental skills of VolleyBall :

- a. Service
  - b. Pass
  - c. Smash
  - d. Blocking
2. Lead-up games.
  3. Barrow motor ability test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of VolleyBall.
2. Important Signals in VolleyBall.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with VolleyBall.

**Reference Books:**

1. Training Manual of Volleyball”, NSNIS, Patiala.
2. American Volleyball Coaches Association (2005), “Volleyball : Skills and Drills”, Human Kinetic, USA.
3. Scates, A.E.(1993), “Winning Volleyball”, W. C. Brown, USA.
4. Sagar, S. K.(1994),“Cosco skill Tactics -Volleyball ”, Sports publication, Delhi.
5. “Official Rule Book of Volleyball”, International Volleyball Federation.

## SEMESTER-VI

**COURSE CODE: BPE607**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN FOOTBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Football.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of Football.
2. Development of Football in India and worldwide.
3. Establishment of national and international federations/associations of Football.
4. Major tournaments of Football.
5. Awards associated with Football.

#### **Unit-II** (17 Hours)

1. Measurements and marking of Football ground.
2. Specifications of Football.
3. Preparation and maintenance of Football ground.
4. Officials, no. of officials and duties of officials in the game of Football.
5. Technical equipments for officiating.

#### **Unit-III** (15 Hours)

1. Fundamental skills of Football :
  - a. Passing
  - b. Kicking
  - c. Trapping
  - d. Heading
  - e. Throw in
2. Lead-up games.
3. Barrow motor ability test.

**Unit-III** (14 Hours)

1. Major rules and regulations of Football.
2. Important Signals in Football.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Football.

**Reference Books:**

1. Training Manual of Football”, NSNIS, Patiala.
2. American Football Coaches Association (2002), “The Football Coaching Bible”, 1<sup>st</sup> edition, Human Kinetic, USA.
3. Sharma, O.P.(2001), “Teaching and Coaching Football”, Khel SahityaKendra, New Delhi.
4. Thani, Yograj (2002), “Coaching Successfully Football ”, Khel SahityaKendra, New Delhi.
5. “Official Rule Book of Football”, Federation International Football Association.

## SEMESTER-VI

### PRACTICAL

#### MARKING&OFFICIATINGIN GAMES

**COURSE CODE: BPE-P-608**

**(ELECTIVE GROUND COURSE-XI)**

**Credit:4** Marks=100 (120Hours)

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes:**

- Know the role of and the correct terminology used by a Marker
- Know the role of and the correct terminology used by a Referee
- Know the correct times allowed for various intervals during a game of squash
- Know the rules relating to the serve
- Understand the basic rules relating to interference on court
- Know the different categories relating to injuries and the times allowed for recovery (including for bleeding)
- Have a basic knowledge of the Conduct Rule and when it can be used

**SEMESTER-VI**  
**PRACTICAL**  
**MARKING&OFFICIATING IN ATHLETICS**

**COURSE CODE: BPE-P-609**

**(ELECTIVE GROUND COURSE-XII)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

**The Course Learning Outcomes:**

- Know the role of and the correct terminology used by a Marker
- Know the role of and the correct terminology used by a Referee
- Know the correct times allowed for various intervals during a game of squash
- Know the rules relating to the serve
- Understand the basic rules relating to interference on court
- Know the different categories relating to injuries and the times allowed for recovery (including for bleeding)
- Have a basic knowledge of the Conduct Rule and when it can be used

Lessonsonmarkingandofficiatingonanytwoevents(oneontrackandonefieldevent)ofathleticsoveredinthepractical'scoursecontentofB.P.E.course(SemesterItoV).

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons on marking & officiating in athletics and games (5 lessons each in athletics & games). In addition each trainee shall complete 1 assignment each in marking & officiating in athletics & games.
2. For the purpose of examination in practical's one lesson each in marking and officiating of respective games & athletic events is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its

weight age.

The contents of teaching for each activity are as follows:-

1. Measurements & marking of track & field events and play fields of games.
2. Equipments & specification of equipments.

3. Rules & regulations of athletic events and games.
4. Related books & magazines.
5. Officiating :
  - a). Duties of official
  - b). Knowledge of score sheets
  - c). Officiating signals
  - d). Technical equipment for officiating
  - e). No. and types of officials.

## **SEMESTER-VI PRACTICAL**

**(Fundamental of Computer Application In Physical Education Practical)**

**COURSECODE:BPE-P-610**

**(MINOR ELECTIVELAB COURSE-VI)**

**Credit:4**

**Marks=100**

**(120Hours)**

### **Objectives:-**

- **Operate a variety of advanced spreadsheet, operating system and word processing functions.**  
Solve a range of problems using office productivity applications, and adapt quickly to new software releases. Maintain quality assurance through critically evaluating procedures and results.

### **The Course Learning Outcomes:**

- CO-1.** Memorizing theImportance ofComputer, characteristics and application.
- CO-2.** Describing the block diagram and classification of the computers.
- CO-3.** Acquiring the knowledge of software, hardware, and storage devices of the computers.
- CO-4.** Determining the role of MS-Word, MS-Excel& MS Power point.
- CO-5.** Define Word processor and its types.
- CO-6.** Applng the concept of prepare the presentation and slide show, animation with function.
- CO-7.**Estimating the working with graph.

1. M.S. Word :
  - a. Creating Document
  - b. Typing Text
  - c. Text Formatting

- d. Inserting Tables, rows and columns
  - e. Mail- Merge
  - f. Page Formatting
2. Excel:
    - a. Creating Spread Sheet and Sorting
  3. Power Point Presentation:
    - a. Creating PPT's
  4. Creating e-mail, Id and Web-browsing.





**ORDINANCE AND COURSE CURRICULUM FOR**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**

**TWO YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

**[www.universityofpatanjali.com](http://www.universityofpatanjali.com)**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**Scheme of Examinations**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**  
**SEMESTER LAYOUT**

<b>Semester-I</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-101</b>	<b>Tourism Concepts and Principles</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -102</b>	<b>Tourism in Uttarakhand</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -103</b>	<b>Yoga Health &amp; Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-104</b>	<b>Adventure Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-105</b>	<b>General Viva-Voce</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-II</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-201</b>	<b>Travel Agency &amp; Tour Operation</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -202</b>	<b>Tourism Resource in India</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -203</b>	<b>Transport Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -204</b>	<b>Computer Applications in Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-205</b>	<b>Educational Tour</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-III</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-301</b>	<b>Culture Heritage and Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -302</b>	<b>Airlines Ticketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -303</b>	<b>Hotel &amp; Resort Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-304</b>	<b>Research Methodology</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-305</b>	<b>Project Report &amp; Presentation</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-IV</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM -401</b>	<b>Major Destinations of world</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --402</b>	<b>Tour Packaging Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --403</b>	<b>Tourism Marketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --404</b>	<b>Tourism Policy &amp; Planning</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --405</b>	<b>On-The Job Training</b>	<b>100</b>	<b>-</b>	<b>100</b>

## Semester -I

### **TOURISM CONCEPTS & PRINCIPLES (MTTM-101)**

#### **Course objectives:**

1. This will be an introductory module giving the basis of tourism studies.
2. This will give an overview of the Tourism Industry and various organisations.
3. Give an insight into how travel and tourism involved over a period of time and reached the modern stage.
4. Enhance the knowledge of students in various areas related to Tourism and how it affects the destination.

**Course Outcomes:** After studying this paper, students will able to

CO 1. assume the elementary concepts of Tourism that are applied in Tourism and Hospitality Industry.

CO 2. classify the role, function and operation in Tourism Industry.

CO 3. divide the concept of Travel and Tourism, the framework of the system, types and form of tourism as well as the impacts of tourism.

CO 4. describe the different types tourism resources of India, there importance in tourism and management.

#### **Unit – I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components
4. Different approaches to the study of tourism.

#### **Unit – II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

#### **Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

#### **Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

#### **Unit- V Tourism Organization:-**

Origin, location, and functions of WTO, IATA,PATA,TAAI, ITDC.

**Suggested Readings:**

- Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.
- Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.
- Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.
- Mill, R.C., (1990), Tourism: The International Business, Pretience Hall, New Jersey.
- Bhatia, A.K., - International Tourism  
Seth, P.N., (1999) Successful Tourism Management (Vol 1 & 2 )

## **Tourism in Uttarakhand (MTTM-102)**

### **Course Objectives:**

1. The module gives information of tourist places of Uttarakhand that helps students to know the background elements of tourism resources of Uttarakhand state.
2. Establishing world class infrastructure, attracting private sector for infrastructure development and identifying new tourism destination.
3. Gives the knowledge of religious and pilgrimage sites.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Enrich about the different Tourism resources of Uttarakhand that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. List of the Tourism prominent role in Uttarakhand. The draw of the Himalayas, the beauty and cool relief of hill stations and the wealth of Hindu religious pilgrimage sites are a part of the attraction.

CO 3. Explore the importance of religious places.

### **Unit 1 Geographical and Historical Background**

Geographical features, divisions, mountain ranges, rivers, main symbol of Uttarakhand Reason , climate, General introduction of History Garhwal and Kumaon region.

### **Unit 2 Social and Cultural Heritage**

Important caste and tribes, Main dances, Fairs and Festival, Handicrafts, Tradition, Main Cusin.

### **Unit 3 Spiritual Tourism in Uttarakhand**

Background of historical tourism, important places -Haridwar, Rishikesh, Jageshwar, Chardham in Uttarakhand, Panch Prayag, Hemkund, panch Badri ,panch kedar.

### **Unit 4 Natural Based Tourism**

Vedani and Dayara Bugyal, Roopkund, Nainital, Devtaryatal, Sahastra tal, Mussiore, Kosani, Ranikhet, Munasyari, ,Kotdwar, Valley of Flowers, Rajaji and Jim Corbett National Park.

### **Unit 5 Adventure Sports**

Trekking, Mountaineering, Skiing, River Rafting and Paragliding, Bungi Jumping - General Introduction.

### **Suggested Readings:**

- - Uttranchal 'the abode of gods'
- - Uttrakand ka smagra darshan – Savita Mohan.
- - Uttrakhand year book – 2010 –Lokesh Navbani
- - Uttranchal- Aitihashik avem Sanskritic Ayam- Uma Prashad Thapaliya
- Uttranchal ke Devalaya – Triloke Chandra Bhatt.
- Uttranchal me Paryatan naye chitize – Dr. Harimohan.

## **Yoga Health and Tourism (MTTM-103)**

### **Course Objectives:**

1. The course intent to upgrade the knowledge of the latest trends in tourism particularly the health tourism in the country.
2. Since health tourism constitute a niche market for the industry and the government as well, it becomes desirable for the students to get in touch with this new segment of tourism industry.
3. After studying this course, the student shall be able to define the trends, issues and challenges in the field of health tourism in India.
4. After reading this subject, students get the knowledge of health and wellness.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Classify the Health and wellness tourism paper can provide opportunities to students to learn new skills or knowledge related to nutrition, fitness, and other aspects of health and wellness.

CO 2. Interpret in enhancing self-awareness among the students by practically taking them in various health & wellness activities, as per the requirements and needs.

CO 3. Classify the importance of health and wellness of the country.

### **Unit 1**

Meaning of word 'Yoga', its definition, Aims & objects, Brief history of yoga, Introduction of Patanjali Yoga Sutra, Relevance of Yoga in relation to Tourism.

### **Unit II**

Health aspects of Yoga: Meaning of Heath Yoga, its definition, Aims & objects, its brief history and significance of Hathyoga in Tourism, limbs of Hathyoga.

### **Unit III**

Role of Asanas, Pranayama & Mudra during Travelling. Importance of Yoga while in high Altitudes, Study of Depiction of Yogic love in the places of Pilgrimages.

### **UNIT – IV**

Health and Medical Tourism: Meaning, nature and scope Health and Medical tourism Product

Health and Medical Tourism markets at global level Advantages and disadvantages for India in Global Medical Tourism Market

### **UNIT – V**

Health and Medical Tourism in India Role of Private sector in health and medical tourism

Traditional Health Care system in India Government incentives for health and medical tourism in India

## **References**

1. Asana- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
2. Pranayama- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
3. Ghrand Samhita ----do----
4. Hath Pradipika ----do----
5. Ghrand Samhita-Swami Niranjananda Saraswati, Bihar School of Yoga, Mungher.  
Asana, Pranayama, Bandha and Mudra-: Swami Satyananda Paramhansa Bihar School of  
Yoga, Maugher
6. Smith, Melanie, & Puczko, Laszlo, Health and Wellness Tourism.
7. Conell, John, Medical Tourism.
8. Kumar, Medical Tourism in India (Management and Promotion)
9. Edlin, Gordon & Golanty, Eric, Health and Wellness.

## **Adventure Tourism (MTTM-104)**

### **Course Objectives:**

1. Memorize the concepts related to adventure tourism.
2. Explains the status of the adventure tourism market in India.
3. Illustrate the challenges, opportunities, and future prospects for adventure tourism in India.
4. Examine the various types of adventure sports in India
5. Evaluate the role of government and other stakeholders in adventure tourism.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Relate the adventure tourism.

CO 2. Explain this type of tourism tourists do some adventures activities like as skydiving, hill climbing, scuba diving for their pleasure and fun purposes.

CO 3. Demonstrate the practical & theoretical aspects of Adventure Tourism.

### **Unit –I: Introduction:-**

Definition, Nature and scope of Adventure tourism: Adventure motives through the ages and their contribution to inventions, explorations and discoveries.

Adventure in the present context, contemporary trends in Adventure tourism Geographical diversities and opportunities for A.T.in India. Potential and existing adventure tourism in different states. Planning and development perspective, major thrust areas, promotional steps taken by states and centers. Organization and institutions promoting Adventure Tourism in India.

### **Unit –II: Land based Adventure activities:-**

Mountaineering, Trekking, Rock climbing, skiing, skating; their necessary equipments, techniques and problems. Wildlife tourism: status of wildlife tourism, popular National parks and Wildlife sanctuaries.

### **Unit –III: Water based activities:-**

Water resources of India; rivers, sea and lakes. River reading, nature of white water, silent water and sea water. Rafting, Kayaking canoeing, yachting, water scooter, Hover craft. Surfing, SCUBA diving, under water activities, coastal activities. Places, organizations, equipments associated with above activities.

### **Unit-IV: Air based activities:-**

Air based activities, Atmosphere, seasons, wind pressure and wind movement in India. Hang gliding, Ballooning, Para jumping , Sky diving, Para sailing. Places, organizations and equipments associated with above activities.

**References:-**

1. Ahmad Aizaz : 'General Geography of India, NCERT, New Delhi
2. Goh Cheong long : An Economic Atlas of India, Oxford University
3. National Atlas of India, Govt. of India Publication, Calcutta
4. Atlas of World Oxford
5. Singh, R.L.(ed) India : A Regional Geography National Geographical Society of India (Varansi 1989)
6. Manorama Year Book
7. Indian Year book, Publication Division, Govt. of India, New Delhi
8. Aluwalia H.P.S. and Manfred Garner : Himalayas: A Practical Guide, Himalayan Books ( Delhi, 1985)
9. Bedi, Ramesh and Rajesh : Indian Wildlife, Brijbasi Printers ( New Delhi, 1989)
10. Bose, S.C. Geography of the Himalayas, National Book trust, India ( New Delhi,1976)
11. Chand Gian and Manohar Puri 'Trekking' International publisher India ( new Delhi,1989)
12. Gamma, Karl 'The Handbook of Skiing Pelham Books (London, 1985)
13. Lozawa, Tomoya : Trekking in the Himalayas, Allied published Pvt. Ltd., ( New Delhi, 1980)
14. Law, B.C. (ed) : Mountains and Rivers of India, Calcutta, 1968
15. Rowe, Ray 'White in Water Kayaking', Salamander Books (London, 1987)
16. Saharia, V.B. "Wildlife in India' Natraj Publisher (Dehradun, 1982)

## **General Viva-Voce (MTTM-105)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions studied in current semester.
2. The purpose is to study the destinations followed in different circuits.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

- CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.
- CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.
- CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will go for the general Viva Voce Examination. The curriculum of this exam is curriculum of MTTM 1<sup>st</sup> sem and the major tourist interest in India.**

The Viva exam and evaluation will jointly taken by the internal & external examiner.

## **Travel Agency & Tour Operation (MTTM-201)**

### **Course Objectives:**

1. The students will understand the conceptual meaning and differentiation between Travel agency and Tour operation. Further they will understand formalities and documentation needed to set up these units.
2. Organize the services being provided to the customer, such as transportation and accommodation.
3. Understand various skills necessary for travel agency and tour operation business
4. Understand various travel terminology.
5. Acquire knowledge on documentation in travel industry.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend the travel agencies can be defined as a sector that books, sells, and arranges travel, tour, and accommodation services provided by suppliers of the industry.
- CO 2. Interpret everything possible even with complicated dates.
- CO 3. Infer Some of primarily engaged in making travel arrangements and reservation services.
- CO 4. Outline the skills necessary to identify sales and marketing strategies for travel agencies

### **Unit - I : Travel Agency and Tour Operation business:**

Travel Agencies and Tour Operators- meaning, concept, types and importance Historical growth and development of travel agency and tour operation business. Linkages and integrations in travel agency and tour operation The future role of Travel intermediaries

### **Unit - II: Organizational structure and functions**

Organizational structure of travel agency and tour operator-main operational and managerial staff. Travel agency HR planning and job analysis of major positions Major functions of Travel agency and tour operators

### **Unit - III: How to Set Up a Travel Agency**

Procedure for approval of Travel Agents, Tour Operators by Department of Tourism, Government of India and IATA Ownership structure and revenue source of travel agency and tour operation fiscal and non-fiscal incentives available to travel agencies and tour operators business.

### **Unit - IV: Understanding the role of Government and other organizations in Travel Trade**

Role and contribution of Department of Tourism, Government of India, ITDC and State Government Travel Trade Associations and Organizations- Role and contribution of WTO, IATA, TAAI and IATO. Present business Trends and Future prospects of travel agencies and tour operators business.

**Unit - V: Case Studies**

THOMAS COOK

COX & KINGS

ORBIT

MAKEMYTRIP.COM

**Suggested Readings:**

Holloway, J. c., The Business of Tourism (1983), Mac Donald and Evans, Plymouth.

Syratt Gwenda, Manual of Travel Agency Practice, Butterworth Heinmann, London, 1995

Stevens Laurence, Guide to Starting and Operating Successful Travel Agency, Delmar Publishers Inc., New York. 1990

Gee, Chuck and Y. Makens, Professional Travel Agency Management, Prentice Hall, Nt.: York, 1990.

Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

Foster D.L. The Business Of Travel Agency Operations and Administration

## **Tourism Resource in India (MTTM-202)**

### **Course Objectives:**

1. The module gives information of countries tourist places of national and international importance and it helps students to know the background elements of tourism resource
2. To provide entertainment to tourists, organise tourism related activities such as cultural shows, fairs and festivals etc.
3. To take over and develop and manage places of tourist interest, parks, lakes, avenues, beaches and recreational places, sports etc.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Compare about the different Tourism resources of India that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. Go through the planning of tourists will often gain a greater respect for the lifestyle of the people living in the area they are visiting.

CO 3. Increase tourism that leads to local communities improving their skills and improving their social status.

### **Unit – I Introduction:**

Concept of resource, attraction & product in tourism, meaning & characteristics, Typology & nature of tourism resources. Nature & Scope to tourist places in India.

### **Unit- II Natural Resources:**

Study of wild life Parks, Sanctuaries & Tiger Reserves in India with case studies of Raja Ji National Park, Jim Corbett, Bharatpur Bird Sanctuary, Valley of Flowers & Gir National Park, Kaziranga National Park.

### **Unit-III Pilgrimage Destinations:**

**Hindu-** Char Dham Yatra, Haridwar, Khajuraho, Mahabalipuram, Tirupati, Madurai, Konark.

**Buddhist:** Lumbini, Bodhgaya, Sarnath, Kushinagar, Sanchi, Ajanta.

**Jain:** Mount Abu, Sharavanbelgola.

**Islamic:** Delhi, Agra, Fatehpur Sikri.

**Sikh:** Patna, Nanded, Golden Temple (Amritsar) Hemkund Sahib (Uttarakhand).

### **Unit- IV Socio-Cultural Resource:**

Socio cultural resources - Important fairs and festivals with case studies of Kumbha Mela, Dussehra, Onam, Puri Rath Yatra- & Chhath.

### **Unit - V: Hill Station & Coastal Destination:**

**Hill Station:** Study of Hill Station attractions and their environs with case studies of Mussoorie, Nainital, Shimla, Manali and Ooty.

**Beaches:** Beaches and Islands: Beaches in Goa, Kerala, Andaman & Nicobar Islands.

**Suggested Readings:**

- Gupta, SP, Lal, K, Bhattacharya, M. Cultural Tourism in India (DK Print 2002)
- Dixit, M and Sheela, C. Tourism Products (New Royal Book, 2001)
- Oki Morihiro, Fairs and Festivals, World Friendship Association, Tokyo, 1988.
- Mitra, Devla, Buddhist Architecture, Calcutta.
- Michell, George, Monuments of India, Vol. 1. London.
- Tourists Resource of India- Ram Acharya.
- Tourists Resources of India- Ratandeeep Singh.
- Tourists Resources of India-Jagmohan Negi.
- Himachal Pradesh, The Land, the people by S.S. Negi

## **Transport Management (MTTM-203)**

### **Course Objectives:**

1. Transport is a vital component of the travel and tourism industry.
2. It becomes imperative for the students of tourism to learn about different modes of transportation and modern world.
3. It is the most important accessibility in terms of exploring world.
4. Promotes social cohesion, accelerate economic prosperity and insure security and territorial integrity.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Demonstrate Transport helps people to move from tourist generating area to tourist destination area.
- CO 2. Elaborate different modes of transport like road transport, rail transport, water transport and air transport.
- CO 3. Get the knowledge about transport management in tourism.
- CO 4. Shape cities, promoting community and enhance quality of tourism

### **Unit-I: Transport and Tourism**

Transportation as dynamic & visual manifestation of tourism. History of different modes of transportation. Landmarks in the development of transport sector and factors affecting the development of different modes of transport.

### **Unit-II: Air Transport**

Airlines & tourism: history of airlines' in India. Role and contribution of air India, Indian Airlines, private airlines & helicopter services. Infrastructural basis of airlines in India. Role of airlines in tourism promotion: recent policies regarding airlines, problems of airlines business.

### **Unit-III: Surface Transport**

Surface transport & tourism: Growth and development of surface transport in India. Importance of surface transportation. Infrastructural basis for surface transport. Coaches & car rental system in India. Problems faced by surface transport sector. Role and contribution of NHAI.

### **Unit-IV: Railway Transport**

Railway & tourism: history & present status of Indian railway. Zonal distribution, infrastructural basis of Indian Railway. Role of Indian railway in tourism promotion. Special trains & packages for tourists. Problems faced by Indian railway.

### **Unit-V: Water Transport**

Water transport: history & present status of water transport, Waterways of India. Types of water transport: Ocean liners, Cruise liners, ferries, hovercraft, river and canal boats and fly cruise.

**References:**

1. Ahmad Aizaz: ' General Geography of India, NCERT, New Delhi.
2. National Atlas of India, Govt. of India, Publication Calcutta.
3. Atlas of World Oxford.
4. Singh, R.L.(ed) India: A Regional Geography National Geographical Society of India (Varanasi 1989)
5. India year book, Publication Division, Govt. of India, New Delhi.
6. Aggarwal Surinder : 'Travel Agency Management', communication India, New Delhi.
7. Hannel Christine, Robert Harshman and Grahan Draper- Travel and Tourism A world regional geography , john Wiley and Sons, New York
8. Hurst, Elist, 'Transporation Geography' McGraw Hill, New York
9. OAG Airlines time table
10. OAG Cruise lines time table
11. Indian Railway Time table

## Computer Applications in Tourism (MTTM-204)

### **Course Objectives:**

1. This module is to inform the students about the role of Computer Information systems in travel trade.
2. The prescribed unit enhance the skills of students especially when they will be attached for practical.
3. This course provides the knowledge of basics computers.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Demonstrate the term Application refers to Software which is a set of instructions or code written in a program for executing a task or an operation in a Computer.

CO 2. Extent applications play a vital role in a Computer as it is an end-user program that enables the users to do many things in a system.

CO 3. Explain the basic rules of computer science.

### **UNIT-I: Computer System**

Introduction to Computers, Characteristics of computers, Applications of computers, Different units of computer, Component of computers, Input / Output and auxiliary storage Devices. CD/DVD ROM, RAM, ROM, Computer application In Tourism.

### **UNIT-II : Windows & MS Office**

Introduction to windows MS –Office: MS Word, MS Excel, MS Power Point.

### **UNIT – III :Network and Communication**

Networking: Concept, User, Types, Devices Used, LAN, MAN, WAN.

Basic Communication Components: Modems, Routers, Client, Server, Communication processors, Host Computers, Types of Transmission.

### **UNIT – IV: Internet**

Internet: Concept, uses, components, browsing, Search Engines, E-mail: Opening Account. Internet and Tourism. Information and Communication Technology (ICT) ICT: need definition, uses for tourism, and future role. ICT in tourism sector, Strategic and tactical role of ICTs for Tourism.

### **UNIT – V: Hotel & Travel Software:**

What is CRS, How it functions. CRS for Rail Transport, Hotel Bookings, Airlines: Different packages used: Amadeus, Galileo, Sabre etc.

**REFERENCES:**

1. Leon Alexis and Mathews Leon: Introduction to Computers, Vikas Publishing House Pvt Ltd. New Delhi
2. Bhatnagar S C and Ramani K V: Computers and information management. A Primer for Practicing Managers, New Delhi, Prentice Hall of India Pvt. Ltd.
3. Bansundara, S: Computer Today.
4. Goel Ritender and D N Kakkar: Computer Application in Management, New Age International Publishers, New Delhi.
5. Jaggi V P and Jain Sushma: Computers for Every one, New Delhi, Academic India Publishers.
6. Simpson Alan: Your First Computers (2nd Edition) New Delhi-BPB Publications.
7. Saxena S: and Prabhpreet Chopra: Cumputer Applications in Management, Vikas Publishing house Pvt. Ltd. New Delhi.
8. Saxena S: MS Office2000 for Everyone Vikas Publishing house Pvt. Ltd. New Delhi.
9. Internet Sites and resources.

## **Educational Tour MTTM-205**

### **Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

### **COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

### **Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

## **Culture Heritage and Tourism (MTTM-301)**

### **Course objectives**

- 1.This module is important to study because India is rich in heritage properties and its maintenance is necessary.
- 2.This will help to understand the nature of heritage properties and conservation.
- 3.prevention and promotion of tribes and communities of the state.
- 4.It helps in studying traditional culture and preserve with modernity.

**Course Outcomes:** After studying this subject, students will able to

CO 1. Contrast of sustainable tourism is defined as “tourism that respects both local people and the travels.

CO 2. Translate the cultural heritage and the environment” It seeks to provide people with an exciting and knowledgeable fair.

CO 3. Supports culture and helps renewing tourism.

CO 4. Relate the strategies of many organizations regarding cultural heritage

### **Unit 1: Understanding Culture & Tourism**

Concept and Fundamentals of Indian Culture.

Culture – Tourism Relationship; Socio-Cultural Impacts of Tourism.

Spiritual basis of Indian culture

### **Unit-II: UNESCO Heritage Sites**

What is Heritage? Meaning and concept. Criteria for selection as heritage sites, monuments and zone by UNESCO (WHC). Types of heritage property. World famous heritage sites and monument in India and abroad.

### **Unit - III: Living Culture and Performing Art of India**

Major Fairs and festivals of India

Classical dances and Music of India

Indian handicrafts

### **Unit – IV: Heritage Management in India**

Heritage Management, objectives and strategies, Protection, Conservation and Preservation, Heritage Marketing, Destination development.

National and International Organisations engaged in Heritage Management (UNESCO, ICOMOS, ASI, INTACH and NGOs),

### **Unit – V: Museums**

Museums, Concept and classification. (National Museum, New Delhi; Bharat Kala Bhawan, Varanasi; Archaeological Museum, Sarnath, etc.), Heritage Hotels.

**Suggested Readings:**

- Allchin, B., Allchin, F.R. et al. (1989) Conservation of Indian Heritage, Cosmo Publishers, New Delhi.
- New Inskeep, Edward, Tourism Planning: An Integrated and Sustainable Development Approach (1991) VNR, New York.
- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- UNESCO-IUCN (1992) Eds. Masterworks of Man and Nature, Pantoga, Australia.
- IATA Special Mail Manual.

## Airlines Ticketing (MTTM-302)

### **Course Objectives:**

1. This module is intended to prepare the students to enter a travel agency where he will be required to be well-versed with the modalities of air ticketing and the study of air transportation industry.
2. Certificated air carriers, the freight and passenger business, general aviation.
3. Economic impact of aviation, understanding of competition and government regulations, Ownership of airlines.
4. The cyclical nature of the airline business. Distribution of world passenger traffic, etc

**Course Outcomes:** After studying this paper, students will able to

CO 1. Interpret the Airline tickets are important documents that confirm a passenger has a seat on a flight.

CO 2. Summarize the ticket includes important information about the passenger and the flight that they will take.

CO 3. Infer the ticket is exchanged for a boarding pass during the check-in process, and this gives the passengers permission to board the plane from studying this subject.

CO 4. Compare the global world class aircraft manufactures and airport providers.

**Unit-I** Aviation Geography: IATA areas, sub areas, sub regions, Longitude, Latitude, time calculation: GMT variation, concept of standard time and daylight saving time, calculator of elapsed time, flying time and ground time, Global Indicators, Aviation Organisation: IATA & ICAO.

**Unit II** Air Transportation: Concept of Airlines, Domestic and international airlines in India, Private sector and government airlines, types of aircraft, the hub and spoke system, interline agreements, role of DGCA, critical remarks on air transport industry of India, policies, practices.

**Unit III** Understanding of various codes: ABC codes, looking up schedules, flight connections, transfer connections, looking TIM:- Passport, visa, special permits, customs formalities and currency regulations, health regulations and Airport tax, passenger needing special attention. Minimum connecting time, general rules of currency conversion and rounding up of fare, different modes of payments e.g. cash, credit card etc.

**Unit IV** Introduction to fare construction:- Definition and understanding of published fares, various types, normal, child fare, one way, return, excursion etc; commissions, discounts, MCO, PTA, HIP, BHC, looking up MPM, calculating TPM, determining the fare breakup point, surcharges, excess mileage table. Ticketing-Insurance of tickets, Normal, one way, return, round the world, excursion, circle trip, child, etc. cancellation, reissue of tickets.

**Unit V** Documentation: Air way bill, charges correction advice, irregularity report, cargo manifesto, cargo transfer Manifesto, documents concerning postal mails and diplomatic mails. Shippers declaration for dangerous goods. Handling- Cargo capacity of Air and Ships. Cargo needing special attention, introduction to dangerous goods regulations. Some important Cargo companies.

**Suggested Readings:**

- Gupta S.K : International Airfare & Ticketing Methods & Technique UDH Publishers & Distributors (P) Ltd. New Delhi.
- Sinha P.C: Encyclopaedia of Tourism Management
- Jagmohan Negi: Travel Agency & Tour Operation Concepts & principle
- Galileo systems
- ABC World wide Airways Guide (Red & Blue)
- Air Tariff Book 1, Worldwide Fares.
- Air Tariff Book 1, Worldwide Rules, IT Fares etc.
- Air Tariff Book 1, World Wide Maximum Permitted Mileage
- Travel Information Manual ( TIM )
- IATA Ticketing Hand Book

## **Hotel & Resort Management (MTTM-303)**

### **Course Objectives:**

1. This Module is prescribed to appraise students about the important departments of classified hotel.
2. To teach various aspects related to accommodation Industry.
3. To determine various departments according to guests needs and safety.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend The Hotel and Resort Management course is designed for students with a career interest in the lodging and resort industries.
- CO 2. Outline these fields represent a wide range of businesses, from the small country inn or bed and breakfast to multinational chains of hotels and resorts.
- CO 3. Interpret the students regarding different accommodations with their functions.

**Unit – I    Origin and Expansion:** Conversion of Tavern; Inns, Chalets and places into hotels, creation of private, Public and multinational hotel chains in India. Regional, National and International Hotel Associations and their operation.

**Unit – II    Departments of hotel:** Front Office, House Keeping, Food and Beverage, Personnel and Accounts. Role and functions of different departments.

**Unit – III    Type and forms of Hotels:** Classification of hotel on basis of location, size, clientele and range of service, hotel plan, type of room etc.  
Star classification- Criteria and Procedure adopted in India.  
Resort Properties, Heritage Hotels- concept and emerging dimensions.

**Unit – IV    Major Hotel Chain in India:**

Taj Group of Hotels  
Oberoi Hotels & Resorts  
Lalit Group of Hotels  
Ashok Group of Hotels

**Unit – V    Resort Planning:** Preliminary Consideration in Resort Planning and Development and Phases of Resort Planning and Development. Trends and factors in Developed Tourist Markets leading to growth of Resort Concept. Factors affecting rate. Basic Elements of a Resort Complex: Lodging facilities, landscaping, Dining and drinking facilities, Family Oriented Services, shops and services, Entertainment; Use of Community Resources.

**Suggested Readings:**

- Selected case studies from sterling. Delmia, Toshali and R.C.I. International will be managed from concerned organisations.
- Andrews, Sudhir : 1985, Hotel Front Office, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : Hotel House Keeping, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : (1991),Food and Beverage Service,Tata M C Graw–Hill, New Delhi.

## Research Methodology (MTTM-304)

### Course Objectives:

1. The main objective of this course is to introduce the basic concepts in research methodology related to Management & Tourism.
2. This course addresses the issues inherent in selecting a research problem and discuss the techniques and tools to be employed in completing a research project.
3. This will also enable the students to prepare report writing and framing Research proposals.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. contrast and comprehend the basics in research methodology and applying them in research/ project work.

CO 2. take up and implement a research project/ study.

CO 3. develop skills in qualitative and quantitative data analysis and presentation used in Research activities.

**Unit-I: Research:** meaning, characteristics, types and relevance of research; trend and challenges with special reference to tourism and hotel business. Research process. Identification and formulation of research problem. **Research methodology:** meaning and procedural guidelines. **Literature review** – Meaning, Importance and sources of literature

**Unit-II: Research design-** Meaning of research design; need for research design; features of a good Research design; different research designs. **Sampling design:** the concept of sampling; Aims of sampling, census versus sample survey; steps in sampling design; characteristics of a good sample design; criteria for selecting a sampling procedure; sampling techniques/methods: probability sampling and non-probability sampling.

**Unit-III: Measurement and scaling techniques-** Measurement in research; sources of Error in measurement; test of sound measurement; technique of developing measurement tools; measurement scales; meaning of scaling; bases of scales- classification, importance; scaling techniques-rating and ranking; types of scales.

**Unit-IV: Collection of Data-** nature, sources of data; methods of data collection. **Processing of data:** Classification and Tabulation, Interpretation of data.

**Unit-V: Report writing-** meaning functions; types of research report; significance of report writing report.

### Suggested Reading:

1. Research Methodology (Pearson Publication) by Ranjit Kumar
2. Management Research Methodology (Pearson Publication) by Krishna swamy, Sivakumar & Mathirajan
3. Business Research Methods (Tata McGraw Hill Publication) by Cooper & Schindler
4. Research Methodology (New Age Publishers) by C.R. Kothari
5. Methods in Social Research (Surjeet Publications) by William J. Goode & Paul K. Hatt

## **Project Report & Presentation (MTTM-305)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will have to submit a Project Report for Via-Voce of several places of tourist interest in India.**

The students will go for Viva Voce Examination which shall be evaluated jointly by the internal & external examiner.

## **Major Destinations of World (MTTM-401)**

### **Course Objectives:**

1. Though there are so many tourist destinations in the world, there are few most famous among them. The primary objective is to explore the major popular destinations of the world.
2. It is worthwhile to know the tourist products in the lights of their main attractions, existing infrastructure facilities, linkages etc.
3. To study the destinations of whole world which is changing in to a global village and outbound tourism from India is growing at a very fast pace.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Illustrate the different tropical region, natural sites, historical heritage, and accommodation with cultural hospitality.

CO 2. Compare world that tells about major destination business around the world.

CO 3. studies about destination under UNESCO.

**Unit-I Main Destination of Asia and Pacific Region:** - Tokyo, Singapore, Dubai, Thailand, Malaysia.

**Unit-II Main Destination of Europe:** - London, Paris, Madrid, Athens.

**Unit-III Main Destinations of Africa:** - Cairo, Cape Town and Johannes berg, Mauritius, Nairobi.

**Unit -IV Main Destinations of Americas:** - New York, Los Angles, Montreal, Rio de Janeiro, San Francisco.

**Unit -V Other Destinations:** - Sydney, Fiji, Wellington, Buenos Aires.

### **References:**

- Ahmad, Aizaz: General Geography of India, NCERT, New Delhi
- Goh Cheong Long: An Economics Atlas of India, Oxford University.
- World Atlas , Oxford press.
- Singh, R.L. (ed) India: A Regional Geography National Geographical Society of India, Varanasi, 1989.
- □Manorama Year Book 2012
- □Indian Year Book 2012, Publication Division, Govt. of India, New Delhi
- Tourism Planner.
- Tour Brochures of related places.
- Lonely Planet-India and related destinations.
- Kumar Ravi Bhushan: Coastal Tourism and Environment, AOH Publishing Corporation, New Delhi.
- Websites of related destinations.

## **Tour Packaging Management (MTTM-402)**

### **Course Objectives:**

1. In this course tourism students are taught the details of tour packages, planning, framing itineraries and costing.
2. To gain knowledge about tours escorting and
3. To study and examine travel packages of known travel companies, so that the students can learn to prepare and run travel packages independently.
4. The students will set practical knowledge relating to travel and tour operation.

**Course Outcomes:** After studying this paper, students will able to

CO 1: Gain the operational knowledge of tour packaging business.

CO2 Acquire the skill of formulation of tour package.

CO3 Acquire the skill of tour costing and pricing techniques of various types of tour packages.

CO4 Apply the practical knowledge in making various real tour packages

**Unit 1** Meaning, definition, development, types components and significance of tour packages with relation to tourists, destinations and tour companies, role and input of public and private sector tourism organizations in promotion of tour packaging business.

**Unit II** Tour Formulation – Influencing factors, stages involved in tour formulation initial research (destination and market), itinerary development, negotiations, confidential tariff, costing & pricing marketing strategies. Brochure designing, Printing and distribution.

**Unit III** Itinerary preparation- meaning, types, do's and Don'ts of itinerary preparation. Limitations and constraints., Tour costing and pricing-cost concept, types of costs. Tour cost sheet. Procedure of costing; group tour, independent tours, and business tours pricing in tour operation Industry-Tour pricing strategies in India. Pricing of deferent tour packages.

**Unit IV** Detailed study of passport-definition, how to get the passport form, essential documents, photographs & fee for passport, type of passport. Visa- meaning, type of visa issued by India, necessary documents to get visa. Health regulations. Customs and currency regulations, baggage rules and insurance.

**Unit V** Tourists activities based on Mountains, Deserts, Forests and Wildlife, White Water, Marinas, Aero sport etc. and cultural and pilgrimage i.e. place of religions, historical archaeological, architectural and monumental significance, fairs and festivals, Conference and conventions and special events, Case studies of Tour Packages offered by government & private sectors and Thomas Cook and SITA etc.

**Suggested Readings**

1. Marketing of Travel & Tourism by Middleton.
2. International Encyclopaedia of Tourism Management by P.C. Sinha.
3. Dynamics of Tourism by R.N. Kaul.
4. Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

## Tourism Marketing (MTTM-403)

### Course Objectives:

1. The course includes the operation techniques of tourism marketing. The students are expected to attain a basic knowledge of marketing principals.
2. Study to suitability of alternative promotional approaches to and formulate marketing plans and promotional approaches to tourism and other related organizations.
3. It helps the learner to develop an understanding of the nature of different tourism products.
4. Provide insights into the process of developing and managing various tourism products enhance the knowledge of students about various tourism products of India.

**Course Outcomes:** By studying this course, students able to

CO 1. Demonstrate about tourism marketing is the collective name given to the various marketing strategies used by businesses within the tourism industry.

CO 2. Plan the hotels, understand and can identify tourism products that are associated with Marketing.

CO 3. Explain the central, peripheral services and public services in tourism product.

CO 4. Contrast the role of Indian architectural heritage in the tourism industry.

**Unit – I Marketing:** Core concepts in marketing; Needs, Wants, Demands, Products markets. Marketing management philosophies-Production, Product, Selling, Marketing and societal perspectives. Economic importance of marketing.

**Unit –II Analysis and selection of market:** Measuring and forecasting tourism demand; Forecasting methods, Managing capacity and demand. Market segmentation and positioning (STP)

**Unit– III Marketing Strategies:** Developing marketing environment, Consumer buying behaviour, Competitive differentiation and competitive marketing strategies. New product development. product life cycle, Customer satisfaction and related strategies in internal and' external marketing; Interactive and relationship marketing.

**Unit –IV Planning marketing programmes :** Product and product strategies; Product line, Product mix Branding and packaging. Pricing considerations. Approaches and strategies. Distribution channels and strategies.

**Unit –V Tourism Marketing :** Service characteristics of tourism. Unique features of tourist demand and tourism product, Tourism marketing mix. Marketing of Tourism. Services : Marketing of Airlines, Hotel, Resort, Travel Agencies and other tourism related services-Challenges and strategies..

**Suggested readings:**

- Kotler, Philip : Marketing Management & Hospitality and Tourism Marketing
- Sinha, P.C : Tourism marketing
- Vearne, Morrison Alison: Hospitality marketing.
- Crough, Marketing Research for Managers.
- Singh Raghbir, Marketing and Consumer Behaviour. Patel, S.G., Modern Market Research, Himalaya Publishing

## **Tourism Policy & Planning (MTTM-404)**

### **Course Objectives:**

- 1.The module will expose the students about the Tourism policy of India and of a few tourism states of the country.
- 2.To create jobs and entrepreneurial opportunities in the tourism sector and ensure the supply of a skilled labour pool.
- 3.To promote the destination trying to improve internal and external tourism demand.
4. To achieve international tourism growth and increase foreign currency income to support the balance of payments.

**Course Outcomes:** After studying this paper, students will able to

CO 1. To promote sustainable, responsible and inclusive tourism.

CO 2. Relate the policy and planning aims to promote sustainable tourism by minimizing the negative impact of tourism on social, environmental and economic aspects and maximizing the positive impact.

CO 3. outline the tourists to ensure about the propaganda tourism policy and planning.

**Unit – I Tourism Policy & Planning Framework:** Tourism Policy- meaning ,relevance & salient feature. Tourism Planning- meaning, levels & types of tourism planning.

**Unit – II Tourism Policy:** Study of National Tourism Policy 1982 and 2002, National Action Plan on Tourism, 1992: Special Tourism Area Development Programme. The concept of National Tourism Board, National Committee on Tourism, Case study of tourism policies of a few states (Uttar Pradesh, Rajasthan, Kerala, Madhya Pradesh,). Investment opportunities and government policy for investment in hotel/tourism industry. Sources of funding.

**Unit – III Destination Planning:** Destination Mix- concept and components. Step and stage in Destination Planning. Tourism Project Feasibility Study.

**Unit – IV Approaches to Tourism Planning:** Eco-centric or environment approach of tourism planning. Community approach of tourism planning. Concept of Tourism Complex Planning & its relevance in India context.

**Unit – V Tourism Policy & Planning:** Case Studies: Place of Tourism in India's Five Year Plan. Tourism Policy of india and contribution of NCT to this effect. Organizational structure of tourism in India at Central and State Level.

### **Suggested Readings:**

- New Inskoop, Edward, Tourism Planning : An Integrated and Sustainable Development Approach ( 1991) VNR, New York.

- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- Dept. of Tourism, GOI Investment Opportunities in Tourism (Brochure).
- Sharma, J. K. (2000), Tourism Development. Design for ecological sustainability, Kaniska Publication, New Delhi.

## **On-Job Training & Report (MTTM-405)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources from the industry experts based on primary and/or secondary analysis.
2. To collect the data available from outside sources such as stake holders and tourists can help the students in fulfilling the project's operations.
3. Connecting what the student has undergone till above semesters.
4. To build a harmony of theoretical and practical knowledge with actual work experience, in order to compliment field specific skills and learn new ones.

**Course Outcomes:** After undergone this training, students will able to

CO 1. Analyse the current obstacles that are occurred in Tourism/Travel related business also they'll able to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Develop skills in the application of theory to practical work situations.

CO 4. Develop skills and techniques directly applicable to their careers.

CO 5. Internships will increase a student's sense of responsibility and good work habits.

### **Course Details:**

The Training is based upon the 45 days practical training with any recognised Travel Agency/Tour Operating Company/Hotel. The Department will circulate the placement brochure / letter to various organisations prior to the joining in the same. During the organisational work (training period), each student is required to prepare practical report of day to day activities to be submitted for evaluation.

The students will have to submit the Job Training Report after completion of their Job Training before Viva-voce examination.

### **Viva – Voce**

The Viva-Voce examination will be conducted on the basis of the Tour Package Prepared, Tour and Job Training Reports and other theory papers taught.

# **ORDINANCE AND COURSE CURRICULUM FOR**

**P.G. DIPLOMA YOGA HEALTH & CULTURAL TOURISM**

**ONE YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

[www.universityofpatanjali.com](http://www.universityofpatanjali.com)

**UNIVERSITY OF PATANJALI, HARIDWAR**  
**Course Syllabus**

**PGD (YH&CT) Semester-I**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-101	Fundamentals of Yoga	70	30	100
YH-102	Principles of Hath Yoga	70	30	100
YH-103	Tourism Theory and Practice	70	30	100
YH -104	Hospitality Management	70	30	100
YH-105	Yoga Practicum	70	30	100
YH -106	Project Report (Tourism)	100	-	100
YH CE 01	Communicative English (Non Credit)	70	30	100

**PGD (YH&CT) Semester-II**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-201	Patanjal Yoga Darshan	70	30	100
YH-202	Yoga Therapy	70	30	100
YH-203	Cultural Tourism Resources	70	30	100
YH -204	Itinerary Planning, Marketing, Tour Packaging and Costing	70	30	100
YH-205	Yoga Practicum	70	30	100
YH -206	Educational Tour	100	-	100
YH CE 02	Communicative English (Non Credit)	70	30	100

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-101)**  
**FUNDAMENTALS OF YOGA**

**Course Objectives:**

1. The main objective of this course is to attain higher level of consciousness and mental hygiene.
2. To possess emotional stability and integrate moral values.
3. To enable the student to have good physical and mental health.
4. To prepare students for spiritual journey and to become healthier.

**Course Outcomes:** After studying this course, students will able to

CO 1. Demonstrate basic skills associated with yoga activities including strength and flexibility, balance and coordination.

CO 2. Demonstrate the ability to perform yoga movements in various combination and forms.

CO 3. Explain and apply the knowledge of basic sequencing, and effective group management.

**Unit-1: General Introduction to Yoga**

Origin of Yoga, Psychological basis for origin of Yoga, History and development of Yoga (Vedic period, Darshan period, Commentary period, Bhakti Yoga and Hatha Yoga period, Modern period), Etymological meaning and definition of Yoga, Purpose of yoga, Current misconceptions regarding yoga, Major principles of yoga, Yoga practices for healthy life, Importance of yoga in present age.

**Unit - 2: Basis of Yoga and Tradition of Yoga**

General introduction of Vedas, Upanishads and Ayurveda in yogic context, General introduction of Samkhya, Yoga and Vedanta philosophy (in yogic context), General introduction of Bhagavadgita (in yogic context), General introduction of Puranas (in yogic context), Yoga in Yog Vashishtha and Narada Bhakti Sutra, Brief Introduction to Yoga in Jain Philosophy and Buddhist Philosophy, Bhakti Yoga of Medieval Saints (Kabir, Nanak and Sufism)

**Unit - 3: Basis of Yoga and Tradition of Yoga - II**

General introduction of Tantra and its currents (Shaiva, Shakta, Vaishnava, Buddhist Tantra), Concept of Shiva and Shakti, Yoga in Shaivite and Shakta Tantras, Concept of Nadi and Prana, Kundalini, Kundalini Shakti and Shatchakra Sadhana, Impact of Tantra in Hatha Yoga Tradition and Sadhana.

## **Unit - 4: Major Streams of Yoga**

Concepts of major streams of yoga and introduction of their limbs with the effects - Gyan Yoga, Bhakti Yoga, Karma Yoga, Ashtanga Yoga, Kriya Yoga, Hatha Yoga and Mantra Yoga

## **Unit - 5: Introduction to Renowned Yogis**

Introduction (life & works) of the great yogis of India - Maharishi Patanjali, Maharishi Vyas, Maharishi Kapil Muni, Adi Shankaracharya, Maharishi Dayanand Saraswati, Swami Vivekananda, Maharishi Arvind, Swami Kuvalayananda, Maharishi Raman, Yogarishi Swami Ramdev

### **Prescribed text book**

1. योगदर्शनम्- स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
2. दर्शनप्रवेश- दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
3. योगकेमूलभूतसिद्धांत - आचार्यबालकृष्णजी. दिव्यप्रकाशन, पतंजलियोगपीठ.हरिद्वार
4. गीतारहस्य (निर्धारितपाठ्यांश)- लोकमान्यतिलक
5. भारतकेमहानयोगी- विश्वनाथमुखर्जी
6. तंत्रदर्शन - स्वामीनिरंजनानंदपरमहंस - पंचदशनामअलखबाड़ा, देवघर, बिहार
7. Sharma, Chandradhar: A Critical Survey of Indian Philosophy. Motilal Banarasi Das, Delhi, 2013

### **BOOKS FOR REFERENCE:**

1. Agarwal MM: Six systems of Indian Philosophy, Chowkhambha Vidya Bhawan, Varanai, 2010
2. Swami Bhuteshananda: Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
3. Hiriyanna M.: Outlines of Indian Philosophy, Motilal Banarsidas, Delhi, 2009
4. Bhat, Krishnak.: The Power of Yoga: Suyoga Publications Mangalore, 2006
5. Swami Prabhavananda: Spiritual Heritage of India (English). Sri Ramkrishna Math, Madras, 2004
6. Swami Vivekananda: Jnana Yoga, Bhakti Yoga, Karma Yoga, Raja Yoga. Advaita Ashrama, Calcutta, 2000
7. Pandit, M.P.: Introduction to Upanishads: Theosophical Society of India, Adyar, Madras, 1976

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-102)**  
**Principles of Hath Yoga**

**Course Objectives:**

1. To Maintain a youthful body, develop physical and psychic powers, awakening the potential energy and finally attaining enlightenment.
2. To build asanas related Hatha yoga are practiced to bring health and energy to body and mind by opening the nadis.
3. It includes physical techniques to preserve and channel the vital force or energy.

**Course Outcomes:** After studying this course, students will able to

CO 1. Go through the mastery of the prana, or energy of the body, we can then easily master the control of the mind and obtain success.

CO 2. Gain self-control and self-discipline and an energetic body with the help of hath yoga.

CO 3. Get strengthen and purify physical body and cultivate prana and activate kundalini.

**Unit-1: General Introduction to Hatha Yoga**

Hatha Yoga - Meaning, Definition, Origin, Tradition and Purpose. Prevailing misconceptions regarding Hatha Yoga. Helping and obstructing elements of Hatha Yoga. The Hatha Yogic practice described in Hathayoga pradipika. Concept of Math, Manuals for the practitioner of Hatha Yoga, Concept of Mitahar, Pathya & Apathya. Tradition of Hatha Yoga. A brief introduction and contribution of the major yogis of the Nath Yoga tradition. Relations in Hatha Yoga and Raja Yoga.

**Unit-2: Practices of Hatha Yoga - Purification and Asanas**

Introduction to purification practices - Purification actions described in Hatha Yoga Pradipika and Gherand Samhita and their method, benefits and precautions. The role of purification practices in yoga sadhana and the importance of purification practices in modern life. Yogasana: Definition, characteristics and importance in yoga practice. Method, benefits, precautions and importance of asanas in Hatha Yoga Pradipika and Gherand Samhita.

**Unit-3: Practices of Hatha Yoga - Pranayama, Bandha and Mudras**

*Pranayama* : Introduction. Method of Proper Respiration, Yogic Deep Breathing. Concept of Inhale (*Purak*), Retention (*Kumbhak*) and Exhale (*Rechak*). Prana, types of prana and sub-

prana. Importance of Pranayama in *Hatha Yoga Sadhana*. Method and importance of *Nadishodhana* Pranayama. Preparation for Pranayama. Method, benefits and precautions of Pranayamas in *Hatha Yoga Pradipika* and *Gherand Samhita*. Signs of *Hatha siddhi* (success in hatha yoga). Bandha :introduction, the importance of bandha-triad in yoga sadhana. Main *mudras* in *Hatha Yoga Pradipika* and *Gherand Samhita* - their methods, benefits and precautions.

#### **Unit-4: Practices of Hatha Yoga - *Pratyahar, Nadanusandhana and Swarodaya Gyan***

*Pratyahara, Dharna and Dhyana* in *Gherand Samhita*, their methods, benefits and precautions. *Samadhi*, signs of *samadhi* in *Hatha Yoga Pradipika*. *Nāda*, the four stages of *Nadānusandhana* and their accomplishments (*siddhis*). Concept of *Swara*, the importance of *Swarodaya Gyan* in *Yoga Sadhana* (with special reference to *Gyan Swarodaya* and *Shiva Swarodaya*).

#### **Unit-5: Introduction and Importance of Major Texts of Hatha Yoga**

Introduction, Purpose and Importance of major texts of Hatha Yoga: *Siddha- Siddhantha Paddhati*, *Goraksha Samhita*, *Shiva Samhita*, *Hatha Yoga Pradipika*, *Gherand Samhita*. *Hatha Ratnavali*: Main applications of hatha yogic activities- preparation of *Raja Yoga Practice*, achieving holistic health, prevention of diseases, rejuvenation, healing and slow aging.

#### **Prescribed text book**

1. हठयोगप्रदीपिका - कैवल्यधाम, लोनावला
2. घेरंडसंहिता - कैवल्यधाम, लोनावला
3. गोरक्षसंहिता - डॉ. चमनलालगौतम (1985)
4. प्राणायामरहस्य - स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
5. Research Publication, P.R.I. Patanjali Yogpeeth

#### **BOOKS FOR REFERENCE:**

1. Woodroffe, Sir John: *The serpent power*, Ganesh & Company, Madras, 2000
2. Woods, J. H.: *The Yoga system of Patanjali*, M.L.B.D., Delhi, 1988
3. Swami Vivekananda: *Rajayoga*, Advaita Ashram, Culcutta, 2000
4. Burley, Mikel: *Hatha Yoga, its' Context Theory and Practice* (M.L.B.D. Delhi, 2000)
5. Burnier, Radha: *Hathayoga Pradipika of Svamarama*, The Adyar Library publications, Chennai

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-103)**

**TOURISM THEORY AND PRACTICE**

**Course Objectives:**

1. To deal with various aspects of sustainable tourism, ecotourism and responsible tourism.
2. To deal with all the fundamental aspects of tourism that are to be learnt by students of tourism, air transport, travel and hospitality disciplines.
3. To give an insight into the concept of tourism from different perspectives.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Gather various types of tourism aspects such as sustainable tourism etc.
- CO 2. Explain fundamental aspects of tourism such as air transport, tourism disciplines etc.
- CO 3. Classify full understanding of the challenges, assumptions, solutions and indicators for tourism.

**Unit - I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product and concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components

**Unit - II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

**Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

**Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

**Unit- V Tourism Organization:-**

Origin, location, and functions of WTO / UNWTO, IATA, UFTAA, ASTA, PATA, TAAL, ITDC.

**Suggested Readings:**

Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.

Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.

Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.

Mill, R.C., (1990), Tourism: The International Business, Prentice Hall, New Jersey.

Bhatia, A.K., - International Tourism

Seth, P.N., (1999) Successful Tourism Management (Vol 1 &2)

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-104)**  
**HOSPITALITY MANAGEMENT**

**Course Objectives:**

1. To appraise students about the important departments of a hotel.
2. To teach various aspects related to accommodation Industry.
3. To provide training, skill development and education, hospitality, tourism and entertainment industries.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Analyze information and make decisions using critical thinking and problem solving skills.
- CO 2. Describe and apply the fundamental principles of leadership and effective communication skills.
- CO 3. Evaluate diversity and ethical considerations relevant to the hospitality industry.

**Unit-I: Hospitality: Meaning, Nature and Typologies**

Defining Hospitality: Nature and its Meaning.

Age old Institution of Hospitality with the Spirit of 'Atithi Devo Bhav' in India and its present status.

Typology of Accommodation, Origin and growth of Hostel industry with special Reference to India.

**Unit-II: Organization and Functions of Various Department in Hotels.**

Front Office, Food Production, F& B Service, House Keeping, Back office and other Ancillary Departments.

**Unit-III: Type and Forms of Hotels**

Classification of Hotel on Basis of Location, Size, Clientele and Range of Service etc

Star Classification - Criteria and Procedure Adopted in India.

Resort Properties, Heritage Hotel and Ecotels- Concept and Emerging Dimensions.

**Unit-IV: Hospitality Institutions & Manpower Requirements.**

Manpower Requirement in Hotel Sector: designations, qualifications & remunerations.

Role and Contribution of I.T.D.C. and State Tourism Corporations in Development of Hotel Sector in India, Hospitality Educations of India-Growth & Development, Hospitality Associations (HAI, FHRAI)

**Unit-V: Major Hotel Chains in India**

The Taj Group of Hotels

Oberai Hotel & Resorts

Lalit Hotels

The Ashok Group of Hotels

**Suggested books**

Introduction to Hospitality Industry-Bagri &Dahiya

Introduction to Hospitality- J. Walker

Managing Hosopitality- D. Rutherford

Hotel Front Office Mannual-Sudhir Andrew

Housekeeping Maual-Sudhir Andrew

Hotel and Lodging Management and Introduction: by Alan T. Stutis & James F. Wortman, John Willy & Sons.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-105)**  
**YOGA PRACTICUM**

**Course Objectives:**

1. To understand the benefits, contraindications and procedure of all practices.
2. To demonstrate each practice with confidence and skill.
3. To explain the procedure and subtle points involved.
4. To teach the yoga practices to any given group.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Rephrase the benefits, contradictions and procedure of all practices.  
CO 2. Demonstrate each practice with confidence and skill.  
CO 3. Explain the procedure and subtle points involved.  
CO 4. Teach the yoga practices to any given group.

**Shatkarma:** Jalneti, Rabarneti, Vamana Dhauti / Kunjar Kriya, Vat karma, Kapalbhathi. - 15marks  
**Asana** - 25 marks

SukshmaVyayam (Pawan mukta Asana) -1, Yogic Jogging, 12 Asanas (Mandukasana, Shashakasana, Gomukhasana, Vakrasana, Makarasana, Bhujangasana, Shalabhasana, Markatasana, Pawanmuktasana, Halasana, Padvrittasana, Dwi-Chakrikasana and Shavasana)

Siddhasana, Kati chakrasana, Ardhalasana, Padmasana, Vajrasana, Swastikasana, Veerasana, Udarakarsanasana, Bhadrasana, Janushirasana, Ardhamatsyendrasana, Gomukhasana, Ustrasana, Uttanapadasana, Naukasana, Sarvangasana, Halasana, Matsyasana, Suptavajrasana, Chakrasana, Tadasana, TiryakTadasana, Ek paadpranamasana, Vrikshasana, Garudasana, Hastotansana, Padahastasana, Trikonasana, Ardhadhanurasana, Marjari asana, Ardhashalabhasana, Bhujangasana, Makarasan, Shavasana, Samakonasana, Bakasana, Sarpasana, Hanumanasana, Sukhasana, Ardhpadmasana, Ek Pada Halasana, Setubandhasana, Markatasana, Shashankaran, Vipreetnaukasana, Dwikonasana, Parshvatanasana, Singhasana.

**Pranayama**-10 marks

Diaphragmatic Breathing, Pranayama: Kapalbhathi, Bhastrika, Bahya, Ujjayi, Anulom-Vilom, NadiShodhan, Bhramari and Udgith

**Mudra & Bandha:** Jnana Mudra, Chin Mudra, Vipreet Karni Mudra, Yoga Mudra, Jalandhar Bandh, Uddiyan Bandh, Moolbandha - 10 marks

**Viva:** Ishwar Stuti Prarthnopasana-10marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-106)**  
**PROJECT REPORT (TOURISM)**

**Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

**Course Detail**

**The students will have to submit a Project Report for Via-Voce of several places of tourist destinations in India.**

The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce Examination.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH- CE 01)**  
**Communicative English (Non Credit)**

**Course Objectives:**

1. To improve the English communication of the students.
2. To analyze and restate the meaning of a text in English.
3. To develop the ability to speak English language with right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Will be able to use literary techniques in literary texts.
- CO 2. Will be able to gain confidence by speaking English in real life aspects.
- CO 3. Gain the skill to write English without grammatical errors.

**Communication:**

Communication definition and concept, Process of Communication. Elements of Communication steps/phase of Communication. Means, Methods, Mode of Communication. Verbal-oral-written Communication. Nonverbal-sign language, Body Language. Flow of Communication: Formal/Informal. Barriers of Communication- Intrapersonal, interpersonal and organizational barriers.

Recapitulation Linguistic Communication Patter of Communication Group Discussion (GD), History of print Media in India.

**Grammar and usage:**

- i. Noun
- ii. Pronoun
- iii. Verb, modal, Tenses
- iv. Adjective
- v. Adverb
- vi. Preposition
- vii. Conjunction
- viii. Interjection
- ix. Rules of Translation
- x. Punctuation
- xi. Capitalization and Abbreviation
- xii. Subject Verb Agreement
- xiii. Sentences Correction Rules

- XIV. One word substitution
- XV. Active and Passive voice xvi.
- XVI. Direct and Indirect Speech
- XVII. Direct and Indirect Speech Suffixes and prefixes  
Antonyms and synonyms  
Homophones and Homonyms Letters  
Writing

Gift of the Magi-O Henry

ShrinivasaRamanujan

MuktaDhara-R.N.Tagore

### **Readings (References)**

Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead effectively, by Helio Fred Garcia, 2012

Pone Communicates, Few Connect: 'What the Most Effective People Do Differently, haC. Maxwell, 2010

Interviewing: A Programmed Approach to Effective Communication, by David Dans, Margaret T. Hearn, Max R. Uhlemann and Allen E. Ivey, 2010

Art and Science of Communication: Tools for Effective Communication in the place, by P. S. Perkins and Les Brown, 2008  
Listening Effective Groups: The Art of Small Group Communication, by Randy Fujishin,

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-201)**  
**Patanjal Yoga Darshan**

**Course Objectives:**

1. To create yoga experts with in-depth knowledge based on yogic texts.
2. To establish holistic health, social harmony and world peace by training them to be good.
3. To teach citizens who can offer yogic way of right living.

**Course Outcomes:** After studying this paper, students will able to:

CO 1 Acquire and be equipped with skills in the application of theoretical & practical knowledge of Yoga.

CO 2. Practice for real life problem solving, in an increasing complex also for the corporate world.

CO 3. Maximize spiritual knowledge and various aspects of yoga with the help of yoga darshan.

**Unit 1: - Introduction of Yogasutra and Samadhi Pada**

Yoga Sutra :Introduction, Definition and Purpose of Yoga, Importance of Yoga Sutra as compared to other Yogic texts, Concept of *Chitta*, *Chitta Bhoomi*, *Chittavrittis* and their types, *Chitta Vritti Nidrodhopaya (Abhyas- Vairagya)*, *Chitta Vikshep (Antaraya)*, *Antarayabhava*, *Chitta Prasad* and its helpers, The metaphysics of Sankhyadarshana and its relation with Patanjali Yogadarshan.

**Unit-2: - Samadhi Pada-II and Sadhan Pada**

Ishwar: Swaroop, Pranava chanting and its results, Ashtanga Yoga - 1 (Bahirang Yoga- Yama, Niyam, Asana, Pranayama, Pratyahara), Importance and Relevance of Ashtanga Yoga and Kriya Yoga, Concept of Kriya Yoga, Describing *Klesha*, Measures of *Klesha* elimination, *Vivek Khyati*, *Chaturvyuhavaad*, the character of *Drishhta & Drishya*, , the form and types of samadhi - *samprajnata*, *asamprajnata*, *sabijand nirvij Samadhi*, *RitambharaPragya* and *Adhyatma Prasad*.

**Unit 3: - Vibhuti Pada**

Ashtanga Yoga - II (*Antaranga* Yoga - Dharna, Dhyana, Samadhi), Concept of *Sanyama - Sanyama* and its three consequences, Concept of *Vibhuti* and introduction of main vibhutis, Describing Ashtasiddhi.

## **Unit-4: - Kaivalya Pada**

Five types of Siddhis (birth, medicine, mantra, penance and samadhija), Nirmaanchitta.  
Types of Karma, *Vaasna*, *Vivek Gyan*, *Dharma Megha Samadhi*, *Kaivalya*

### **Prescribed text books**

योग दर्शनम् - स्वामी रामदेव, दिव्य प्रकाशन, पतंजलि योग पीठ, हरिद्वार

दर्शन प्रवेशदिव्य प्रकाशन-, पतंजलि योग पीठ, हरिद्वार

**सहायक पुस्तक -**

भोज वृत्ति

योगदर्शनम्-गीताप्रेस

### **BOOKS FOR REFERENCE**

BKS Iyengar: Introduction of Patanjali Yogasutra-s: MDNIY, New Delhi, 2011.

Swami Ved Bharti: Yogasutra of Patanjali (with the Exposition of Vyasa) M.L.B.D. New Delhi, 2004,  
Vol I & II.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-202)**  
**Yoga Therapy**

**Course Objectives:**

1. To promote positive awareness for the healthy body and healthy mind
2. To inculcate the teaching ability for conducting yoga sessions and offer various techniques.
3. To create yoga professionals of high caliber who know the concepts, techniques and can do the practical as well.
4. To create yoga experts with in-depth knowledge based on yogic texts.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Develop understanding of different yogic techniques.

CO 2. Attain perfection to perform different yogic practices and shat karmas.

CO3. Explain techniques of Pratyahara, Dharana, Dhyana and conduct practical sessions.

**Unit-1 Yoga Etiology, Diagnosis and Therapy**

Yogic Anatomy and Physiology: Concept of Psychic Centers, Pancha Kosha and three planes of human being; and effects of their activation and impairment over somatic, psychic and psycho-somatic levels of human existence. Yogic diagnostic techniques: Connections of SwarScience, Prana and Breathing Patterns over somatic, mental and psycho-somatic levels. Association of Psychic centers over nerve plexus and endocrine glands; Concept of health and wellness in terms of WHO, Ayurveda and Yoga; Concept of Yoga Therapy: Meaning, Definition, Aims, Principles, Factors Impacts and Limitations; Qualities of a yoga therapist.

**Unit-2: Musculo-Skeletal Disorders**

Back Pain: Classification of back pain: organic and functional: Lumbar Spondylosis, Intervertebral disc prolapse (IVDP), Spondylolisthesis, Spondylitis, Psychogenic- Lumbago, Medical and Yogic management; Neck pain: Classification- Cervical Spondylosis, radiculopathy, Functional neck pain; Medical and Yogic management, All forms of Arthritis: Rheumatoid Arthritis, Osteoarthritis, Medical and Yogic management.

**Unit- 3: Gastro Intestinal and Excretory Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Acid peptic disease - Indigestion Hyperacidity, Ulcer, Flatulence, Gastritis, Bowel problems - chronic Constipation and hemorrhoids, Irritable Bowel Syndrome, Ulcerative colitis or inflammatory bowel disease, Crohn's disease, gluten intolerance, food allergies; Excretory System: irritable bladder syndrome, stress incontinence, Chronic renal failure, Renal hypertension, Renal stones.

## **Unit- 4: Cardio-Pulmonary Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Hypertension and Hypotension, Ischemic heart diseases, Varicose veins, Peripheral vascular disease, Autoimmune Arteritis. Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management (rationale for the disease specific yoga protocol, scientific evidence if available, probable healing mechanisms, practices of choice and contra indications). Allergic, autoimmune respiratory conditions -Allergic Rhinitis & Sinusitis, Bronchial Asthma, COPD & Emphysema- Occupational pulmonary disease.

## **Unit-5: Neurological and Psychiatric Disorders**

Headaches: Migraine: Causes, Classification, clinical features, Medical and Yogic management, Tension headache: Causes and its symptoms and Medical and Yogic management; Cerebro vascular accidents: Causes, clinical features, Medical and Yogic management, Epilepsy, pain; Parkinson's disease: Causes, clinical features, Medical and Yogic management

Introduction to psychiatric disorders, classification - Neurosis, Psychosis: Neurosis: Anxiety disorders: Generalized anxiety disorder, Panic Anxiety, Obsessive Compulsive Disorder, Phobias: Medical and Yogic management: Depression: Dysthymia, Major depression, Medical and Yogic management; Psychosis: Schizophrenia, Bipolar affective disorder, Medical and Yogic management

### **TEXT BOOKS**

1. Nagarathna R and Nagendra HR, Yoga therapy for common ailments series, SVYPPublications, 2010
2. Swami Karmananda, Yoga therapy for common diseases, Yoga publication trust, Munger,2001
3. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers

### **REFERENCE BOOKS**

1. Shivanand Saraswati: Yoga Therapy (Hindi & English)
2. Rai, Lajpat: Discovering Human Potential energy: A Physiological Approach to Yoga (Anubhava Rai Publications, 1998)
3. Nagarathna, R and Nagendra, H.R.: Promotion of Positive Health, Swami Vivekananda Yoga Prakashana, Bangalore, 2002
4. Ramesh Bijlani: Back to Health through Yoga, Rupa Publications India Pvt. Ltd, 2011
5. MONIY publications: 10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi,2009
6. Swami SatyanandaSaraswati: Yoga and Cardio Vascular Management, Yoga PublicationTrust, Munger, 2005
7. Nagarathna R and Nagendra H R:Yoga for Arthritis, Back pain, Diabetes, Pregnancy Breathing Practices, Swami Vivekananda Yoga Prakashana, Bangalore, 2000

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-203)**  
**CULTURAL TOURISM RESOURCES**

**Course Objectives:**

1. To give information of countries Tourist places of India importance.
2. To help students to know the background elements of Cultural Tourism Resources.
3. To Discuss the importance of cultural and heritage tourism to national development.
4. To evaluate the culture and heritage of the Region.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Classify the concept of culture and its place in the tourism market.
- CO 2. Illustrate the impact of the cultures of visitors of the Caribbean cultures.
- CO 3. Identify the multiple cultures and its impact on its economic development.
- CO 4. Evaluate the study of folk dances, traditional music accessible in India.

**Unit - I**

Art Heritage of India- Indus valley architecture- Mauryan Architecture-Buddist Architecture, Temple Architecture through the ages-Islamic Architecture.

**Unit - II**

Pre historic paintings- Tribal and Folk-Indian manual painting-Ajanta, Ellora-Early western Chalukya-Pallava-Pandaya-early Chera-Rashtrakuta, Chola- Vijayanagar-Nayak School-Rajasthani- Mughal and Pahadi Schools-Modern paintings.

**Unit- III**

Classical dances and dances styles- (BharathaNatya, Kathakali, Mohiniattam. Kuchipudi, Oddisies, Manipuir) centers of learning and performances Indian folk dances.

**Unit- IV**

Music-Different types of Indian Music- Status of Vocal and instrumental music--various types- new experiments.

**Unit- V**

Handicrafts- Iconometry and Iconography- Metal works-stone ware wood carving-furniture-jewellery - dools- musical instrument

**Suggested Readings:**

- Banerjee, J.N.-The development of Hindu Iconography
- HamayanaKahan-Indian Heritage
- Percy Brawen-Indian Architecture
- Ragini Devi-Dance Dialects of India
- Sarswathi, S- Indian Sculpture
- Sivaramamoorthy –Indian painting
- Sunith V.A.- History of fine art in Indian and Cylon.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-204)**

**ITINERARY PLANNING, MARKETING, TOUR PACKAGING AND  
COSTING**

**Course Objectives:**

1. To develop an understanding of the creation of the inclusive tour product in the leisure travel market.
2. To develop interactive and communication skills.
3. To examine human behavior as it relation to the purchase of tours Learning outcomes upon completion of this course.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. offer wide exposure to the students to handle issues in tourism related businesses professionally.
- CO 2. develop knowledge to be an explorer he will set practical knowledge relating to travel and tour operation.
- CO 3. bridge the gap between theoretical and practical knowledge of the students by adopting tourism significance.
- CO 4. develop socially, ethically responsible business leaders and innovative teaching pedagogy.

**Unit - I**

What is marketing? Marketing Management, Marketing Management Philosophies, Marketing Mix, Marketing challenges into the next century.

**Unit - II**

Concept of Tour-Itinerary, Steps in preparation of tour Itinerary, Effective principles in making tour itinerary, steps in doing tour costing, FIT & GIT.

**Unit- III**

Some itinerary planning of north and west India: Example: Agra, Khjuraho and Varanasi circuit, Naintal, Deharadun, Shimla and Leh Circuit. Jaipur, Jodhpur and Udaipur Circuit.

Selected out bound package tour: Salient feature of outbound package tour, package tour of far east and South East Asian countries like Singapore, Hong Kong, Thailand and Malayasia, package tour of South Asia Countries like Nepal, Srilanka, Bhutan etc.

**Unit- IV**

Factors to consider when setting prices, General pricing approaches, Nature of distribution channels, Channel behavior & organization, Channel Management decisions.

**Unit- V**

The marketing communication mix, Communication process, Steps in developing effective communication, Setting total promotional budget and mix, Advertising, Sales promotion, Public relation, Personal selling.

**Suggested Readings:**

1. Navin Berry: Travel Planner
2. Eric Law: Managing Packaged Tourism
3. Philip Kotler & Gray Armstrong: Principles of Marketing
4. S. Neelamegham: Marketing in India-Cases & Readings
5. Rama Swamy & Mamakumari: Marketing Management- Planning Implementation & Control

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-205)**

**Yoga Practicum**

**Course Objectives:**

1. To Enable the student to have good health.
2. To Practice mental hygiene and possess emotional stability.
3. To Attain higher level of consciousness and integrate moral values.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. get to know more about physical and mental exercise.  
CO 2. witness many changes accordingly with flexibility.  
CO 3. attain higher moral ethics and learning about spiritual path.

**Shatakarma:**Danddhauti,Vastrdhauti, Nauli, Trataka. -5 marks

**Aasana:** -15marks

Dvipada Skandhasana, Purna Bhujangasana, Purna  
Matsyendrasana,Pakshee Aasan, Vrishchik Aasana, Padma  
Mayurasana,  
Purna Vrishchikasana, Takiya Aasana, Padma Sheershasana,  
Karnapidasana, PurnaDhanurasana, Gorakshasana,  
Purna Chakrasana, Purna Shalabhasana, Ek Pada Bakasana,  
Omkar Aasana, Purna Natarajasana  
And all the practices of previous semesters.

**Pranayama –**

10 marks

Udgeeth, Moorchha.

**Dhyana & Viva:** Vijnanamaya & Anandamaya Kosha - 20marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-206)**  
**EDUCATIONAL TOUR**

**Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

**COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

**Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH CE 02)**

**Communicative English (Non Credit)**

**Course Objectives:**

1. To analyze and restate the meaning of a text in English.
2. To demonstrate the skill to write in English without grammatical error.
3. To practice listening effectively to communication in English.
4. To develop the ability to speak English language with the right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Express the viewpoints with confidence in English with right pronunciation.
- CO 2. Outline values and skills gained through effective communication to other disciplines.
- CO 3. Compose articles and compositions in English and discuss about English effectively.

**Communication:**

- i. Recapitulation
- ii. Face to Face Communication
- iii. Telephonic Conversation
- iv. Reading Techniques
- v. Letter writing
- vi. Creative Writing
- vii. Accent
- viii. Stress
- ix. Rhythm
- X. Intonation
- Xi. Seeking Introduction/Introduce oneself
- Xii. Making Enquires
- xiii. Asking Questions and Discussion

## **Literature**

- i. The Kite Maker by Ruskin Bond
- ii. RabindraNath Tagore-Chandalika
- iii. Autumn by Kalidasa(Translated by Arthur W.Ryoler)
- iv. While the Auto Waits O Henry(Adapted for the stage by walter wykes)
- v. The Loss by Anjali Shukla.

## **Suggested Readings**

- The Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead Effectively, by Helio Fred Garcia, 2012
- Crucial Conversations Tools for Talking When Stakes Are High, by Kerry Patterson, Joseph Grenny, Ron McMillan and AlSwitzler, 2011
- Everyone Communicates, Few Connect: What the Most Effective People Do Differently, by John C. Maxwell, 2010
- Messages: The Communication Skills Book, by MatthewMcKay, Martha Davis and Patrick Fanning, 2009
- Communication: The Key to Effective Leadership, by Judith A.Pauley, 2009
- The Art and Science of Communication: Tools for EffectiveCommunication in the Workplace, by P.S. Perkins and Les Brown, 2008

University of Patanjali Haridwar



Department of Psychology

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## Department of Psychology

University of Patanjali

Haridwar

### M.A Psychology with specialization in Clinical Psychology

(w.e.f. Academic Session: 2018-19 and onwards)

#### 1. Program Educational Objectives (PEOs):

PEO1	Promotion of holistic health with the knowledge of Clinical Psychology.
PEO2	Application of scientific knowledge to understand and interpret psychological phenomena.
PEO3	Engagement in innovative and integrative thinking of psychotherapies.
PEO4	Apply psychological concepts and skills to career goals.
PEO5	Apply ethical standards to conduct and evaluate psychological science and practice.

#### 2. Program Outcomes (POs):

PO1	Use scientific Knowledge to understand and interpret psychological phenomena.
PO2	Applications of Rational thinking approach in the solution of problems.
PO3	To promote the ability to work with <i>Manoyoga</i> (passion).
PO4	Use psychological principles to understand local, regional, national and international issues.
PO5	Apply psychological principles and theories to serve and improve one's community.

#### 3. Program Specific Outcomes (PSOs):

PSO1	Students will be able to create Yogic-Psychological environment in different areas of life.
PSO2	Students of Psychology will be able to have unconditional positive regard and empathy towards others.
PSO3	Students will learn to work in a team and develop leadership qualities.
PSO4	Students will be able to conduct short empirical researches so that they develop an understanding about application of statistics and research methodologies.
PSO5	Students will be able to apply psychological principles and theories to serve and improve one's community.

## Eligibility of Admissions

The course requirements for the degree of M.A Psychology with specialization in Clinical Psychology have been designed with the objective to provide comprehensive knowledge and training with research orientation in the details of modern Psychology. The students shall have to pass in the theory and practical papers separately.

**Eligibility for Admission:** Bachelor's Degree in any discipline from UGC recognized University/Institute. Reservation will be as per University/ Central Government Rules.

**Duration:** Four semesters (Two years course)

The distribution of theory and practical papers for M.A I year and II year examinations (semester wise) is as follows-

### FIRST YEAR (M.A. PART-I)

#### I Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-101	Yoga Psychology	30	70	100
MAP-102	Statistical techniques and experimental designs	30	70	100
MAP-103	Social Psychology	30	70	100
MAP-104	Biological foundations of behaviour	30	70	100
MAP-105	Practicum	30	70	100
	Total Marks			500

#### II Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-201	Research Methods	30	70	100
MAP-202	Positive Psychology	30	70	100
MAP-203	Cognitive Psychology	30	70	100
MAP-204	Theories of Personality	30	70	100
MAP-205	Practicum	30	70	100
	Total Marks			500

**Important:** In second year (Semester III and IV). Clinical Psychology course (**Group-A**) will be run by the department and five **days educational tour** to visit Mental Health Institution and **one month internship** should be mandatory.

## SECOND YEAR (M.A. PART-II)

### Group A: Clinical Psychology

#### III Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-301	Health Psychology	30	70	100
MAP-302	Psychopathology	30	70	100
MAP-303	Clinical Psychology	30	70	100
MAP-304	Psychometry	30	70	100
MAP-305	Practicum	30	70	100
	Total Marks			500

#### IV Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-401	Guidance and Counseling Psychology	25	70	100
MAP-402	Psychological Testing	25	70	100
MAP-403	Therapeutic techniques	25	70	100
MAP-404	Dissertation/Project work	25	70	100
MAP-405	A report of the academic tour/survey in mental Health Institution/in clinical situation prepared by the students	25	70	100
	Total Marks			500

\*Dissertation/Project work will be of 100 marks.

**SEMESTER-I**  
**CODE: MAP 101**  
**Yoga Psychology**

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**Marks-70**  
Time- 03 Hrs

### **Course Objectives:**

- To initiate the understanding of psychological knowledge within yoga and meditation linking with the idea of mental health and well-being.
- To deepen the practice of yoga and meditation systems and linking to applications in various contexts.

### **Course Outcomes (COs):**

After completion of the course students will be able:

- CO 1- To achieve spiritual and mental wellbeing.
- CO 2- To promote ancient Indian Knowledge.
- CO 3 -To understand human behaviour as per Yogic Perspectives.

### **Course Contents**

**Unit 1: Yoga Introduction:** Definition and meaning of Yoga, Historical Development of Yoga over the ages including a brief philosophical overview (Patanjali yoga)

**Unit 2: Yoga in Modern Context:** Vivekananda's framework of Raja Yoga; Karma Yoga, Swami Ramdev and his ideas.

**Unit 3: Yoga school in contemporary context:** Bihar school of Yoga, Art of living and Sri SriRavi Shankar, Integral Psychology by Sri Aurobindo.

**Unit 4: Fundamental text of Yoga Psychology 1:** Samadhi Paada- Concepts Svaroop, Samsskara, Vasana, Viveka, Vairagya and Ishwar.

**Unit 5: Fundamental text of Yoga Psychology-11:** Saadhana Paada- Kriya Yoga, Tapas, Svadhyaya, Ishwar Pranidhana, Kleshas, Avidya, asmita, raga-dvesa, abhinivesha, yama, niyampranayama, pratyahara, two yoga therapies: Meditation and yognidra (with practical knowledge).

### **Books Recommended:**

- Taimni, I. K. (1961). The science of yoga. Adyar, India: The Theosophical Society of India.
- Feuerstein, G. (2002). The yoga tradition: Its history, literature, philosophy and practice. Delhi, India: Bhavana Books and Prints.
- Jacobsen, K. A., Larson, G. J. (2005). Theory and practice of yoga: Essays in honour of Gerald James Larson. Leiden, Holland: Brill.
- Vivekananda, S. (1982). Raja yoga or conquering the internal nature. Calcutta, India: Advaita Ashram.

Semester- I  
Code: MAP 102  
**Statistical Techniques and Experimental Designs**

**Marks-70**  
Time- 03 Hrs

**Course Objectives (COs):**

- To develop an understanding of various statistical techniques in terms of their Applications
- To create understanding about different types of Design employed in Psychological Research

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO 1- To collect organizes, interpret and analyze of psychological data in various fields of life.
- CO 2- To obtain scientific results by using different statistical methods.
- CO 3- To utilize statistical knowledge in various fields of science and arts.

**Course Contents**

- Unit 1** : **Measures of Variability:** NPC- Characteristics & Applications of Normal Probability Curve, Average Deviation, Quartile and Standard Deviation.
- Unit 2** : **Test of Statistical Significance:**Significance of difference between means: CR and 't' test (Correlated & Uncorrelated). Analysis of variance (one way and two ways), Non-Parametric Statistics:Chi-Square test, Sign Test, Median Test. Difference between parametric and non-parametric statistics.
- Unit 3** : **Correlation Methods:** Concept and Significance of correlation methods, Product Moment Correlation (Ungrouped Data), Rank Difference Correlation, Bi-serial, Point Bi serial, Phi contingency.
- Unit 4:** **Regression and Prediction:** Partial and Multiple (Introduction only not numerical).
- Unit 5** : **Introduction to Experimental Design:** Randomized group design, Block design, within group design, factorial design.

**Note:**

1. Students can use simple calculator (Without Programming/Nonscientific) during the Examination.
2. Statistical Tables will be provided during the Examination.

**Books Recommended:**

1. Gareett, H.E. (2005). Statistics in Psychology and Education. New Delh. Paragon International Publishers.
2. Haslam, S.A., &Mcarty, C. (2003). Research Methods and Statstics in Psychology. London: Sage Publication.
3. D. Howitt, D., & Cramer, D. (2000). An Introduction to Statistics in Psychology. London: Pearson Education.

## Semester- I

Code: MAP 103

### Social Psychology

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To understand the use of social psychological perspectives to explore human experiences and behaviour within social situations or socio-historical context.
- To develop insight about the basic assumptions and scope of social psychological perspectives.
- To explore the use of social psychological perspectives in addressing the issues and problems of the real world.

#### Course Outcomes (COs):

After completion of the course, students will be able to:

- CO 1- Describe a broad social perspective towards social issues.
- CO 2- Present scientific solutions of social problems.
- CO3 – Explain intergroup relationship.

#### Course Contents

**Unit 1: Introduction to Social Psychological Perspectives:** Nature and scope of Social Psychology, Methods of Social Psychology: Experimental, Survey, Field Studies and Questionnaire.

**Unit 2: Social Influence and Responding to Social Situations:** Social facilitation, social loafing, Social perception, attitude and its change within cultural context, aggression and ways to manage aggression.

**Unit 3: Intergroup relations:** Group dynamics, leadership style and effectiveness, theories of intergroup relations (relative deprivation theory, realistic conflict theory, conflicts and resolution).

**Unit 4: Socialization:** Agents, process and characteristic of socialization, determinants of socialization, communication and language.

**Unit 5: Social Conformity and Social Problems:** Social Conformity, Conformity Bias, Impact of Feedback and Non-Conformity, Social Problems: Poverty and Deprivation, Gender Issues and Social Violence.

#### Books Recommended:

1. Baron, R.A. & Byrne, D. (2000). Social Psychology, New Delhi: Prentice Hall of India Pvt. Ltd.
2. Fraser, C. & Burchell, B. (2001). Introducing Social Psychology. Madlen: Blackwell.
3. Myers, D. (2007.) Social Psychology. New Delhi: Cengage Learning.
4. Singh, A.K. (2009). An outline of Social Psychology. New Delhi: Motilal Banarasi Das.
5. S. Mohamad (2009). Advanced Social Psychology. New Delhi: Motilal Banarasi Das.

Semester- I  
Code: MAP 104

## **Biological Foundations of Behavior**

**Marks-70**  
**Time- 03 Hrs**

### **Course Objectives:**

- To learn about biological foundations of behavior.
- To understand about physiology and importance of brain functions.

### **Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1- Describe causes of human behaviour as per biological perspectives.
- CO 2- Control and manage the physiological changes of one's own body.
- CO3 – explain neurological understanding about human behaviour.

### **Course Contents**

- Unit 1 : Introduction to Physiological Psychology** (Meaning and definition), nature and scope of Physiology Psychology.
- Unit 2 : Central Nervous System:** Structure and functions of human brain (spinal cord, medulla oblongata, cerebellum, thalamus and hypothalamus, cerebrum.)
- Unit 3 : Peripheral Nervous System:** Cranial nerves and spinal nerves, Sympathetic and Para- Sympathetic nervous system- structure and functions, Endocrine glands and Psychological functions.
- Unit 4 : Brain and behavior:** Mechanism of Hormonal action, Reproductive behavior, sleep and biological rhythm.
- Unit 5 : Recent advances in neurophysiology:** hemispheric specialization and localization.

### **Books Recommended:**

1. F. Leukel. (1985). Introduction to Physiological Psychology. New Delhi: CBS Publishers and Distributors.
2. Tiwari, G & Pal, R. (1985). Experimental Psychology: A Dynamic Approach. Agra: Vinod PustakMandir.
3. Morgan, C.T. (1965). Physiological Psychology. New York: McGraw Hill.
4. Tiwari, B.D. (2001). Modern Physiological Psychology. Varanasi: MotilalBanarasidas.

Semester- I  
Code: MAP 105  
**Psychology Practicum**

**Course Objectives:**

- The course aims to deliver practical and in-depth experience in accordance to the principles learnt in the theory courses covering the areas of verbal learning, memory, forgetting etc.
- To provide the students with the practical knowledge of conducting various experiments and Psychological Tests.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1-Describe the basic concepts of psychological testing.
- CO 2- Measure various psychological characteristics.
- CO 3- Compare individual differences.

**List of Practicals:**

➤ **Any five of the following:**

1. Marital Adjustment Inventory
2. Emotional Competency
3. Depth Perception
4. Eysenck Personality Inventory
5. Sixteen Personality Factors
6. Retroactive Interference
7. Reaction time
8. Division of attention
9. Mirror Drawing Apparatus
10. Effect of noise of attention

➤ **Division of Marks:**

- |                               |   |          |
|-------------------------------|---|----------|
| • Conduction of 02 Practicals | : | 40 Marks |
| • Viva Voce                   | : | 35 Marks |
| • Practical Record Book       | : | 15 Marks |
| • Internal Viva-Voce          | : | 10 Marks |

Total : 100 Marks

**Note:** Any five practicals shall be conducted /administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

**Semester- II**  
**Code: MAP 201**  
**Research Methods**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To inform students about the basics of scientific research in applied psychology.
- To make them learn the statistical rigors in designing research and processing data.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1- To conduct short empirical research.
- CO 2- To prepare and present scientific research report in various fields of life.
- CO 3- To prepare research reports.

**Course Contents:**

- Unit 1 : **Research Process:** Nature of research, Problem and hypothesis, Variables: selection, manipulation and control of independent and extraneous variables, measurement of dependent variables.
- Unit 2 : **Types of Research:** Experimental, Quasi Experimental, Correlation Research and Ex-post facto research.
- Unit 3 : **Sampling:** Meaning, Purpose and Types, Sampling error, Factors affecting sampling error.
- Unit 4 : **Methods of Data Collection:** Observation, Interview and questionnaire, content analysis, sociometry method.
- Unit 5 : **Report Writing** – Research Report Writing based on APA Style. Ethical issues in psychological research – APA ethics code.

**Books Recommended:**

1. K.D. Broota (1992). Experimental Design in Behavioural Research, New Delhi: Willey Eastern.
2. F.N. Ferlinger (1973). Foundation of Behavioural Research, Delhi: Surjeet Publications.
3. A.K. Gupta and R. Singh (2009). Research Methodology, New Delhi: Vayu Education of India.
4. L.H. Kidder (1981). Research Methods in Social Science. Tokyo: Holt Saunders.
5. Mohsin: Research Methods in behavioural Sciences, New Delhi; Longman

Semester- II  
Code: MAP 202

## **Positive Psychology**

Marks-70  
Time- 03 Hrs

### **Course Objectives:**

- To recognize what contributes/does not contribute to happiness.
- To understand the right kind of vocation relationship and values in life that enhances one's well-being
- To recognize the role of positive emotions and traits in enhancing happiness.

### **Course Outcomes (COs):**

After completion of the course, students will be able:

- CO 1- To know and apply the true meaning of life.
- CO 2- To create happy and healthy ambiance.
- CO 3- Explain the importance of holistic wellbeing.

### **Course Contents:**

1. **Introduction: Positive psychology:** meaning, definitions, nature, goals and relation with other fields.
2. **Happiness and well-being:** Happiness: concept and definitions, happiness and facts of life, gender, love, marriage, close relationships and others.
3. **Emotion, personality traits and well-being:** Emotional Intelligence, Positive emotion and well-being, positive beliefs and illusions.
4. **Virtues, character strengths and well-being:** Classification of human virtues, religion, spirituality, religion and virtue: Buddhism, Islam and Hinduism.
5. **Positive Health and Positive change:** meaning of positive health, stages of change process.

### **Books recommended:**

- Kumar, V., Archana, & Prakash, V. (2015). Positive Psychology-Application in work, health and well-being. Delhi& Chennai, India:Pearson.
- David, S, A., Boniwell, I & Ayers, A.C. (2013) The oxford handbook of happiness. Oxford: Oxford University.

## Semester- II

Code: MAP 203

### **Cognitive Psychology**

Marks-70

Time- 03 Hrs

#### **Course Objectives:**

- To learn about basic psychological processes through scientific experiments.
- To understand various mental processes: Attention and consciousness, Memory processes, Reasoning and decision making.

#### **Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- Provide an in-depth understanding of some of the cognitive processes in terms of current theories, models and applications.
- CO2 -Help learners understand the importance of these cognitive processes in everyday life.
- CO3- Become creative and decision oriented.

#### **Course Contents:**

- Unit 1 : **Attention and Perceptual Processes:** Attention: Concepts and Mechanisms, factors affecting attention, Perception – Figure- ground organization. Perception of depth and movement, Perceptual constancy – Brightness, size and shape.
- Unit 2 : **Memory and Forgetting:** Memory – Types of memory (STM and LTM). Methods and Material, determinants of memory. Forgetting – Concepts, Causes and theories of forgetting – Interference Theory (Behaviouristic) and repression theory.
- Unit 3 : **Thinking and Problem solving:** Thinking – Meaning and Types, Language and thinking. Problem solving – Nature, factors affecting problem solving and strategies.
- Unit 4 : **Verbal Learning:** Nature, materials and methods of verbal learning, Determinants of verbal learning and transfer of learning.
- Unit 5 : **Creativity and decision Making: Meaning and nature, Factors affecting decision making, improving Decision Making.**

#### **Books Recommended:**

1. M.R. D'Amato (1979). Experimental Psychology: Methodology, Psychophysics and learning. New Delhi: Tata McGraw Hill.
2. B.E. Goldstein (2002). Sanstationand Perception. USA: Wadsworth.
3. J.W. Kling and L.A. Riggs (1984). Woodworth and Schlosberg's Experimental Psychology. New Delhi: Khosla Publishing House.
4. R.L. Solso (2001). Cognitive Psychology, Singapore: Pearson Education.

Semester: II  
Code: MAP 204  
**Psychology of Personality**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To develop an understanding of the concept of individual difference.
- To develop an appreciation of the biological and social impact on personality.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1- Achieve and maintain dignity of human behaviour.
- CO 2- Built organized personality.
- CO 3 – Explain importance of Indian virtues.

**Course Contents**

- Unit 1 : **Concept and Definition of Personality:** Meaning and definition of Personality, Views on self and Personality: Upanishadic, Gita and Buddha
- Unit 2 : **Determinants of Personality:** Importance of heredity in the development of personality, Role of biological factors: Direct genetic effect; mediated effect through environment factors: Physical and socio- cultural impact.
- Unit 3 : **Trait and type Approaches:** Allport, Cattell, Eysenck and Big Five Factors Models.
- Unit 4 : **Personality of individual differences:** Biological and social explanation of gender differences in Personality, Trigun theory of Personality.
- Unit 5 : **Recent advances in Personality Research:** Human Strength and virtues: Learned Helplessness.

**Books Recommended:**

1. G.C. Hall, G. Lindzey and J.C. Campbell (1998). Theories of Personality. New York: John Wiley and Sons.
2. W. Mischel (1976). Introduction to Personality. New York: Holt Reinhart and Winston.
3. R.M. Rchman (2000). Theories of Personality. USA: Thomson Wadsworth.
4. R. Frager and J. Fadiman (1998). Personality and Personal Growth, New York : Longman.
5. J.M. Burger (2004), Personality. USA: Thomson Wadsworth.

Semester- II  
Code: MAP 205  
**Psychology Practicum**

**Course Objectives:**

- To provide a understanding of psychological tests having applications in clinical practice.
- Exposure to the general concepts of psychology through experimentation and testing.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO -1 Detect various mental diseases through psychological tests.
- CO - 2Provide scientific report of psychological qualities.
- CO-3Compare individual differences.

**List of Practicals:**

**Any Five of the following:**

1. Defense Mechanism
2. Emotional Maturity Scale
3. Attribution Style
4. Adjustment Inventory
5. Mental Health Scale/Inventory
6. Muller Lyer
7. Two Hand Coordination
8. Maze learning
9. Aggression Scale
10. Judging Emotions by Photographs

**Division of Marks:**

Conduction of 02 Practicals	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
<hr/>		
Total	:	100 Marks
<hr/>		

Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

Semester- III  
Code: MAP 301  
Group A: Clinical Psychology  
**Health Psychology**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To familiarize with the concept of health psychology to live healthy life.
- To orient the students about management of stress.

**Course Outcomes (Cos):**

After completion of the course, students will be able to:

- CO 1- Maintain a holistic approach of health.
- CO 2 - Promote Indian psycho-yogic views of health in the society.
- CO 3- Describe conceptual knowledge of behavioural health.

**Course Contents**

- Unit 1: **Concept of Health:** Definition of Health, Biopsychosocial model VS biomedical model. Interaction of biopsychosocial variables, clinical implication of biopsychosocial model, cross cultural perspective of health.
- Unit 2: **Social and Environmental Factors:** Global health trends, Health care systems, socio-economic factors in health, Gender and Health.
- Unit 3: **Stress and Coping:** Meaning and sources of stress, Stress as stimulus and Response, techniques of coping, Stress related health problems: – cardiovascular disease: hypertension, stroke, diabetes.
- Unit 4: **Modification of Health Behaviour:** Changing health beliefs, self observation and self monitoring, Health enhancing behaviour – Exercise, accident prevention and weight control.
- Unit 5: **Behavioural health:** Effect of smoking, interventions to reduce smoking, effects of alcohol, preventing alcohol.

**Books Recommended:**

1. Baum, A., R.J. Gatchel, R. J. & Krantz, D.S (1997). An Introduction to Health Psychology. New York: McGraw Hill.
2. Baum, A., Revenson, T.A & Singer, J.E. (2001). Handbook of Health Psychology. New Jersey: Lawrence Erlbaum.
3. Dimatteo, M.R. & Martin, L.R. (2010). Health Psychology. New Delhi: Dorling Kindersley Pvt. Ltd.
4. Khokhar, C.P. (2007). A Text Book of Stress Coping and Health Meerut: Shalab Publication

Semester- III  
Code: MAP 302  
Group A: Clinical Psychology  
**Psychopathology**

Marks-70  
Time- 03 Hrs

### Course Objectives:

- To develop understanding of the various manifestations of psychopathology.
- To familiarize with DSM IV and ICD II to classificatory systems in the context of diagnosis of various psychiatric/psychological disorders.

### Course Outcomes (COs):

After completion of the course, students will be able:

- CO-1 To understand nature, aetiology and prevention of mental health issues.
- CO-2 To develop skills for diagnosis and classification of mental disorders.
- CO-3 To prepare mental status examination.

### Course Contents

- Unit 1: Approaches to Psychopathology:** overview of latest version of Diagnostic and statistical Manual (DSM) International classification of diseases. Biological, Psychodynamic, behavioural, cognitive, Socio-cultural.
- Unit 2: Anxiety disorders:** Approaches and etiology of generalized anxiety disorder, panic disorder, phobia, obsessive-compulsive disorder and post traumatic stress disorder.
- Unit 3: Psychotic disorders:** Approaches and etiology of Schizophrenia, Paranoid and mood disorders.
- Unit 4: Cognitive Impairments:** Approaches and etiology of delirium, dementia and amnesic syndromes, dementia of the Alzheimers type.
- Unit 5: Substance Related Disorders:** Alcohol Dependence, Short-term effects of Cannabis.

### Books Recommended:

1. Buss, A.H. (1999). Psychopathology. New York: John Wiley and Sons.
2. Lamm, A. (1997). Introduction to Psychopathology. New York : Sage Publications
3. Davison, G.C., & Neals, J.M. (1996). Abnormal Psychology. New York: John Wiley and Sons.
4. Mohanty, G.B. (1998). Text Book of abnormal Psychology. New Delhi: Kalyani Publishers.

Semester- III  
Code: MAP 303  
Group A: Clinical Psychology

**Clinical Psychology**

Marks-70

Time- 03 Hrs

**Course Objectives:**

- To familiarize with the history and development of clinical psychology as a field in India and its evolving professional identity.
- To orient students to major theoretical models which guide clinical psychological practice and research
- To orient about clinical assessment process and its application in various domains.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To describe the basic concepts of clinical psychology.
- CO-2 To assist clinical psychologists and psychiatrists
- CO-3 To assess and prepare a treatment plan under clinical setting.

**Course Contents:**

**Unit 1: Clinical Psychology:** meaning and nature of clinical psychology, professional issues: roles, skills and ethics.

**Unit 2: Psychoanalytic approach:** Brief orientation to four psychoanalytic psychologies: Drive, Ego, Object relations and Self-personality, understanding of psychological defences.

**Unit 3: Other approaches of clinical psychology:** Behavioural approach, humanistic approach, attempt at integration: bio-psycho-social.

**Unit 4: Clinical assessment:** Meaning and stages of Clinical interview with its merits and demerits, case history

**Unit 5: Areas of application:** Intellectual and educational, personal and interpersonal.

**Books Recommended:**

1. Llewelyn, S., Murphy, D. (Eds.) (2014). What is clinical psychology? Oxford UK: Oxford University Press.
2. Bellack, A. S., & Hersen, M. (1980). Introduction to clinical psychology. New York: Oxford University Press.
3. Korchin, S. J. (1986). Modern clinical psychology. Delhi: CRR Publishers and Distributors.
4. Ray, S. D. (1996). The practice of psychotherapy. New Delhi: New Age International.

Semester- III  
Code: MAP 304  
Group A: Clinical Psychology  
**Psychometry**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with Psychometry and psychological measurement.
- Criteria of psychological test and the steps used in test construction.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To create critical understanding of measurement issues and techniques in psychological inquiry
- CO-2 To develop skills and competencies in test construction and standardization
- CO-3 To learn the application and contextual interpretation of data from psychological measurement

**Course Contents**

- Unit 1: **Foundations of Psychometric:** Basic of measurement theory, Speed vs. power test, nature of psychological testing.
- Unit 2: **Test Construction:** Item writing – method of scoring, step use in test construction, Item analysis – meaning and purpose, items difficulty, difficulty value and index of discrimination.
- Unit3: **Standardization of tests:** Types of norms, specificity of norms.
- Unit 4: **Reliability and Validity:** Meaning of reliability, Methods – test retest, internal consistency/ split half. Factors influencing reliability of a test. Validity – meaning, types-content, criterion, predictive, concurrent and construct validity. Factors influencing validity of the test.
- Unit 5: **Application of Tests:** Applications of Psychological testing in various settings- education, counseling and guidance, and ethical issues.

**Books Recommended:**

1. Chadha, N.K. (2009). Applied Psychometry. New Delhi: Sage Publications.
2. Guilford, J.P. (1989). Psychometric Methods, New Jersey: John Wiley and Sons.
3. C. Jackson (2003). Understanding Psychological Testing, Mumbai: Jaico Publishings House.
4. Nunnally, J.C. (1978). Psychometric Theory. New York: McGraw Hill.
5. Chandha, N.K. (1996). Theory and Practice of Psychometry. New Delhi: New Age international Publishers.

Semester- III  
Code: MAP 305  
**Psychology Practicum**

**Course Objectives:**

- To provide an understanding of psychological tests having applications in clinical practice.
- Exposure to the general concepts of psychology through experimentation and testing.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO-1 Demonstrate working knowledge of report writing and providing psychological consultancy in various setting.
- CO-2 Developing an appreciation of how psychological tests can be applied to real life settings.
- CO-3 Compare individual differences.

**List of Practical:**

**Any Five of the following:**

1. Rorschach
2. T.A.T.
3. PGI Health Questionnaire
4. Depression Scale
5. Rosenberg Self Esteem
6. Self Concept Rating Scale
7. Sportsman Spirit Test
8. The group test of general mental ability
9. Draw a man test
10. Eight State Questionnaire

**Division of Marks:**

Conduction of 02 Practical	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks

Total : 100 Marks

**Note:** Any five practicals shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

Semester- IV  
Code: MAP 401  
Group A: Clinical Psychology  
**Guidance and Counseling Psychology**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain the knowledge about guidance and counseling
- Importance of counseling in real life.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1To understands bio- psycho-social issues of human life as per psychological perspectives.
- CO-2To assists clients under the supervision of clinical psychologists in various areas of life.
- CO-3To provides counselling in school, college and university levels.

**Course Contents:**

- Unit 1 : **Counseling Psychology: Meaning and nature of guidance and counseling, Ethical issues in counseling, Distinctions between counseling and Psychotherapy.**
- Unit 2 : **Expectations and goals of Counseling:** Goals and expectations, Process, Characteristics of counselors, Role and functions of the counselors and their professional training.
- Unit 3 : **Theoretical Approaches to Counseling:** Psychoanalytic, Behavioral, Rational- Emotive Behavior Therapy, Client Centered and Transactional Analysis.
- Unit 4 : **Areas of Counseling:** Educational, Career, Family and Martial, Gerontological and Weaker Sections, Stress Management Oriented Counseling.
- Unit 5 : **Future of Counseling:** The future and status of counseling with special reference to India.

**Books Recommended:**

1. C.J. Gelso and B.R. Fretz (1995). Counselling Psychology. Bangalore: Prism Books Pvt. Ltd.
2. V.R. Patri (2001): Counselling Psychology, New Delhi : Authors Press.
3. S.N. Rao (2002). Counselling and Guidance, New Delhi : McGraw Hill
4. A. David (2004). Guidance and Counselling. New Delhi: Common Wealth Publishers.

Semester- IV  
Code: MAP 402  
Group A: Clinical Psychology  
**Psychological Testing**

Marks-70  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with psychological testing and its nature and functions
- To create understanding about different types of testing.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1-To administer psychological testing in various settings like school, hospitals and NGO.
- CO2-To provide help in the assessment of mentally retarded and physically handicapped persons
- CO3- To explain about various types of psychological testing.

**Course Contents**

- Unit 1: **Psychological Test:** Nature, Uses, Functions and Types of Psychological Tests. Test Administration- Effects of examiner and situational variables. Test-takers perspective, Effects of training on test performance.
- Unit 2: **Measurement of Aptitude and Abilities:** Group Tests – Multidimensional Aptitude Battery, Multilevel Aptitude Batteries – Cognitive Ability Test. Multiple Aptitude Test Batteries- Differential Aptitude Test
- Unit 3: **Personality Testing:** Self Inventories – MMPI, EPPS, 16PF, Neo Personality, Inventory, Projectivetechniques: TAT, Rorschach test.
- Unit 4: **Interest Inventories:** Strong interest Inventory, Kuder Interest Inventory, Jackson's Vocational Interest Inventory.
- Unit 5: **Tests for special Population:** Infant and Pre-school testing, Assessment of mentally retarded and physically handicapped.

**Books Recommended:**

1. A. Anastasi (1998). Psychological Testing. New Delhi : McMillan.
2. Paul Kline (1993). The Hand Book of Psychological Testing. London Poutlege.
3. K.R. Morphy and C.O. Davidshofer (1988). Psychological Testing: Principles and Application. New Jersey: Prentice Hall of India Pvt. Ltd.
4. F.S. Freeman (1971). Theory and Practices of Psychological Testing. New York: Oxford Press.
5. L.J. Cronbach (1972). Essentials of Psychological Testing. New York: Harper and Row.

## Semester- IV

Code: MAP 403

Group A: Clinical Psychology

### Therapeutic Techniques

Marks-70

Time- 03 Hrs

#### Course Objectives:

- To gain knowledge about different therapies
- To create understanding and awareness about the use of therapies in professional life.

#### Course Outcomes (COs):

After the completion of this course students will be able:

- CO1-To apply psycho - therapeutic knowledge in practical life.
- CO2-To assist psychotherapist and clinical psychologist.
- CO3- To explain the basic utility of psychotherapies.

Unit 1: **Psychotherapies:** Concept, Roles and responsibilities, The Client and therapist Relationship, Ethical issues.

Unit 2: **Psychodynamic Therapy:** Freudian Psychoanalysis, Alfred Adler and Erik Erikson.

Unit 3: **Behaviour Therapy:** Guided Exposure, Systematic desensitization, Aversion Therapy, Assertion training, Modeling, Biofeedback.

Unit 4: **Cognitive Behaviour Therapy:** Beck's Cognitive Therapy, Rational emotive behavior Therapy, Michenbaum's cognitive behaviour therapy.

Unit 5: **Humanistic Therapies:** Person centered therapy- Gestalt Therapy, existential therapy. Transactional therapy, Interpersonal Relationship Therapy- Marital and Family Systems Therapy.

#### Books Recommended:

1. G. Corey (2001). Theory and Practice of Counselling and Psychotherapy. Belmont CA: Brooks Cole.
2. S. Culari (1998). Foundations of Clinical Psychology. New York: Allyn and Bacon.
3. T. Plante (2005). Contemporary Clinical Psychology, New York: John Wiley and Sons.
4. R. Erskine (1988) Integrative Psychotherapy in Action, New York: Sage Publications
5. M.B. Ghorpade and V.B. Kumar (1988). Introduction to Modern Psychotherapy. New Delhi: Himalaya Publishing House.
6. A Bandura (1969). Principle of Behaviour Modification. New York: Holt Rinehard and Winston.
7. G.D. Rastogi (1991). Psychopathology and Treatment. New Delhi: Wiley Eastern Ltd.

**Semester- IV**  
Code: MAP 404  
Group A: Clinical Psychology  
**Dissertation**

**Course Objectives:**

- Assess the student's mastery of the factual information, the theoretical concepts, and the methodological approaches in his/her field.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- conduct original research including: Literature review and generation of hypothesis
- CO2- Explain and apply an appropriate technique of research methodology and Statistical analysis of data.
- CO3- Produce final dissertation outcomes of a high professional standard.

**Eligibility Criteria:**

The students securing a minimum of 60% marks in total in I, II and III Semester examination (Subject to clearing all the theory and practical papers) will have an opportunity to select a Dissertation Work (100 Marks) in lieu of only 4<sup>th</sup> paper of IV semester. The student opting for Dissertation will select a topic related to his/her group of specialization (Clinical Psychology) with the help of supervisor (one of the faculty member) and later on submit an application along with relevant information through the supervisor to the Head of the Department within 30 days from the declaration of the result of III semester. The students securing less than 60% marks in total I, II, and III will have prepare project report. The dissertation in typed form (two copies) following APA manual between seventy-five to hundred pages shall be submitted on or before 30<sup>th</sup> April to the Head of the Department along with Supervisor certificate.

**Division of Marks:**

Report Writing	:	70 Marks
Viva Voce	:	30 Marks
Total	:	<hr/> 100 Marks <hr/>

Note: Supervisor will act as an internal examiner. The marks will be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

**Semester- IV**  
Group A: Clinical Psychology  
Code: MAP 405  
**Tour Report**

**Course Objectives:**

A report of the academic tour/survey in mental Health Institution/in clinical situation prepared by the students has following objectives. They are as follows:

- Deepen Social and practical knowledge.
- Develop critical thinking.
- Enhances perspectives

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- Collaborate with teachers, and integrate new perspectives with informal environments to enhance learning initiatives.
- CO2-Apply skills, values and general knowledge in new settings.
- CO3- Explore practical utility of the clinical tour.

**Division of Marks:**

Viva Voce	:	75 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
		_____
Total	:	100 Marks
		_____

Note: The marks shall be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

पतञ्जलि विश्वविद्यालय, ( हरिद्वार )

पाठ्यक्रम - B.A. - दर्शन ( ऑनर्स )

वर्ष- 2017-18



# University Of Patanjali

## **BA DARSHAN (BD)**

### **Program Educational Objectives (PEOs)**

- **PEO 1** – To inculcate human and moral life values in the student by learning the principles of Indian shaddarshan philosophies
- **PEO 2** – By imparting a proper sense of history, social science and political science to the student, by equipping the student with the glory of the past and the resolve of the golden future, to inculcate humanity in the family, social and political life.
- **PEO 3** – By giving understanding of Shrimadbhagwadgita and Upanishads, to equip the student with right devotion and right work.
- **PEO 4** – To awaken within the student the feeling of oneness, coexistence and universal brotherhood with self-realization by establishing individual and collective harmony by integrating the knowledge of body and universe with the understanding of Yoga science and Yajna science.
- **PEO 5** – To develop proficiency in English language along with national language and mother tongue.

### **Program Specific Outcomes (PSOs)**

After completing of the program, the students will be able to

- **PSO 1** – Build a divine personality and divine character by attaining the right understanding of the scriptures such as philosophy, political science, social science, Gita Upanishad, etc.
- **PSO 2** – Avoid (retire from) ignorance, mistrust and bad deeds, and gets engaged in good deeds and self-religion by being equipped with good knowledge and goodwill with the theoretical understanding of Vedic Philosophical schools.
- **PSO 3** – Become skilled and proficient in his overall physical, mental, intellectual and spiritual development while being equal in all dialectical situations with the knowledge and faith described in Shrimad Bhagvad Gita.
- **PSO 4** – Realise the Brahmavidya described in Upanishads and strong detachment from worldly attractions and complete loyalty and faith towards Guru and God.
- **PSO 5** – Destroy all the diseases and troubles present in himself and the society with the understanding of the science behind Yoga and Yagya.

**पाठ्यक्रम - B.A. /ऑनर्स- ( दर्शन )**  
**प्रथम, द्वितीय एवं तृतीय वर्ष**  
**के कुछ सामान्य नियम**

- ❖ परीक्षा में 50% अंक प्राप्त करने वाले छात्र को ही उत्तीर्ण माना जायेगा।
- ❖ प्रस्तुत पाठ्यक्रम तीन वर्ष का होगा।
- ❖ प्रत्येक वर्ष 2 सत्र (Semester) में, 2 बार परीक्षाएं होंगी।
- ❖ प्रत्येक परीक्षा में पाँच प्रश्नपत्र होंगे।
- ❖ दो प्रश्नपत्र दर्शनों से सम्बन्धित, तृतीय संस्कृत तथा चतुर्थ पत्र हिन्दी व पाँचवा अंग्रेजी भाषा का होगा।
- ❖ सभी पेपर 100-100 अंक के होंगे।
- ❖ कुल अंक एक वर्ष में 1000 तथा तीनों वर्ष के मिलाकर - 3000 अंक होंगे।
- ❖ परीक्षा का माध्यम English Paper को छोड़कर शेष सभी पत्रों में हिन्दी या संस्कृत होगा।
- ❖ प्रत्येक परीक्षा का निर्धारित समय 3 घण्टे होगा।

पतञ्जलि विश्वविद्यालय, हरिद्वार  
पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) प्रथम वर्ष  
Semester -I

**Paper -1- yogadarśana**

**Paper Code- BD-101**

(70+30=100)

**Course Objectives-**

- *yogadarśana ke mūla sūtroṃ kā bodha*।
- *yogadarśana ke mūla sūtroṃ kā jñāna*।
- *sāmānyasūtrārtha kā bodha*।
- *yoga ke paribhāṣā kā bodha*।

पातञ्जल योगसूत्र

(70+30=100)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *yogadarśana ke mūla sūtroṃ kā vācana*।
- *yogadarśana ke mūla sūtroṃ kā lekhaṇa*।
- *sāmānyasūtrārtha kā paricaya*
- *yoga kī paribhāṣā*।

सन्दर्भग्रन्थ - सदाशिवेन्द्रवृत्ति एवं योगदर्शन- स्वामीरामदेव जी

**Paper -2- sāmkyadarśana-1**

**Paper Code- BD-102**

(70+30=100)

**Course Objectives-**

- *sāmkyadarśana ke 1 se 3 adhyāya kā bodha*।
- *sāmkyadarśana ke 1 se 3 adhyāya ke lekhaṇa kā bodha*।
- *sāmkyadarśana ke sāmānyasūtrārtha (1 se 3 adhyāya) kā jñāna*।
- *trividha duḥkha ke nivāraṇa kā bodha*।

सांख्यसूत्र-(1-3 अध्याय)

(70+30=100)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *sāmkyadarśana ke 1 se 3 adhyāya kā vācana*।
- *sāmkyadarśana ke 1 se 3 adhyāya kā lekhaṇa*।
- *sāmkyadarśana ke sāmānyasūtrārtha (1 se 3 adhyāya)*
- *trividha duḥkha kā vivaraṇa evaṃ nivāraṇa*।

सन्दर्भग्रन्थ - आचार्य आनन्दप्रकाश जी, विद्योदयभाष्य सहित सांख्यदर्शन (आचार्य उदयवीर शास्त्री जी)

## Paper -3- *saṃskṛta-1*

Paper Code-103

(70+30=100)

### Course Objectives-

- *saṃdhiprakaraṇa kā bodha*।
- *śabdarūpa paricaya va vācana kā bodha*। (1-15)
- *dhāturūpa paricaya va vācana kā bodha*। (1-15)
- *sāhitya evaṃ buddhacaritam- 1-4 sarga kā jñāna*।

साहित्य - बुद्धचरितम्- 1-4 सर्ग

व्याकरण - वर्णोच्चारण शिक्षासूत्राणि, संज्ञा प्रकरणम्, सन्धि प्रकरणम्, 15 शब्दरूप व 15 धातुरूप  
अनुवाद, अलंकार प्रदीप (विश्वेश्वर सूरी)

### Course Outcomes-

- *saṃdhiprakaraṇa kā paricaya*।
- *śabdarūpa paricaya va vācana*। (1-15)
- *dhāturūpa paricaya va vācana* (1-15)
- *sāhitya evaṃ buddhacaritam- 1-4 sarga kā paricaya*।

सन्दर्भग्रन्थ- व्याकरण प्रवेश- प्रारम्भिक रचनानुवाद कौमुदी व रचनानुवाद कौमुदी

## Paper -4- hindī-1

### Paper Code- 104

(70+30=100)

#### Course Objectives-

- *hindī bhāṣā kā sāmānya bodha*।
- *kāla-vibhājana evaṃ nāmakaṛaṇa kā bodha*।
- *bhakti āṃdolanarū udbhava aura vikāsa kā jñāna*।
- *madhyakālīna bodha tathā ādhunika bodha- saṃkramaṇa kī paristhitiyoṃ kā bodha*।

#### इकाई-1 हिन्दी भाषा

- हिन्दी भाषा का सामान्य परिचय
- हिन्दी की विभिन्न बोलियों का सामान्य परिचय।
- खड़ी बोली का स्वरूप व क्षेत्र का संक्षिप्त परिचय

#### इकाई-2 आदिकाल

- काल-विभाजन एवं नामकरण
- आदिकाल की प्रमुख प्रवृत्तियाँ

#### इकाई-3 मध्यकाल

- भक्ति आंदोलन : उद्भव और विकास
- भक्तिकाल की प्रमुख प्रवृत्तियाँ
- रीतिकाल : नामकरण
- रीतिकाल की प्रमुख प्रवृत्तियाँ

#### इकाई-4 मध्यकालीन बोध तथा आधुनिक बोध- संक्रमण की परिस्थितियाँ

- आधुनिक हिंदी कविता की प्रमुख प्रवृत्तियाँ
- उपन्यास, कहानी, नाटक, निबंध, आलोचना तथा अन्य गद्य रूप।

#### Course Outcomes-

- *hindī bhāṣā kā sāmānya paricaya*।
- *kāla-vibhājana evaṃ nāmakaṛaṇa*।
- *bhakti āṃdolanarū udbhava aura vikāsa*।
- *madhyakālīna bodha tathā ādhunika bodha- saṃkramaṇa kī paristhitiyāṃ*।

#### सहायक ग्रन्थ-

1. हिन्दी भाषा- धीरेन्द्र वर्मा
2. हिन्दी भाषा की संरचना - भोलानाथ तिवारी
3. हिन्दी साहित्य का इतिहास - रामचन्द्र शुक्ल
4. हिन्दी साहित्य का इतिहास - डॉ. नगेन्द्र
5. आदिकालीन हिंदी साहित्य के अध्ययन की दिशाएं - अनिल राय

# Paper-5- Communicative English -1

Paper Code- BD-105

(70+30=100)

## Course Objectives

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

## Language :

- Communication : Process, Methods, and Interpersonal Communication .
- Definition & Concept, Elements, Verbal, Written, Non Verbal, Flow, Barriers.
- Listening: Definition, Difference between hearing and listening, Advantages.
- Grammar: Parts of Speech, Using one word as different parts of Speech.

## Literature : • William Wordsworth, **Lines Written in Early Spring.**

- Swami Ramdev. • Lord Ganesha

## Course Outcomes

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

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पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) प्रथम वर्ष  
Semester -II

**Paper -1- sāmkyakārikā**

**Paper Code- 201**

(70+30=100)

**Course Objectives-**

- *sāmkyakārikā ke mūla ślokoṃ ke vācana kā bodha*
- *sāmkyakārikā ke mūla ślokoṃ ke lekhana kā bodha*
- *sāmkyakārikā ke ślokoṃ ke arthoṃ kā jñāna*
- *sāmkyā kī paribhāṣā kā bodha*

सम्पूर्ण सांख्यकारिका

(70+30=100)

(कण्ठस्थीकरण, कारिकार्थ एवं विषय परिचय)

**Course Outcomes-**

- *sāmkyakārikā ke mūla ślokoṃ kā vācana*
- *sāmkyakārikā ke mūla ślokoṃ kā lekhana*
- *sāmkyakārikā ke ślokoṃ ke arthoṃ kā paricaya*
- *sāmkyā kī paribhāṣā*
- *sampūrṇa sāmkyakārikā*

सन्दर्भग्रन्थ - सांख्यकारिका (श्रीमदीश्वरकृष्णविरचिता)

**Paper -2- sāmkyadarśana-2**

**Paper Code- BD-202**

(70+30=100)

**Course Objectives-**

- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ ke vācana kā bodha*
- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ ke lekhana kā bodha*
- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ ke sūtrartha kā jñāna*
- *tīna prakāra ke pramāṇoṃ kā jñāna*

सांख्यसूत्र (4-6 अध्याय)

(70+30=100)

(कण्ठस्थीकरण, सूत्रार्थ एवं विषय परिचय)

**Course Outcomes-**

- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ kā vācana*
- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ kā lekhana*
- *sāmkyā darśana ke cāra se chaḥ adhyāyoṃ kā sūtrartha*
- *tīna prakāra ke pramāṇa kā paricaya*

सन्दर्भग्रन्थ -दर्शनप्रवेश- आचार्य आनन्दप्रकाश जी, विद्योदय भाष्य सहित सांख्यदर्शन (आचार्य उदयवीर शास्त्री जी)

**Paper -3- saṃskṛta-2**

**Paper Code-BD-203**

(70+30=100)

**Course Objectives-**

- *sāhitya kā bodha*।
- *anuvāda kā jñāna*।
- *1 se 15 śabda rūpoṃ va dhātu rūpoṃ kā bodha*।
- *buddhacaritam-5 se 8 sarga kā jñāna*।

साहित्य - बुद्धचरितम्- 5-8 सर्ग

व्याकरण - सामासिक, नामिक, अनुवाद, 15 शब्दरूप, 15 धातुरूप  
अनुवाद, अलंकारप्रदीप (विश्वेश्वरसूरि)

**Course Outcomes-**

- *sāhitya kā paricaya*।
- *anuvāda kā paricaya va vivaraṇa*।
- *1 se 15 śabda rūpoṃ va dhātu rūpoṃ kā paricaya*।
- *buddhacaritam-5 se 8 sarga kā paricaya*।

सन्दर्भग्रन्थ- व्याकरणप्रवेश- प्रारम्भिक रचनानुवादकौमुदी व रचनानुवादकौमुदी

**Paper -4- hindī-2**  
**Paper Code- BD-204**

(70+30=100)

**Course Objectives-**

- *bhāṣā kī paribhāṣā, prakṛti evaṃ vividha rūpoṃ kā jñāna*
- *hindī kī varṇa-vyavasthā: svara evaṃ vyaṃjana*
- *varṇoṃ kā uccāraṇa sthāna: kaṇṭhya, tālavya, mūrddhanya, dantya, oṣṭhya tathā dantyoṣṭhya varṇoṃ kā jñāna*
- *bhāvārtha aura vyākhyā, āśaya lekhana, vividha prakāra ke patra lekhana kā bodha*

1. भाषा की परिभाषा, प्रकृति एवं विविध रूप।
2. हिन्दी भाषा की विशेषताएँ : क्रिया, विभक्ति, सर्वनाम, विशेषण एवं अव्यय सम्बन्धी।
3. हिन्दी की वर्ण-व्यवस्था : स्वर एवं व्यंजन।
4. स्वर के प्रकार - ह्रस्व, दीर्घ तथा संयुक्त।
5. व्यंजन के प्रकार - स्पर्श, अन्तस्थ, ऊष्म, अल्प्राण, महाप्राण, घोष तथा अघोष।
6. वर्णों का उच्चारण स्थान : कण्ठ्य, तालव्य, मूर्द्धन्य, दन्त्य, ओष्ठ्य तथा दन्त्योष्ठ्य वर्ण।
7. बलाघात, संगम, अनुतान तथा संधि।
8. भाषा संप्रेषण के चरण : श्रवण, अभिव्यक्ति, वाचन तथा लेखन।
9. हिंदी वाक्य रचना, वाक्य और उपवाक्य, वाक्यभेद, वाक्य का रूपान्तर।
10. भावार्थ और व्याख्या, आशय लेखन, विविध प्रकार के पत्र लेखन।

**Course Outcomes-**

- *bhāṣā kī paribhāṣā, prakṛti evaṃ vividha rūpa*
- *hindī kī varṇa-vyavasthā: svara evaṃ vyaṃjana*
- *varṇoṃ kā uccāraṇa sthāna: kaṇṭhya, tālavya, mūrddhanya, dantya, oṣṭhya tathā dantyoṣṭhya varṇa*
- *bhāvārtha aura vyākhyā, āśaya lekhana, vividha prakāra ke patra lekhana*

**सहायक ग्रन्थ-**

1. सामान्य हिन्दी - डॉ० द्वारिका प्रसाद सक्सेना
2. अपनी हिन्दी सुधारें - डॉ० विजय अग्रवाल
3. व्यवहारिक हिन्दी - डॉ० महेन्द्र मित्तल
4. अच्छी हिन्दी - डॉ० रामकुमार वर्मा

## Paper -5- Communicative English -2

### Paper Code- BD-205

(70+30=100)

#### Course Objectives

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### Language :

- Words used and Misused, Tense, Subject Verb Agreement, Correction of Incorrect Sentences
- One word Substitution, Active Passive Voice, Direct Indirect Speech, Idioms & Proverbs  
Antonym & Synonym.

#### Literature :

- William Wordsworth, **The Solitary Reaper**
- **Swami Dayanad Saraswati.**
- R.K. Narayan, **The Guide**
- **Swami Vivekanand.**

#### Course Outcomes

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English.

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) द्वितीय वर्ष**  
**Semester -III**

**Paper -1- *nyāya darśana-1***

**Paper Code- BD-301**

(70+30=100)

**Course Objectives-**

- *nyāya darśana mūla sūtreṃ ke prathama, dviṭīya aura ṛtīya adhyāya kā vācana kā bodha।*
- *nyāya darśana mūla sūtreṃ ke prathama, dviṭīya aura dviṭīya adhyāya kā lekhana kā jñāna।*
- *nyāya darśana ke mūla sūtreṃ ke arthoṃ kā bodha।*
- *nyāya kī paribhāṣā kā jñāna।*

न्याय सूत्र (प्रथम व द्वितीय अध्याय)  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *nyāya darśana mūla sūtreṃ ke prathama, dviṭīya aura ṛtīya adhyāya kā vācana।*
- *nyāya darśana mūla sūtreṃ ke prathama, dviṭīya aura dviṭīya adhyāya kā lekhana।*
- *nyāya darśana ke mūla sūtreṃ ke arthoṃ kā paricaya।*
- *nyāya kī paribhāṣā।*

सन्दर्भग्रन्थ - विद्योदय भाष्य सहित न्यायदर्शन (आचार्य उदयवीर शास्त्री जी)

**Paper -2- *vaiśeṣika darśana-1***

**Paper Code- BD-302**

(70+30=100)

**Course Objectives-**

- *vaiśeṣika darśana ke sūtroṃ kā vācana kā bodha।*
- *vaiśeṣika darśana ke sūtroṃ kā vācana kā jñāna।*
- *vaiśeṣika darśana ke sūtroṃ ke arthoṃ kā bodha।*
- *dravyādi padārthoṃ kā jñāna।*

वैशेषिक सूत्र- (1-5 अध्याय)  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *vaiśeṣika darśana ke sūtroṃ kā vācana।*
- *vaiśeṣika darśana ke sūtroṃ kā vācana।*
- *vaiśeṣika darśana ke sūtroṃ ke arthoṃ kā paricaya।*
- *dravyādi padārthoṃ kā paricaya।*

सन्दर्भग्रन्थ - वैशेषिक दर्शन - आचार्य उदयवीर शास्त्री।

## Paper -3- saṃskṛta-3

### Paper Code- BD-303

(70+30=100)

#### Course Objectives-

- *buddhacaritam ke 9-12 sarga kā jñāna*
- *mudrārāṅgasam prathama aṅka kā sāmānya bodha*
- *kāraṅgīya sabhī gaṇoṃ se 20 dhāturūpa aura 20 śabdārūpa kā jñāna*
- *kāraṅgīya, racanānūvāda kaumudī kā (1-30) adhyāya kā lekhana kā bodha*

साहित्य

बुद्धचरितम्- 9-12 सर्ग

मुद्राराक्षसम् - प्रथम अंक

व्याकरण - कारकीय, सभी गणों से 20 धातुरूप, 20 शब्दरूप

रचनानुवाद कौमुदी (1-30 अध्याय)

#### Course Outcomes-

- *buddhacaritam ke 9-12 sarga kā paricaya*
- *mudrārāṅgasam prathama aṅka kā sāmānya paricaya*
- *kāraṅgīya sabhī gaṇoṃ se 20 dhāturūpa aura 20 śabdārūpa kā paricaya*
- *kāraṅgīya, racanānūvāda kaumudī kā (1-30) adhyāya kā lekhana*

सन्दर्भग्रन्थ - कारकीय, रचनानुवादकौमुदी।

**Paper -4- hindī-3**  
**Paper Code- BD-304**

(70+30=100)

**Course Objectives-**

- *kabīra- kabīra kī sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, kabīra kā samāja-darśana, bhakti bhāvanā, kabīra kī bhāṣā kā bodha!*
- *sūradāsa- sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, sūra kā vātsalya varṇana, śṛṅgāra varṇana- saṃyoga evaṃ viyoga, sūra kā bhramara gīta, sūra kī bhakti bhāvanā, kāvya kalā kā jñāna!*
- *tulasīdāsa- sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, tulasī kī bhaktibhāvanā, tulasī kā samanvaya, tulasī kā loka maṅgala, kāvya kalā kā bodha!*
- *maithilīśaraṇa gupta- sāhityika paricaya, rāṣṭrīyatā, sāhityika viśeṣatāoṃ kā jñāna!*

पाठ्य पुस्तक- 1. प्राचीन एवं मध्यकालीन हिन्दी कविता, सम्पादक- डॉ० सुरेन्द्र कुमार

2. आधुनिक हिन्दी कविता सम्पादक- डॉ० सुरेन्द्र कुमार

निर्धारित कवि- कबीरदास, सूरदास, तुलसीदास, जयशंकर प्रसाद, सूर्यकान्त त्रिपाठी, मैथिलीशरण गुप्त।

इकाई-1 कबीर- कबीर की साहित्यिक रचनाएँ एवं उनकी साहित्यिक विशेषताएँ, कबीर का समाज-दर्शन, भक्ति भावना, कबीर की भाषा।

इकाई-2 सूरदास- साहित्यिक रचनाएँ एवं उनकी साहित्यिक विशेषताएँ, सूर का वात्सल्य वर्णन, शृंगार वर्णन- संयोग एवं वियोग, सूर का भ्रमर गीत, सूर की भक्ति भावना, काव्य कला।

इकाई-3 तुलसीदास- साहित्यिक रचनाएँ एवं उनकी साहित्यिक विशेषताएँ, तुलसी की भक्तिभावना, तुलसी का समन्वय, तुलसी का लोक मंगल, काव्य कला।

इकाई-4 जयशंकर प्रसाद- साहित्यिक परिचय, छायावाद के प्रवर्तक, काव्य कला सौन्दर्य चेतना।

इकाई-5 सूर्यकान्त त्रिपाठी 'निराला'- साहित्यिक परिचय, वैविध्य के कवि, काव्यगत विशेषताएं, प्रगतिशील चेतना और निराला।

इकाई-6 मैथिलीशरण गुप्त- साहित्यिक परिचय, राष्ट्रीयता, साहित्यिक विशेषताएं।

**Course Outcomes-**

- *kabīra- kabīra kī sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, kabīra kā samāja-darśana, bhakti bhāvanā, kabīra kī bhāṣā kā paricaya!*
- *sūradāsa- sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, sūra kā vātsalya varṇana, śṛṅgāra varṇana- saṃyoga evaṃ viyoga, sūra kā bhramara gīta, sūra kī bhakti bhāvanā, kāvya kalā kā vivaraṇa!*
- *tulasīdāsa- sāhityika racanāem̃ evaṃ unakī sāhityika viśeṣatāem̃, tulasī kī bhaktibhāvanā, tulasī kā samanvaya, tulasī kā loka maṅgala, kāvya kalā kā paricaya!*
- *maithilīśaraṇa gupta- sāhityika paricaya, rāṣṭrīyatā, sāhityika viśeṣatāoṃ kā vivaraṇa!*

सहायक ग्रन्थ- 1. कबीर मीमांसा - डॉ० रामचन्द्र तिवारी, कबीर एक नयी दृष्टि- डॉ० रघुवंश, कबीर-हजारीप्रसाद द्विवेदी, सूरदास- डॉ० हरवंश लाल शर्मा, सूर की सांस्कृतिक चेतना और उनका युगबोध- डॉ० सन्तराम वैश्य।

## Paper -5- COMMUNICATIVE ENGLISH -3

### Paper Code- BD-305

(70+30=100)

#### Course Objectives

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### Language :

- Writing Skills: Paragraph, Message, Circular, Editorial, Application, Email, Reprot.

#### Literature :

- Anita Desai's **The Voices in the City.**
- **Pt. Madan Mohan Malaviya.**
- **Mahatma Gandhi, (Extracts of his Speeches).**

#### Course Outcomes

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English.

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) द्वितीय वर्ष**  
**Semester -IV**

**Paper -1- nyāya darśana-2**

**Paper Code- BD-401**

(70+30=100)

**Course Objectives-**

- *nyāyadarśana-2 ke tṛtīya adhyāya kā bodha /*
- *nyāyadarśana-2 ke caturtha adhyāya kā jñāna /*
- *nyāyadarśana-2 ke pa×cama adhyāya kā bodha /*
- *nyāyadarśana-2 ke tṛtīya, caturtha, pa×cama adhyāya ke sūtrārtha kā bodha /*  
न्याय सूत्र- तृतीय, चतुर्थ एवं पञ्चम अध्याय-  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *nyāyadarśana-2 ke tṛtīya adhyāya kā paricaya /*
- *nyāyadarśana-2 ke caturtha adhyāya kā paricaya /*
- *nyāyadarśana-2 ke pañcama adhyāya kā paricaya /*
- *nyāyadarśana-2 ke tṛtīya, caturtha, pañcama adhyāya ke sūtrārtha kā vācana /*

सन्दर्भग्रन्थ - विद्योदयभाष्य सहित न्यायदर्शन (आचार्य आनन्दप्रकाश जी)

**Paper -2- vaiśeṣika darśana-2**

**Paper Code- BD-402**

(70+30=100)

**Course Objectives-**

- *vaiśeṣika darśana-2 ke 06-08 adhyāya kā bodha /*
- *vaiśeṣika darśana-2 ke 09-10 adhyāya kā jñāna /*
- *vaiśeṣika sūtra-2 ke 06-08 adhyāya kā vācana va lekhana kā bodha /*
- *vaiśeṣika sūtra-2 ke 09-10 adhyāya kā vācana va lekhana kā jñāna /*  
वैशेषिक सूत्र -(6-10 अध्याय)-  
(कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय)

**Course Outcomes-**

- *vaiśeṣika darśana-2 ke 06-08 adhyāya kā paricaya /*
- *vaiśeṣika darśana-2 ke 09-10 adhyāya kā paricaya /*
- *vaiśeṣika sūtra-2 ke 06-08 adhyāya kā vācana va lekhana /*
- *vaiśeṣika sūtra-2 ke 09-10 adhyāya kā vācana va lekhana /*

सन्दर्भग्रन्थ - वैशेषिक दर्शन - आचार्य उदयवीर शास्त्री।

**Paper -3- saṃskṛta-4**

**Paper Code- BD-403**

(70+30=100)

**Course Objectives-**

- *buddhacaritam ke 13-14 sarga kā bodha /*
- *mudrārākṣasam dvitīya aṃka kā sāmānya jñāna /*
- *kārakīya sabhī gaṇoṃ se 20 dhāturūpa aura 20 śabdarūpa kā bodha /*
- *kārakīya, racanānuvāda kaumudī kā (31-60) adhyāya kā lekhana kā jñāna /*

साहित्य

बुद्धचरितम्- 13-14 सर्ग,

मुद्राराक्षसम् - द्वितीय अंक

व्याकरण - छन्द परिचय, अलंकारप्रदीप, रचनानुवाद कौमुदी (31-60 अध्याय) 20 धातुरूप

**Course Outcomes-**

- *buddhacaritam ke 13-14 sarga kā paricaya*
- *mudrārākṣasam dvitīya aṃka kā sāmānya paricaya*
- *kārakīya sabhī gaṇoṃ se 20 dhāturūpa aura 20 śabdarūpa kā paricaya /*
- *kārakīya, racanānuvāda kaumudī kā (31-60) adhyāya kā lekhana /*

सन्दर्भग्रन्थ - कारकीय, रचनानुवाद कौमुदी।

**Paper -4- hindī-4**  
**Paper Code- BD-404**

(70+30=100)

**Course Objectives-**

- *hindī gadya rūpoṃ kā sāmānya jñāna /*
- *premacāṃda prasāda mohana rākeśa bhaṃḍārī ke sāhitya kā bodha /*
- *bālakṛṣṇa bhaṭṭa ācārya rāmacāṃdra śukla hajārī prasāda dvivedī, vidyānivāsa miśra ke sāhitya kā jñāna /*
- *bhāratemdu hariścaṃdra mahādevī varmā hariśaṃkara parasāt ke sāhitya kā bodha /*

इकाई-1 : हिन्दी गद्य रूपों का सामान्य परिचय

इकाई-2 : प्रेमचंद (गोदान), प्रसाद (पुरस्कार), मोहन राकेश (मलबे का मालिक), मनु भंडारी (मैं हार गई)

इकाई-3 : बालकृष्ण भट्ट (साहित्य जन-समूह के हृदय का विकास है), आचार्य रामचंद्र शुक्ल (उत्साह), हजारी प्रसाद द्विवेदी (नाखून क्यों बढ़ते हैं), विद्यानिवास मिश्र (मेरे राम का मुकुट भीग रहा है)

इकाई-4 : भारतेन्दु हरिश्चंद्र (अंधेर नगरी), महादेवी वर्मा (घीसा), हरिशंकर परसाई (भोलाराम का जीव)

**Course Outcomes-**

- *hindī gadya rūpoṃ kā sāmānya paricaya /*
- *premacāṃda prasāda mohana rākeśa bhaṃḍārī ke sāhitya kā vivaraṇa /*
- *bālakṛṣṇa bhaṭṭa ācārya rāmacāṃdra śukla hajārī prasāda dvivedī, vidyānivāsa miśra ke sāhitya kā vivaraṇa /*
- *bhāratemdu hariścaṃdra mahādevī varmā hariśaṃkara parasāt ke sāhitya kā paricaya /*

**सहायक ग्रन्थ-**

1. हिन्दी का गद्य साहित्य - रामचंद्र तिवारी
2. हिंदी साहित्य का दूसरा इतिहास-बच्चन सिंह
3. निबंधों की दुनिया- विजयदेव नारायण साही; निर्मला जैन/हरिमोहन शर्मा
4. छायावादोत्तर हिन्दी गद्य साहित्य - विश्वनाथ प्रसाद तिवारी
5. हिन्दी रेखाचित्र- हरवंश लाल शर्मा
6. निबंधों की दुनिया- शिवपूजन सहाय; निर्मला जैन/अनिल राय।

## Paper -5- COMMUNICATIVE ENGLISH - 4

### Paper Code- BD-405

(70+30=100)

#### Course Objectives

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.]

#### Language :

- Business Letter, Letter of Enquiry, Placing Order, Replacement / Cancellation Letter Complaint Letter, Drafting Advertisement, Poster Making.

#### Literature :

- P.B. Shelley's **Ode to the West Wind.**
- **Chapter from "Light of Asia".**
- **Indian Traditional Knowledge on Environmental Conservation.**

#### Course Outcomes

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) तृतीय वर्ष**  
**Semester -V**

**Paper -1- vedānta darśana-1**

**Paper Code- BD-501**

(70+30=100)

**Course Objectives-**

- *vedānta darśana ke prathama adhyāya ke sūtreṃ ke vācana kā bodha /*
- *vedānta darśana ke prathama adhyāya ke sūtreṃ ke lekhana kā bodha /*
- *vedānta darśana ke dvitīya adhyāya ke sūtreṃ ke vācana kā jñāna /*
- *vedānta darśana ke dvitīya adhyāya ke sūtreṃ ke lekhana kā jñāna /*

वेदान्त सूत्र ( प्रथम व द्वितीय अध्याय )

( कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय )

**Course Outcomes-**

- *vedānta darśana ke prathama adhyāya ke sūtreṃ kā vācana /*
- *vedānta darśana ke prathama adhyāya ke sūtreṃ kā lekhana /*
- *vedānta darśana ke dvitīya adhyāya ke sūtreṃ kā vācana /*
- *vedānta darśana ke dvitīya adhyāya ke sūtreṃ kā lekhana /*

सन्दर्भग्रन्थ - वैदिक मुनिभाष्य

**Paper -2- mīmāṃsā darśana-1**

**Paper Code- BD-502**

(70+30=100)

**Course Objectives-**

- *mīmāṃsā darśana kā jñāna /*
- *mīmāṃsā darśana ke ācāryaṃ kā bodha /*
- *catuṣsūtrī ke vācana kā bodha /*
- *catuṣsūtrī ke lekhana kā bodha /*

मीमांसा सूत्र- चतुस्सूत्री + 46 सूत्र, ( कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय )

**Course Outcomes-**

- *mīmāṃsā darśana kā paricaya /*
- *mīmāṃsā darśana ke ācāryaṃ kā paricaya /*
- *catuṣsūtrī kā vācana /*
- *catuṣsūtrī kā lekhana /*

सन्दर्भग्रन्थ -मीमांसा दर्शन

**Paper -3- saṃskṛta-5**

**Paper Code- BD-503**

(70+30=100)

**Course Objectives-**

- *śukanāśopadeśa ke yauvana avasthā kā varṇana kā jñāna /*
- *mudrārākṣasam ke tṛtīya aṃka kā bodha /*
- *prakṛti pratyaya kā nirūpaṇa kā jñāna /*
- *nibandha lekhana kā bodha /*

साहित्य – शुकनासोपदेश

मुद्राराक्षसम्- तृतीय अंक

व्याकरण- प्रत्यय निरूपणम्, संक्षिप्त धातुकोष, पत्रलेखन, निबन्ध माला।

**Course Outcomes-**

- *śukanāśopadeśa ke yauvana avasthā kā varṇana /*
- *mudrārākṣasam ke tṛtīya aṃka kā paricaya /*
- *prakṛti pratyaya kā nirūpaṇa /*
- *nibandha lekhana kā paricaya*

सन्दर्भग्रन्थ – रचनानुवाद कौमुदी।

**Course Objectives-**

- *vijñāpana: svarūpa evaṃ avadhāraṇā kā jñāna /*
- *vijñāpanaḥ vividha mādhyama kā vivaraṇa kā bodha /*
- *vijñāpana kī bhāṣā kā jñāna /*
- *vijñāpana-nirmāṇa kā abhyāsa kā bodha /*

**इकाई-1 : विज्ञापन : स्वरूप एवं अवधारणा**

विज्ञापन : अर्थ व परिभाषा। विज्ञापन का महत्त्व। विज्ञापन के सामाजिक तथा व्यावसायिक उद्देश्य, मार्केटिंग और ब्रांड-निर्माण विज्ञापन के नए संदर्भ, प्रायोजित कार्यक्रम।

**इकाई-2 : विज्ञापन: विविध माध्यम**

सामान्य परिचय। विज्ञापन माध्यम का चयन। प्रिंट, रेडियो एवं टेलीविजन के लिए कॉपी लेखन।

**इकाई-3 : विज्ञापन की भाषा**

विज्ञापन की भाषा का स्वरूप। विज्ञापन की भाषागत विशेषताएँ। विज्ञापन की भाषा के विभिन्न पक्ष- सादृश्य विधान, अलंकरण, तुकांतता, समानांतरता, विचलन, मुहावरे-लोकोक्तियाँ, भाषासंकर, हिन्दी विज्ञापनों की भाषा।

**इकाई-4 : विज्ञापन-निर्माण का अभ्यास**

प्रिंट माध्यम : वर्गीकृत एवं सजावटी विज्ञापन-निर्माण। रेडियो जिंगल लेखन। टेलीविजन के स्टोरी बोर्ड निर्माण।

**Course Outcomes-**

- *vijñāpana: svarūpa evaṃ avadhāraṇā kā paricaya /*
- *vijñāpanaḥ vividha mādhyama kā vivaraṇa /*
- *vijñāpana kī bhāṣā kā paricaya /*
- *vijñāpana-nirmāṇa kā abhyāsa kā paricaya*

**सहायक ग्रन्थ-**

1. जनसंपर्क, प्रचार एवं विज्ञापन- विजय कुलश्रेष्ठ
2. जनसंचार माध्यम : भाषा और साहित्य- सुधीश पचौरी
3. डिजिटल युग में विज्ञापन - सुधा सिंह, जगदीश्वर चतुर्वेदी।

## **Paper -5- Communicative English -5**

### **Paper Code- BD-505**

(70+30=100)

#### **Course Objectives**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach.

#### **Language :**

- Unseen Passage, Comprehension, Note Making, Summarizing, Referring to Encyclopaedia, Dictionary, thesaurus, academic reading material, Debate, Speech, Article, Paragraph.

#### **Literature :**

- Chanakya
- Ramanujan
- **Oscar Wild's The Importance of Being Earnest (Act I)**

#### **Interview Training Program :**

- GD, Personal Interview, Presentation.

#### **Course Outcomes**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English

**पतञ्जलि विश्वविद्यालय, हरिद्वार**  
**पाठ्यक्रम - B.A. /ऑनर्स ( दर्शन ) तृतीय वर्ष**  
**Semester -VI**

**Paper -1- vedānta sūtra (Check This)**  
**Paper Code- BD-601**

(70+30=100)

**Course Objectives-**

- *vedānta sūtra ke dvitīya adhyāya kā bodha /*
- *vedānta darśana ke caturtha adhyāya kā jñāna /*
- *vedānta darśana ke tṛtīya adhyāya ke lekhana kā bodha /*
- *vedānta darśana ke caturtha adhyāya ke vācana kā jñāna /*

**प्रश्नपत्र- ( 1 ) वेदान्त दर्शन-2**

वेदान्त सूत्र- ( तृतीय व चतुर्थ अध्याय )

( कण्ठस्थीकरण, सूत्रार्थ एवं अध्यायगत विषय परिचय )

**Course Outcomes-**

- *vedānta sūtra ke dvitīya adhyāya kā paricaya /*
- *vedānta darśana ke caturtha adhyāya kā paricaya /*
- *vedānta darśana ke tṛtīya adhyāya kā lekhana /*
- *vedānta darśana ke caturtha adhyāya kā vācana /*

**सन्दर्भग्रन्थ - वैदिक मुनि भाष्य**

**Paper -2- nighaṇṭu**

**Paper Code- BD-602**

(70+30=100)

**Course Objectives-**

- *nighaṇṭu ke 1 se 5 adhyāya kā vācana kā bodha /*
- *nighaṇṭu ke 1 se 5 adhyāya kā vācana kā jñāna /*
- *nighaṇṭu ke 1 se 2 adhyāya kā śabdārthabodha /*
- *nighaṇṭu ke 3 se 5 adhyāya kā śabdārthabodha /*

निघण्टु 1 से 5 अध्याय  
प्रथम व द्वितीय अध्याय,  
(कण्ठस्थीकरण एवं शब्दार्थ बोध)

**Course Outcomes-**

- *nighaṇṭu ke 1 se 5 adhyāya kā vācana /*
- *nighaṇṭu ke 1 se 5 adhyāya kā vācana /*
- *nighaṇṭu ke 1 se 2 adhyāya kā śabdārthabodha /*
- *nighaṇṭu ke 3 se 5 adhyāya kā śabdārthabodha /*

सन्दर्भग्रन्थ -निघण्टु

## Paper -3- saṃskṛta-6

### Paper Code- BD-603

(70+30=100)

#### Course Objectives-

- *raghuvamśam ke prathama sarga meṃ rājā dilīpa kā viśiṣṭa ke āśrama meṃ jāne ke vivaraṇa kā bodha /*
- *nandinī gāya dvārā rājā dilīpa ko putra varadāna kā jñāna /*
- *mudrārājasam ke caturtha aṅka kā sāmānya bodha /*
- *saundaranandam prathama, dvitīya sarga kā sāmānya jñāna /*

साहित्य - रघुवंशम् (प्रथम सर्ग)

मुद्राराक्षसम्- चतुर्थ अंक

सौन्दरनन्दम्- प्रथम, द्वितीय सर्ग

व्याकरण- अनुवाद

#### Course Outcomes-

- *raghuvamśam ke prathama sarga meṃ rājā dilīpa kā viśiṣṭa ke āśrama meṃ jāne kā vivaraṇa /*
- *nandinī gāya dvārā rājā dilīpa ko putra varadāna kā varṇana /*
- *mudrārājasam ke caturtha aṅka kā sāmānya vivaraṇa /*
- *saundaranandam prathama, dvitīya sarga kā sāmānya vivaraṇa /*

सन्दर्भग्रन्थ - रचनानुवाद कौमुदी।

**Course Objectives-**

- *kampyūṭara kā vikāsa aura hindī kā bodha /*
- *hindī bhāṣā aura praudyogikī kā jñāna /*
- *hindī bhāṣā, kampyūṭara aura gavarnēṃsa kā bodha /*

**इकाई-1 : कम्प्यूटर का विकास और हिन्दी**

कम्प्यूटर का परिचय और विकास। कम्प्यूटर में हिन्दी का आरम्भ एवं विकास। हिन्दी के विविध फॉन्ट। कम्प्यूटर में हिन्दी की चुनौतियाँ और संभावनाएँ।

**इकाई-2 : हिन्दी भाषा और प्रौद्योगिकी**

इंटरनेट पर हिन्दी।  
यूनिकोड, देवनागरी लिपि और हिन्दी भाषा।  
हिन्दी और वेब डिजाइनिंग।  
हिन्दी की वेबसाइट्स।

**इकाई-3 : हिन्दी भाषा, कम्प्यूटर और गवर्नेंस**

राजभाषा हिन्दी के प्रसार में कम्प्यूटर की भूमिका।  
ई-गवर्नेंस, इंटरनेट।  
एस.एम.एस.(लघुसंदेश सेवा) की हिन्दी।  
न्यू मीडिया और हिन्दी भाषा।  
हिन्दी के विभिन्न की-बोर्ड।

**Course Outcomes-**

- *kampyūṭara kā vikāsa aura hindī kā paricaya /*
- *hindī bhāṣā aura praudyogikī kā vivaraṇa /*
- *hindī bhāṣā, kampyūṭara aura gavarnēṃsa kā paricaya /*

**सहायक ग्रन्थ-**

1. कम्प्यूटर के भाषिक अनुप्रयोग - विजय कुमार मल्होत्रा।
2. कम्प्यूटर और हिन्दी - हरिमोहन।
3. ऑनलाइन मीडिया - श्री सुरेशकुमार (आजतक के उपसम्पादक)
4. इंटरनेट पत्रकारिता - श्री सुरेशकुमार (आजतक के उपसम्पादक)

## **Paper -5- COMMUNICATIVE ENGLISH -6**

### **Paper Code- BD-605**

(70+30=100)

#### **Course Objectives**

- Develop the students' abilities in grammar, oral skills, reading, writing and study skills
- Students will heighten their awareness of correct usage of English grammar in writing and speaking
- Students will improve their speaking ability in English both in terms of fluency and comprehensibility
- Students will give oral presentations and receive feedback on their performance
- Students will increase their reading speed and comprehension of academic articles
- Students will improve their reading fluency skills through extensive reading
- Students will enlarge their vocabulary by keeping a vocabulary journal
- Students will strengthen their ability to write academic papers, essays and summaries using the process approach..

**Language :** Oral Practice, Role Play, GD, Listening to recorded passage, Reading Comprehension, MCQ.

#### **Literature :**

- **Guru Govind Singh.**
- **Ayurveda of Life (Article).**
- **Oscar Wild's The Importance of Being Earnest (Act II and Act III)**

#### **Interview Training Program :**

- CV, Resume, H R, Telephonic Interview.

#### **Course Outcomes**

- Produce words with right pronunciation
- Develop vocabulary and improve the accuracy in grammar
- Develop the confidence to speak in public
- Demonstrate positive group communication exchanges.
- Ability to speak and write clearly in standard, academic English.

**UNIVERSITY OF PATANJALI  
HARIDWAR**



**DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS  
UNDER GRADUATE PROGRAM  
Bachelor in Physical Education and Sports  
(B.P.E.S)  
SYLLABUS 2017-18**



**Preamble:**

Physical Education is a form of one of the most effective means of education imparted through physical exercises, recreational activities and sports. It is an integral part of education. Which by mere participation in it gives the outcomes? These outcomes are both instant as well as have strong carry over values in the life. The children as well as the adults and the old enjoy physical activities & sports and gets benefit in the form of stronger muscles and bones, increased energy, coordination level and most importantly the decreased risk of developing chronic diseases. The UNESCO in its General Conference in 1978 was convinced that, everyone should be free to develop and preserve his or her physical, intellectual and moral powers. Physical Education and Sport should consequently be assured and guaranteed for all human beings. Physical Education is now a regular feature in the primary and secondary schools as well as it is gaining popularity in the higher education. The course opted for this is elective as well as the core at the college and the university level in India. The graduate level course in Physical Education and Sports contains subjects varying from foundation of Physical Education to Anatomy, Physiology, Kinesiology, Officiating & coaching, Test & Measurement, Nutrition, Rehabilitation, Psychology, Sports Training, Sports Biomechanics, Methods of Teachings etc. which are aimed to give thorough knowledge and skills to the students. Students perusing physical education courses are fit to join the jobs as physical trainers, coaches, game officials, referees, umpires, curators, gym trainers, lifeguards, personal trainers etc. During their course of education the students also develops the expertise to establish their own business as entrepreneurs in the field of sports, fitness, recreation, adventure sports, Camping, event management etc.

**Aims of the Bachelor's degree program in Physical Education**

Physical education is not only concerned with the physical outcome that

accrue from participation in physical activities but also the development of knowledge and attitude conducive to lifelong learning and participation in motor activities. The overall aim of bachelor's degree program in Physical Education is;

1. The acquisition and refinement of motor skills,
2. To equip the students with the scientific knowledge of body response to various types of exercise.
3. Maintenance of fitness for optimal health and well being,
4. Attainment of knowledge and the growth of positive attitude towards physical activity and sports.

### **Nature and extent of the B.P.E.S degree program**

Physical Education is normally referred to as the science that aims to develop all-inclusive aspects of human personality through physical and sports activities. Physical education practical, Is a Multidisciplinary subject that cannot be studied in seclusion under the scope of one or two subjects. The scope of Physical Education as a subject is very broad. It caters to the need for developing capability of the students on physical, mental and social aspects. Physical education also aims to develop activity as an alternate and prophylactic medicine. The key areas of study within the Physical Education are 'Exercise Physiology, Sports Psychology, Sports Sociology, Sports Management, Sports Journalism, Kinesiology- Biomechanics, Sports Training, Sports Medicine, Kinanthropometry, yoga etc.

Degree program in Physical Education covers topics that overlap with the areas outlined above and that address the interfaces of Physical Education with other subjects such as Physiology, Bio- Chemistry, Physics, Physiotherapy, Psychology, Management, and Sociology along with training pedagogy employed for enhancing the functional status of individuals with varied needs. As a part of the effort, to enhance the employability of graduates of Physical Education, programs include learning experiences that offer opportunities in various spheres of human.

### **Program Outcomes:**

## **Program Specific Outcomes of Bachelor's Degree Program in Physical Education**

After successful completion of the program, an individual will be able to :

**PO-1** Interpret practical and sports skills required for physical education  
Development

**PO-2** Able to officiate in the tournaments

**PO-3** Able to understand functioning of various internal organs of the human  
body.

**PO-4** Appraise food safety and prevention of injury to maintain a safe and  
health Environment

**PO-5** Able to applicant and interpret ant of applied psychology

**PO-6** Develop long write goals and strategies that the action needed to each  
year to meet the objectives

**PO-7** To conduct the rehabilitation program for the players and society

**PO-8** Able to take anthropometric measurement in the field of sports and  
physical Education

**PO-9** Able to help responsible authorities during natural disaster in their  
Management.

## **Program Specific Objectives**

### **Program Specific Objectives of Bachelor's Degree Program in Physical Education.**

- To enable students to understand history, philosophy, values, ethics and functions of Physical Education profession, and its linkages with other social science& science disciplines;
- To equip students with knowledge on core and ancillary methods of professional work, and its practice base;
- To inculcate in the student's values of enquiry and research; and thereby develop problem solving and decision making abilities;

- To prepare professionals to practice in diverse field settings and also address contemporary issues and concerns such as of games and sports;
- To make learners- the young professionals sensitive to the needs of the people at individuals, group and community levels and to social problems in changing social, cultural and techno-economic context;
- To develop young professionals with good communication skills and quest for a self-motivated life-long learning, focusing on skilling and re-skilling in their respective field of Physical Education.

### **Program Specific Outcomes (PSOs)**

## **Program Specific Outcomes of Bachelor's Degree Program in Physical Education.**

The learning and abilities or skills that a student would have developed by the end of three-year **B.P.E.S. (three Year Degree Program):**

- PSO-1** Remembering and Understanding the concepts, theories, functions, structures, terminology and skills of physical education and sports sciences.
- PSO-2** Applying and demonstrating various concepts, theories, procedures and skills in different sports situations.
- PSO-3** Analyzing and relating the valuable knowledge about the Health, related issues various communicable disease, its preventive measures, Nutrition, its role in weight management and healthy life..
- PSO-4** Evaluating and measuring the important methods used for teaching in Physical Education.
- PSO-5** Creating and designing research problem, training sessions, diet plans.

### **I. ELIGIBILITY:**

1. Candidate who has passed +2 Examination with minimum 50% any other examination as equivalent thereto.
2. Preference will be given to those candidates who are sportsman or had participated in Co-curricular Activities.

## II. AGE:

- i) No student who has crossed the age of 23 years as on 1<sup>st</sup> July of the relevant year will be allowed admission to B.P.E.S. (Bachelor of Physical Education & Sports 3 Years Course) However, the vice-chancellor, University of Patanjali, Haridwar has the power to relax the upper age limit by 6 months on the recommendation of the Head of the Institution.
- ii) The upper age limit can be relaxed by 3 years in the case of SC and ST candidates.

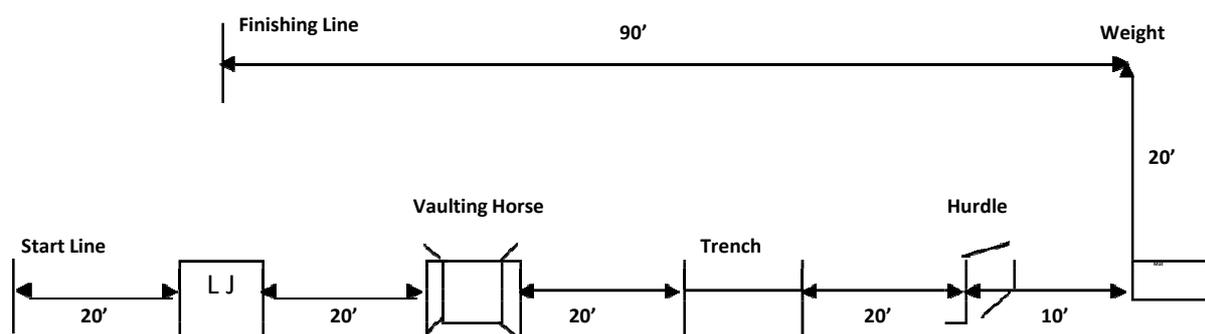
## III. PHYSICAL EFFICIENCY TEST:

The candidate for admission to B.P.E.S shall have to qualify the physical efficiency test conducted by the concerned college through the Principal. The details of the test are given as under:

ITEM	MEN	WOMEN	
Long Jump	10'	8'	Report against the end line within 35 seconds. Carrying weight equal to half of his/her own body weight in buckets
Vaulting horse	5'	4'	
Trench (7 Times)	5'	4'	
Hurdle	3'	2'	
Mat (1-Front Roll)			

# The candidate will start running from the starting line, cover the distance/obstacles as per the requirements of the chart. In case the candidate does not cover the required distance/obstacles within 35 seconds, he will be declared unfit for qualifying the Physical Efficiency Test. Not more than two chances will be given to clear Physical Efficiency Test.

## DIAGRAM OF PHYSICAL EFFICIENCY TEST



**Note:-** i) Any candidate who has appeared in qualifying examination can appear in the Physical Efficiency Test but his/her candidature for admission will be considered only if the candidate produces the qualifying examination original certificate at the time of personal interview in addition to other Academic/Sports Certificates authenticated by the concerned state agencies/authorities.

ii) The physical efficiency test is only qualifying test for the admission in BPES No marks will be awarded for this test.

### IV. ADMISSION PROCEDURE:

After qualifying physical efficiency test being conducted by concerned by The H.O.D. of The University of Patanjali'

The admission will be made on merit to be determined on the basis of total percentage of marks in qualifying examination + the weight age of the overall achievement in different sports/games given as under:

#### 1. Senior National:

1 <sup>st</sup> Position	50 Points
2 <sup>nd</sup> Position	45 Points
3 <sup>rd</sup> Position	40 Points
Participation	30 Points

#### 2. Junior National/School National:

1 <sup>st</sup> Position	35 Points
2 <sup>nd</sup> Position	30 Points
3 <sup>rd</sup> Position	25 Points
Participation	20 Points

### 3. State Level:

1 <sup>st</sup> Position	25 Points
2 <sup>nd</sup> Position	20 Points
3 <sup>rd</sup> Position	15 Points
Participation	10 Points

### 4. District/School Level:

1 <sup>st</sup> Position	20 Points
2 <sup>nd</sup> Position	15 Points
3 <sup>rd</sup> Position	10 Points
Participation	5 Points

**Note:-** The weightage of achievement in sports/games shall be given to only those sports/games which are approved and recognized by University of Patanjali, Haridwar Sports and Co-Curricular Activity Council.

## V. EXAMINATION

### 1. Duration (Time Frame):

The UG (TDC) program for a regular student shall be for a minimum period of three years and a maximum of five years from the date of admission of the candidate. Each academic year shall comprise of two semesters, viz. Odd and Even semesters. Odd Semesters shall be from June / July to October / November and the Even Semester shall be from November / December to April / May on the dates to be notified by the Controller of Examinations.

### 2. Evaluation

Evaluation system has the following two components:-

- A. **Continuous Comprehensive Assessment (CCA)** accounting for 50% of the final grade that a student gets in a course; and
- B. **End-Semester Examination (ESE)** accounting for the remaining 50% of the final grade that the student gets in a course.

A. Continuous **Comprehensive Assessment (CCA)**: This would have the following components:

(i) **Classroom Attendance** – Each student will have to attend a minimum of 75%

Lectures / Tutorials / Practicals. A student having less than 75% attendance will not be allowed to appear in the End-Semester Examination (ESE).

- γ Provided that those having between 74% and 65% attendance will apply for exemption in a prescribed form accompanied by clear reason(s) for absence to the authorized functionaries.
- γ Provided that those having between 64% and 50% attendance will apply for exemption in a prescribed form accompanied by a Medical Certificate from a Government Hospital.
- γ Provided that exemption from 75% attendance will be given to those participating in prescribed co-curricular activities (e.g. NCC, NSS, Youth Festivals, Sports etc.) to the extent of 25% (making the necessary attendance as 50% in these cases). However, the claim for this exemption should be supported by authenticated certificate from the concerned college authorities.
- γ Provided further that those getting the exemptions, except for those getting exemptions for co-curricular activities, will not be entitled for getting the CCA marks for classroom attendance as given below.

(ii) **Classroom Attendance Incentive**: Those having greater than 75% attendance

(for those participating in Co-curricular activities, 25% will be added to per cent attendance) will be awarded CCA marks as follows:-

≥ 75% but < 80%	1 marks
≥ 80% but <85%	2 marks
≥ 85 but <90%	3 marks
≥ 90% but < 95%	4 marks
≥95%	5 marks

(iii) **Mid-Term (Minor) Tests** – There will be two mid-term tests, first after 48 teaching days (8 weeks) covering the syllabus covered so far, and second after 90 teaching

days (15 weeks) covering the syllabus after the first minor test. **Each of these mid-term tests will be for 15 marks.**

(iv) **Seminar / Assignment / Term Paper** – The remaining 15 marks of the CCA will be awarded on the basis of seminar / assignment / term paper etc. that the course teacher might give to the students.

(v) **End-Semester Examination (ESE)**: The remaining 50% of the final grade of the student in a course will be on the basis of an end-semester examination (ESE) that will be for three hours duration and will be covering the whole syllabus of the course.

γ For the Odd Semesters the ESE will be in the month of October / November and for Even Semesters it will be in the month of April / May.

γ A candidate who does not pass the examination (ESE) in any course(s) (or due to some reason is not able to appear in the ESE, other conditions being fulfilled, and so is considered as 'Fail'), shall be permitted to appear in such failed course(s)' ESE in the subsequent ESE to be held in the following October / November or April / May as the case may be.

γ The registration for the ESE will be done at the time of the enrollment for the course at the beginning of the semester. The fee for the ESE will also be collected at that time as decided by the university from time to time.

γ If a student is not permitted to appear in the ESE due to shortage of attendance beyond the exemption limit (< 50% attendance) shall be deemed to have 'dropped' the course. However such candidate, on his / her written request to be made immediately, can be permitted to redo the missed semester after completing the rest of the programme or whenever the course is offered subsequently. This redoing would mean complete course including CCA and ESE.

The question paper for the ESE will have the following pattern:

γ **Part A**

Compulsory of 18 marks consisting of 10 objective type questions (in MCQ/True False/Fill in the blanks or such type) and four short answer questions of 2 marks each covering whole of the syllabus.

γ **Part B (UNIT I)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part C (UNIT II)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part D (UNIT III)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

γ **Part E (UNIT IV)**

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be of long type

**Total marks (A + B + C + D+E)**

**18 + 8 + 8 + 8 + 8 = 50 marks.**

### OUTLINES OF SEMESTER WISE COURSES

SEMESTER-I					
S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course I	Compulsory Course Hindi	CC 101	4	Compulsory – 4  Major Core – 8  Elective – 16  <b>Total = 4 + 8 + 16 = 28</b>
2.	Major Core Course I	Human Anatomy and Physiology-I	BPE 102	4	
3.	Major Core Course II	History of Physical Education and Sports	BPE 103	4	
4.	Elective Course I	(i) Foundation of Yoga	BPE 104	4	
		Or (ii) Sports Journalism	BPE 105	4	
5.	Elective Ground Course I	Games Practicals : (on any one of the following games) 1. Volleyball 2. Kabaddi 3. Woodball 4. Badminton	BPE-P-106	4	
6.	Elective Ground Course II	General Lessons Practicals : (on any one of the following activities) 1. Marching 2. Calisthenics 3. Dumb-Bell 4. Band & Flute	BPE-P-107	4	
7.	Minor Elective Course I	Yog Practical	BPE-P-108	4	

## SEMESTER-II

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course II	Compulsory Course English	CC 201	4	Compulsory – 4
2.	Major Core Course III	Yoga and Holistic Health	BPE 202	4	Major Core – 8
3.	Major Core Course IV	Introduction to Physical Education	BPE 203	4	
4.	Elective Course II	(i) Health Education and Nutrition Or (ii) Exercise Physiology (Any One)	BPE 204 BPE 205	4	Elective – 16
5.	Elective Ground Course III	Athletics Practicals : (on any one of the following athletic events) 1. Discus Throw 2. Triple Jump 3. Hurdles 4. Middle and Long distance races	BPE-P-206	4	<b>Total = 4 +8 + 16 = 28</b>
6.	Elective Ground Course IV	Athletics Practicals : (on any one of the following athletic events) 1. Sprints 2. Long Jump 3. Shot Put 4. Relay	BPE-P-207	4	
7.	Minor Elective Course II	Yoga Practical	BPE-P-208	4	

**SEMESTER-III**

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Compulsory Course III	Environmental Science (Self Study Mode)	CC 301	4	Compulsory – 4
2.	Major Core Course V	<u>Methods of Teaching Yoga</u>	<u>BPE 302</u>	4	
3.	Major Core Course VI	Methods in Physical Education	BPE 303	4	Major Core – 8
4.	Elective Course III	(i) Fundamentals of Biomechanics in Sports Or (ii) Adapted Physical Education	BPE 304 BPE 305	4	
5.	Elective Ground Course V	Games Practicals : (on any one of the following games) 1. Kho-Kho 2. Basketball 3. Judo 4. Boxing 5. Table Tennis	BPE-P- 306	4	Elective – 16  <b>Total = 4 + 8 + 16 = 28</b>
6.	Elective Ground Course VI	Gymnastics Practicals : (on any one of the following activity) 1. Floor Exercises 2. Vaulting Horse 3. Parallel Bar 4. Balancing	BPE-P- 307	4	
4 7.	Minor Elective Course III	<u>Yoga Practical</u>	<u>BPE-P- 308</u>	4	

### SEMESTER-IV

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course VII	Remedial and Massage	BPE 401	4	Major Core – 8  Elective – 20  <b>Total = 8 + 20 = 28</b>
2.	Major Core Course VIII	Organization and Administration of Phy. Edu.	BPE 402	4	
3.	Elective Course IV	(i) Basis of Yoga Therapy Or (Any One) (ii) Officiating and Coaching	BPE 403  BPE 404	4	
4.	Elective Course V	Specialization in the Games : (on any one of the following games) 1. Woodball 2. Kabaddi 3. Judo 4. Badminton	BPE 405 BPE 406 BPE 407 BPE 408	4	
5.	Elective Ground Course VII	General Lessons Practicals : (on any one of the following athletic events) 1. Class Formation 2. Lazium 3. Indian Clubs & Rings 4. Aerobics	BPE-P- 409	4	
6.	Elective Ground Course VIII	Gymnastics Practicals : (on any one of the following athletic events) 1. Uneven Bar (for Women) 2. Rhythmic Gymnastics (for Women) 3. Horizontal Bar (for Men) 4. Pomell Horse (for Men)	BPE-P-410	4	

7.	Minor Elective Course IV	Yoga Practical	BPE-P-411	4
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<b>SEMESTER-V</b>					
<b>S.N.</b>	<b>Course</b>	<b>Course Name</b>	<b>Course Code</b>	<b>Credit</b>	<b>Cumulated Credits Category wise</b>
1.	Major Core Course IX	Kinesiology	BPE 501	4	Major Core – 12
2.	Major Core Course X	Fundamental of Sports Training	BPE 502	4	
3.	Major Core Course XI	Common Sports Injuries Prevention and Cure	BPE 503	4	Elective – 16
4.	Elective Course VI	Specialization in the Game : (on any one of the following games) 1. Kho-Kho 2. Basketball 3. Boxing 4. Taekwondo	BPE 504 BPE 505 BPE 506 BPE 507	4	
5.	Elective Ground Course IX	Games Practical : (on any one of the following games) 1. Cricket 2. Handball 3. Taekwondo 4. Weightlifting 5. Football	BPE-P- 508	4	<b>Total = 12 + 16 = 28</b>
6.	Elective Ground Course X	Athletics Practicals : (on any one of the following athletic events) 1. High Jump 2. Hammer Throw 3. Javelin 4. Competitive walking	BPE-P- 509	4	
7.	Minor Elective Course V	Yoga Practical	BPE-P- 510	4	

**SEMESTER-VI**

S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course XII	Fundamental of Computer Application in Physical Education	BPE 601	4	Major Core – 12  Elective – 16  <b>Total = 12 + 16 = 28</b>
2.	Major Core Course XIII	Sports Psychology	BPE 602	4	
3.	Major Core Course XIV	Test, Measurement & Evaluation	BPE 603	4	
4.	Elective Course VII	Specialization in the Games : (on any one of the following games) 1. Yoga 2. Hand Ball 3. Volley Ball 4. Foot Ball	BPE 604 BPE 605 BPE 606 BPE 607	4	
5.	Elective Ground Course XI	Marking & Officiating in any Two Games (Covered in course contents of Semester I-V)	BPE-P- 608	4	
6.	Elective Ground Course XII	Marking & Officiating in Athletics  (i.e. one track event & one field event covered in course contents of Semester I-V)	BPE-P- 609	4	
7.	Minor Elective Course VI	Fundamental of Computer Application in Physical Education Practical	BPE-P- 610	4	

## **COURSE CONTENTS IN DETAIL**

### **SEMESTER-1**

**COURSE CODE:CC101**

**(COMPULSORY COURSE-I)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **HINDI**

#### **COURSE OBJECTIVES:**

1. Understand the aspects of linguistic behavior in Hindi language.
2. Understand the position and content of Hindi language taught at secondary level.
3. Understand the constitutional provisions and historical preview of Hindi language.
4. Understand the role of Hindi in India; in nation and in International arena.
5. Understand and develop linguistic systems and other language skills of Hindi language used in classroom teaching.
6. Understand the use of different strategies used in Hindi teaching.

#### **THE COURSE LEARNING OUTCOMES (COs):**

**CO-1.**The students are able to get an in-depth knowledge of this ancient Indian language and its literature.

**CO-2.**The students must get an overview about the poetry grammar and history of its literature.

## हिंदी भाषा और साहित्य :

- क. आधुनिक भारतीय भाषाओं का उद्भव और विकास
- ख. हिंदी भाषा का परिचय एवं विकास
- ग. हिंदी साहित्य का इतिहास, आदिकाल, मध्यकाल : सामान्य परिचय
- घ. हिंदी साहित्य का इतिहास, आधुनिक काल : सामान्य परिचय

### पाठ्य-विषय -

#### 01. हिन्दी ध्वनियों का स्वरूप -

- क. स्वर और व्यंजन
- ख. संज्ञा, सर्वनाम, क्रिया, विशेषण
- ग. वाक्य संरचना

#### 02. उपसर्ग, प्रत्यय

03. हिन्दी शब्द संरचना - पर्यायवाची, समानार्थक, विलोमार्थक, अनेक शब्दों के स्थान पर एक शब्द समूहार्थक शब्दों के प्रयोग, निकटार्थी शब्दों के सूक्ष्म अर्थ-भेद, समानार्थक शब्दों के भेद।

#### 04. लिंग विधान और कारक प्रयोग -

- क. वर्तनी।
- ख. विरामादि चिन्हों के प्रयोग।
- ग. मुहावरे और लोकोत्तियों तथा उनके रचनात्मक प्रयोग।

05. निबन्ध - निबन्ध की परिभाषा, हिन्दी निबन्ध लेखन महत्व, निबन्ध का अंग, निबन्ध के प्रकार, निबन्ध की विशेषता।

#### सन्दर्भ

- 01. राजभाषा हिंदी - गोविन्ददास - हिन्दी साहित्य सम्मेलन, प्रयाग।
- 02. राष्ट्रभाषा आन्दोलन- गोपाल परशुराम- महाराष्ट्र सभा।
- 03. आधुनिक हिन्दी व्याकरण एवं रचना- वासुदेव नन्दन प्रसाद, पटना।
- 04. हिन्दी शब्द मीमांसा- किशोरी प्रसाद बाजपेयी।
- 05. हिन्दी का सामान्य ज्ञान भाग-2, हरदेव बाहरी, लोकभारती, इलाहाबाद।
- 06. शुद्ध हिन्दी- जगदीश प्रसाद कौशिक।
- 07. अच्छी हिन्दी- रामचन्द्र वर्मा।
- 08. निबन्ध के रूप और तत्व- देवमित्र।
- 09. हिन्दी साहित्य का इतिहास- आचार्य रामचन्द्र शुक्ल।
- 10. सामान्य हिन्दी- अरिहन्त पब्लिकेशन पृथ्वीनाथ सिंह।

**COURSE CODE: BPE102**

**(MAJOR COURSE-I)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **HUMAN ANATOMY AND PHYSIOLOGY-I**

#### **Objectives:-**

- Fundamentals of Anatomy & Physiology gives students in-depth instruction in the organization, structures, and functions of the human body.
- Students will learn the terminology, anatomy and physiology, and pathology of each body system and how they interrelate to maintain homeostasis.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will

be learning and able to do/perform the following.....

**CO-1.**Describing the concept, need and importance of anatomy and physiology in physical education.

**CO-2.**Describing and define the cell, tissue, organs and systems.

**CO-3.**Explaining the circulatory systems and its functions.

**CO-4.**Describing the respiratory systems and its functions.

**CO-5.**Explainingthe digestive systems and its functions.

#### **Unit-I Introduction: (14 Hours)**

1. Meaning and Concept of Anatomy & Physiology.
2. Its importance in the field of physical education and sports.
3. Meaning and definition of cell, tissue, organ and system.
4. Microscopic structure and functions of cell.
5. Properties of living cell.

#### **Unit-II Skeletal System: (16 Hours)**

1. General structure of bone, classification of bones and functions of the bones.
2. Location of various bones in skeleton.
3. Joints, their structure and classification.

#### **Unit-III Muscular System: (15 Hours)**

1. Meaning of muscle.
2. Various types of muscle, their structure and functions.

3. Microscopic structure of skeletal muscle.
4. Mechanism of muscular contraction of skeletal muscle.

**Unit-IV      Cardiovascular System:    (15 Hours)**

1. Heart, its location, structure and function.
2. Major blood vessels of the body.
3. Mechanism of blood circulation.
4. Systemic, pulmonary and coronary circulatory.
5. Blood pressure, cardiac output, cardiac cycle, heart rate, pulse rate and athletes heart.

**Reference Books:**

1. Pearce E., "Anatomy and Physiology for Nurses." Delhi Oxford University Press 1989.
2. Parrot, J.W. , "Anatomy for the students and teachers of Physical Education." London Edward Arnold Ltd. 1973.
3. Miller, A. and Leavel L.C., "Kimber-Grey-Stack pole's, Anatomy and Physiology." Amerind Publishing Co. Pvt. Ltd. New Delhi, Bombay, Calcutta, new York 1973.
4. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers Ludhiana Second revised addition 2008.
5. Grays Anatomy.
6. Characids, B.D., " Handbook of General Anatomy." CAS Publication, New Delhi.
7. Fox, E.L, "Physiological Basis of Physical Education and Athletic" Brown Publication, 1989.

## SEMESTER-I

COURSE CODE:BPE103

(MAJOR COURSE-II)

Credit:

4Marks:(ESE=70+CCA=30)=100

### HISTORY OF PHYSICAL EDUCATION AND SPORTS

#### Learning Objectives

- -This aims to develop the students into better-rounded, balanced individuals.
- -Including martial arts and self-defense.
- -Not only do these activities capture the interest of the students
- They also promote their safety and well-being.
- -This is a practical improvement on the usual Physical Education program.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Describing the meaning, definition, need, scope, and historical perspective of physical education.

**CO-2.** Describe and define the aims and objectives of physical education.

**CO-3.** Explaining the development of physical education at the global level.

**CO-4.** Interpreting the philosophical aspect of physical education.

**CO-5.** Explaining the sports institution in India before and after independence.

**CO-6.** Classifying the different committees and schemes in the field of physical education.

**CO-7.** Discussing the different awards and honors.

#### **Unit-I History of Physical Education in India in Ancient Period: (13 Hours)**

1. Physical education in Indus Valley civilization (3250BC – 2500 BC).
2. Physical Education in Vedic Period (2500 BC – 600 BC).
3. Physical Education in Early Hindu Period (600 BC – 320 AD).
4. Physical Education in Later Hindu Period (320 AD – 1000 AD).
5. Physical Education in Medieval Period (100 AD – 1757 AD).

#### **Unit-II History of Physical Education in Pre & Post Independence Era in India:**

(15 Hours)

1. Physical Education during British Period (till 1947).
2. Physical Education in India after independence.

3. Kothari Commission and its recommendation.
4. National policy on Education (1986).
5. Role of the following organization in promoting Physical Education and Sports:
  - a. Y.M.C.A.
  - b. S.N.I.P.E.S.
  - c. L.N.I.P.E.
  - d. N.S.N.I.S.
  - e. S.A.I.

**Unit-III Historical Perspective of Physical Education World Wide: (15 Hours)**

1. Physical Education in Rome.
2. Physical Education in Germany.
3. Physical Education in USA.
4. Physical Education IN English.
5. Physical Education in Japan.
6. Physical Education in China.

#### **Unit-IV Historical Perspective of Physical Education with special reference to Greece**

(17 Hours)

1. Physical Education in Athens.
2. Ancient Olympic Movement.
3. Modern Olympic Games.
  - a. Olympic Motto
  - b. Governing body
  - c. Olympic torch and flag
  - d. Opening ceremony
  - e. Awards
  - f. Closing ceremony

#### **Reference Books:**

1. Kamlesh M.L., "Physical Education, Facts and foundations" Faridabad P.B. Publications.
2. Barrow Harold M., "Man and movements principles of Physical Education" 1978.
3. Ravanes R.S., "Foundation of Physical Education" Houghton Millin Co. Boston USA(1978)
4. Krishana Murthy V. and Paramesara Ram, N., "Educational Dimensions of Physical Education", 2<sup>nd</sup> Revised edition, Print India, New Delhi 1990.
5. Singh Ajmer et.al., "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised Addition 2008.
6. Deleh V.A., "World History of Physical Education", prentice Hall Inc.
7. HallInc.

**SEMESTER-I**

**COURSECODE:BPE-104**

**(ELECTIVECOURSE-I)**

**Credit: 4Marks:(ESE=70+CCA=30)=100**

**Foundation of Yoga**

**Objectives:** Following the completion of this course, students shall be able to..

- Understand the basic principles of Teaching Methods.
- Have knowledge of different aspects of teaching methods used in Yoga.

**Learning outcomes :**

**CO-1** Demonstrate basic skills associated with yoga and Pilates.

**CO-2** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3** Apply the knowledge of basic choreography, and effective group management.

**CO-4** Demonstrate the ability to create and present various yoga activities.

**Unit-I: General introduction to yoga [15Hrs.]**

1. Brief about origin of Yoga: Psychological aspects and Mythological concepts;
2. History and Development of Yoga: prior to the Vedic period, Vedic period, Medieval period, modern era;
3. Etymology and Definitions of Yoga, Aim and Objectives of Yoga,
4. Misconceptions of Yoga; Brief about Streams of Yoga; Principles of Yoga, Importance of Yoga.

**Unit - II: General introduction to Indian philosophy [15Hrs.]**

1. Philosophy: meaning, definitions and scope;
2. Indian Philosophy: Salient features, Branches (Astika and Nastika Darshanas),
3. Distinction from Religion and Science,
4. Brief introduction to Prasthanatrayee and Purushartha Chatushtaya;
5. Relationship between Yoga and Indian Philosophy.

**Unit - III: Brief about Yoga in texts – I [15Hrs.]**

1. Brief to Upanishads and Yoga in Principal Upanishads,
2. Yoga in Yogopanishad; Yogic perspective of Epics: Ramayana, Adhyatma Ramayana and Mahabharata;
3. Yogic perspective: Bhagavad Gita, Yoga Vasishtha, Narada Bhakti Sutras.

**Unit-IV: Brief about Yoga in texts – II [15 Hrs.]**

1. Yogic perspective: Smritis, Puranas with emphasis to Bhagavat Purana;
2. Yogic perspective to Shad-darshanas;
3. Emphasis to Vedantic approach of Shankara, Ramanuja, Madhva and Vallabha;
4. Brief: Agamas, Tantras, Shaiva Siddhanta.

**TEXT BOOKS**

1. Lal Basant Kumar : Contemporary Indian Philosophy, Motilal Banarsidas Publishers Pvt. Ltd, Delhi, 2013
2. Dasgupta S. N : History of Indian Philosophy, Motilal Banarsidas, Delhi, 2012
3. Singh S. P : History of Yoga, PHISPC, Centre for Studies in Civilization Ist, 2010
4. Singh S. P & Yogi Mukesh: Foundation of Yoga, Standard Publication, New Delhi, 2010.

## SEMESTER 1

COURSE CODE:BPE105

(ELECTIVE COURSE-I)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPORTS JOURNALISM

#### Objective:-

- Basically, the primary objective of sports journalism is not to know about the environment of games or sports, but to present the facts. A sports enthusiast's first concern is the statistics related to a sporting event.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.**Describing the Meaning and Definition of Journalism.

**CO-2.**Explaining the role of Sports News agencies.

**CO-3.** Determining the Concept of Sports Bulletin.

**CO-4.** Comparing the General news reporting and sports reporting.

**CO-5.**Editorializing and evaluating of Reported News.

#### Unit-I (15 Hours)

1. Introduction to Mass Media.
2. Purpose of Mass Media for the propagation/promotion of sports.
3. Growth of sports communication.
4. Coverage of sports:
  - a. In daily newspapers.
  - b. General magazines and sports magazines.
  - c. Radio and Television.

#### Unit-II (12 Hours)

1. Space allocation for sports sections in a daily news paper.
2. News agency.
3. Magazine office.
4. Sports personalities, their pictures and thumbnail sketches in news papers.

#### Unit-III (17 Hours)

1. Journalistic techniques:
  - a. News writing and news story.
  - b. Reporting various schemes.

- c. Editing and headings of news.
  - d. Picture section and editing sports page makeup
- 2. Characteristics of News
- 3. Writing a sports features:
  - a. Types of sports features.
  - b. Exclusive picture feature

**Unit-IV** (16 Hours)

1. Ethics of sports writing.
2. Sportsman's gratuities.
3. Amateurism V/s Professionalism.
4. Invasion of private life.
5. Sports for charity.
6. Writing a weekly or fortnightly common.
7. Writing sports editorials.

**Reference Books:**

1. Health. Jr. Gelfand: How to cover, write and edit sports, Ames Lowe USA, 1951
2. Woodward, S: Sports page Simon a and Schuster, New York, 1949.
3. Juries, John R: This writing game, New York, Columbia University, Press, 1969.
4. "Sports" by Bhola Singh Thakur (pp 1124) in the Indain reports Guide by Richard Critchfield, Allied Pacific Pvt. Ltd. Bombay, 1962.
5. Nea, Robest," News Gathering and new writing, New York, Prentice Hall, inc., 1949.



**SEMESTER I  
PRACTICAL  
GAMES LESSON**

**COURSE CODE: BPE-P-106**

**(ELECTIVE GROUND COURSE-I)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Change management. ...
- Problem solving. ...
- Morale building. ...

**The Course learning outcomes :**

- Experiencing the General & Specific warming up for games.
- Acquiring the Basic skills of games
- Demonstration and application of various techniques of games Warming up: - General & Specific
- Specific conditioning program for games
- Basic skills- offensive & defensive.

Lesson on any one of the following games:-

1. VolleyBall
2. Kabaddi
3. Hockey
4. Badminton

**SEMESTER-I**  
**PRACTICAL**  
**GENERAL LESSONS PRACTICAL**

**(ELECTIVE GROUND COURSE-II)**

**COURSE CODE: BPE-P-107**

**Credit:4**

**Marks=100**

**(120Hours)**

Objectives:-

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Communication. ...
- Change management. ...
- Problem solving. ...
- Flexible thinking. ...

Morale building

**Course learning outcomes :**

**CO-1.** Define the meaning and general principles of Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

General Lessons Practical:

(on any one of the following activities)

1. Marching
2. Calisthenics
3. Dumb-Bell
4. Band&Flute

**SEMESTER I**  
**PRACTICAL**  
**YOGA**  
**PRACTICAL**

**COURSE CODE: BPE-P-0107**

**(MINOR ELECTIVE COURSE-I)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- 1) **To enable the student to have good health.**
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

**Course learning outcomes :**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Understand and apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

**ASANA**

Siddhasana , Vajrasana , Veerasana , Udarakarshanasana , Janushirasana , Gomukhasana , Ushtrasana , Naukasana , Katichraasana , Tadasana , Vrikshasana , Garudasana , Padhastasana , Ardhhdhanurasana , Marjari asana , Ardhshalabhasana , Bhujangasana , Shavasana , Samkonasana , Setubandasana , Shashankasana , Mandukasana , Ardhhallasana, Ardhpadmasana

**PRANAYAMA**

Deep Breath Inhale – Exhale  
Diaphragm Breathing  
Nadi Shodhan Pranayama  
Suryabhedhi Pranayam

## **SATKARMA**

Jal Neti  
Rubber Neti

## **MUDHRA AND BANDH**

Gyan Mudra  
Viparita Karani Mudra

## **DHYAN**



## SEMESTER-II

**COURSE CODE:CC201**

**(COMPULSORY COURSE-II)**

**Credit:4(T+P)**

**Marks:(ESE=70+CCA=30)=100**

## ENGLISH

### Objectives:

- Improve pronunciation and Use English Grammar worksheets and exercises to improve grammatical knowledge for competitive exams
- Enhance reading, understanding and writing abilities in English
- Develop the ability to read, understand and improve English vocabulary
- Demonstrate conversational skills, Asking Questions

### The Course Learning Outcomes (COs):

**CO-1.** Improve and widen employment prospects.

**CO-2.** Explore the world with confidence

**CO-3.** Increase cognitive ability.

**CO-4.** Access world-class education system and establishment.

**Method of Teaching & Assessment-** Videos, Audio clippings, discussion, written and oral exercises

### **UNIT-I      VOCABULARY BUILDING      (12 Hours)**

1. Vocabulary Building / Synonyms / Antonyms
2. Syntax (Spell Correction & Sentence Correction)
3. Formation of Words

### **UNIT-II      READING COMPREHENSION      (12 Hours)**

#### **Unseen Long Passage**

The total length of the passage will be between 800 - 900 words. The passage will include following questions:

- 5 - MCQs
- 9 - Short answer type questions

#### **Unseen Short Passage**

A second passage of 400-500 words. There will be two Descriptive questions

### **UNIT-III WRITING      (16 Hours)**

1. Paragraphs / Essays / Composition
2. Application Letter / Personal Letter

3. Make a Notice, Report, Newspaper Article, Project Front Page Making

**UNIT-IV      SPEAKING & PRESENTATION SKILLS      (20 Hours)**

1. How to improve Speaking Skills
2. Different types of Speaking
3. Different types of Speech
4. Spoken English in British Style
5. Spoken English in American Style
6. Types of Presentation
7. How to improve Presentation Skills
8. How to prepare presentation
9. Prepare Presentation any one topic of Yoga & Sports

## References

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1. Wren, P.C. & Martin, H.; (Edition 2015). High School English Grammar & Composition; S. Chand Publishing.
2. Wren, P.C. & Martin, H.& Prasada Rao, N.D.V. ; (Edition 2015). High School English Grammar & Composition; Blackie.
3. Eastwood, John (2003). Oxford Guide to English Grammar; Oxford.
4. Biber, Douglas ; Finegan, Edward ; Johansson, Stig ; Conrad, Susan ; Leech, Geoffrey (1999) Longman Grammar Spoken & Written English Cased; Longman.
5. Aarts, Bas (2011) Oxford Modern English Grammar; OUP Oxford
6. Orion, Gertrude (2<sup>nd</sup> Edition 1999) Pronouncing American English: Sounds, Stress, and Intonation; Heinle & Heinle Pub.
7. Carter, Ronald & McCarthy, Michael (2006) Cambridge Grammar of English: A Comprehensive Guide; Cambridge University Press.
8. Huddleston, Rodney & K. Pullum ,Geoffrey (2002) The Cambridge Grammar of the English Language; Cambridge University Press.
9. Dictionaries, Oxford (1884) Oxford English Dictionary; Oxford University Press, United Kingdom.
10. Simpson, John & Weiner, Edmund (2<sup>nd</sup> Edition 1989) The Oxford English Dictionary (Oxford English Dictionary (20 Vols.)); Clarendon Press.
11. Stevenson, Angus (3<sup>rd</sup> Revised ed. Edition 2010) Oxford Dictionary of English; Oxford University Press, USA.
12. Dictionaries (7<sup>th</sup> Edition 2011 ) Oxford English Mini Dictionary - Indian Edition; Oxford.

## SEMESTER-II

**COURSE CODE: BPE202**

**(MAJOR COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **YOGA AND HOLISTIC HEALTH**

#### **Objective:-**

- **Yoga is a holistic science that embodies the union of our physical, mental and spiritual health. It can help us achieve mental equilibrium, as well as providing numerous health benefits for our body.**
- **Yoga as a practice encourages a lifestyle that focuses on balance, harmony, positive thinking and health**

#### **The Course learning outcomes (COs):**

**CO-1.**Approach of holistic health in physical education.

**CO-2.** Five components of holistic health.

**CO-3.** Principles of holistic health.

**CO-4.** To promote health living and to facilitate prevention early detection and management of disease.

**CO-5.**Explore transfer and career opportunity in health related profession.

**Unit-I: Concept of Body, Health and Disease [15 Hrs.]**

1. Definition & Importance of Health According to WHO.
2. Dimension of Health: Physical, Mental, Social and Spiritual.
3. Concept of Body, Health & Disease in Yoga-Yogic concept of Body from Taittiriya Upanishad.
4. Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi according Yoga Vasistha and remedial measures; Holistic health care through Yoga.
5. Concept of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing.
6. Concept of Pancha-koshas & Shat-chakra and their role in Health & Healing.

**Unit - II: Causes of Ill Health & Remedial Measures as per Patanjali [15 Hrs.]**

1. Potential causes of Ill-health: Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Dukkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva;
2. Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi).

**Unit - III: Yogic Principles & Practices of Healthy Living - I [15 Hrs.]**

1. Dietary regulation according to Hatha yoga and Bhagavadgitha;
2. shatkriyas and tatva shuddhi;
3. Asana for mind body and spirit;
4. Practice for pranamaya kosha– pranayama;
5. Definition of Mental Health & Mental Hygiene & Total Health ;
6. Indian approach to personality and personality integration Psycho-Social Implications of yoga;
7. Adjustment Personal and interpersonal adjustment through yogic methods Niyamas & Yamas.

**Unit - IV: Yogic Principles & Practices of Healthy Living - II [15 Hrs.]**

1. Attitude change towards yoga through individualized counselling.
2. Psychological & yogic method Tackling ill effects of conflict and Frustration;
3. Yogic methods Yoga Psychology for Adjustment: Psychological, philosophical and yogic counselling;
4. the remedial measures; Action in relaxation-the secret of Karma Yoga;
5. Unattached action, not to the fruits of action, equanimity in success and failure.

**TEXT BOOK**

1. Ghosh. Shyam : The Original Yoga Munshiram Manoharlal, New Delhi. 1999)
2. Jnanananda Bharati : Essence of Yoga Vasishta Pub: Sanata Books, Chennai
3. Hatha Ratnavali: Tirumala Tirupathi Devasthanam, Andhra Pradesh.

## SEMESTER-II

COURSE CODE: BPE203

(MAJOR COURSE-IV)

Credit:4

Marks:(ESE=70+CCA=30)=100

### INTRODUCTION TO PHYSICAL EDUCATION

#### Objective:-

Develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.

#### The Course Learning outcomes (COs):

**CO-1.** The pass out would be able to compare the relationship between general education and

Physical education.

**CO-2.** He/she would be able to identify and relate with the History of Physical Education.

**CO-3.** He/she would be able to comprehend the relationship between Philosophy, Education and

Physical Education.

**CO-4.** He/she would able to identify the works of Philosophers of Education and Physical

Education.

**CO-5.** He /she would know recent developments and academic foundation of Physical Education.

#### Unit-I Introduction: (15 Hours)

1. Definition, aim and objectives of Physical Education.
2. Principles of Physical Education.
3. Relationship of Physical Education with general education.
4. Misconception, regarding Physical Education.
5. Personality development of an individual.

#### Unit-II Philosophical aspect of Physical Education (17 Hours)

1. Meaning of Philosophy.
2. Different philosophies applied to Physical Education:
  - a. Idealism.
  - b. Pragmatism.
  - c. Realism.
  - d. Naturalism.

- e. Existentialism.
3. Need and importance of different philosophies in modern Physical Education program.

**Unit-III      Biological Concept of Physical Education:**                      (14 Hours)

- 1. Biological principles of Physical Education.
  - a. Growth and development.
  - b. Heredity and environment.
  - c. Somatic types.
  - d. Sex differences.
  - e. Use, disuse and over use.
  - f. Chronological, physiological and anatomical ages

**Unit-IV      Emerging Trends in Physical Education      (14 Hours)**

1. Career opportunities in Physical Education and Sports:
  - a. As a Physical Education teacher.
  - b. Coach / trainee.
  - c. Gym instructor.
  - d. Physiotherapist.
  - e. Psychologist.
  - f. Dietitian.
  - g. Sports administrator/manager
  - h. Rehabilitator
2. Adventure Sports
3. Water Sports
4. Worldwide therapeutic acceptance of Yoga
5. Fast growing professional in sports

**Reference Books:**

1. Kamlesh M.L., “Physical Education, Facts and foundations”, Faridabad P.B. Publications.
2. Barrow Harold M., “Man and movements principles of Physical Education”, 1978.
3. Ravanes R.S., “Foundation of Physical Education”, Houghton Millin Co. Boston USA(1978)
4. Krishana Murthy V. and Paramesara Ram, N. “Educational Dimensions of Physical Education”, 2<sup>nd</sup> Revised edition, Print India, New Delhi 1990.
5. Singh Ajmer et.al., “Essentials of Physical Education”, Kalyani Publishers LudhianaSecond revised Addition 2008.
6. Deleh V.A., “World History of Physical Education”, prentice Hall Inc.

## SEMESTER-II

**COURSECODE: BPE204**

**(ELECTIVE COURSE-II)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### HEALTH EDUCATION AND NUTRITION

#### Objective:-

- They are to promote health and reduce the risk of developing chronic diseases by encouraging Americans to consume healthful diets and to achieve and maintain healthy body weights. Nutrition criteria are reflective of a solid scientific foundation for health and weight management

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Defining the concepts and principles of health education.

**CO-2.** Explaining the meaning, definition, and importance of health education.

**CO-3.**Classifying hygiene and its types.

**CO-4.** Writing about the role and uses of pollution.

**CO-5.** Discussing the types of natural resources.

#### **Unit-I Introduction: (12 Hours)**

1. Concept of health, meaning, definition and scope of health education.
2. Objective of health education.
3. Principles of health education.
4. Need and significance of health education.

#### **Unit-II Personal health and Hygiene: (17 Hours)**

1. Meaning of personal hygiene.
2. Personal care of:
  - a. Skin.
  - b. Hair.
  - c. Ear.
  - d. Eyes.
  - e. Nose.
  - f. Teeth.
  - g. Feet.



- c. Centers of communicable disease.

**3. Health instructions related to:**

- a. Personal care.
- b. Communicable disease.
- c. Nutrition.
- d. Healthful living.

**4. Nutrition:**

- a. Balanced diet and its elements:
  - i. Carbohydrates, proteins, fats, vitamins, minerals, salts and water.
- b. Daily energy/calorie requirements of healthy person.

**Unit-IV Communicable Disease: (15 Hours)**

1. Meaning and definition of communicable disease.
2. Mode of transmission, prevention and cure and sanitation of communicable disease.
3. Common Communicable Diseases:
  - a. Influenza.
  - b. Malaria.
  - c. Small pox.
  - d. Tuberculosis.
  - e. Typhoid.
  - f. Cholera.
  - g. Measles.

**Reference Books**

1. Klander H.F., "School Health Education", The Mac Million Co. 1962.
2. Pande P.K. and Gango Padhyay S.R., "Health Education for School Children."
3. S. Dheer and Others, "Introduction to Health Education, AP Publishers 9, Books Market Chowk Adda, Tande, Jalandhar 1989.
4. Nebmir. A. "The school Health Education, New York: Harper and Brothers.
5. Park, JE and park, K., "Text Books of Preventive and Social medicine" Tenth Edition, Banarsi Dass Bhanot, Habalpur 1985.



## SEMESTER-II

COURSE CODE:BPE205

(ELECTIVECOURSE-II)

Credit:4

Marks:(ESE=70+CCA=30)=100

### EXERCISEPHYSIOLOGY

#### Objective:-

- Exercise physiology serves to **empower individuals to understand how to safely move their body, how frequently they should exercise and how to measure their outcomes to see the improvement over time.**

#### The Course Learning Outcomes (COs):

**CO-1.** He/she would be able to Relate and interpret the role of exercise on body systems and its relation

to well being, through literature reviews and physical conditioning exercises.

**CO-2.** Adapt the art to apply the knowledge of physiology in physical activity classes at school level.

Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

#### Unit-I (14 Hours)

1. Meaning and definition of exercise physiology
2. Need and importance of exercise physiology in the field of Physical Education.
3. Energy sources
  - a. Definition of energy
  - b. Adenocine triphosphete (ATP)
  - c. Creative phosphate
  - d. Metabolism

#### Unit-II (17 Hours)

1. Structure of skeletal muscle
2. Sliding filament theory of skeletal muscle
3. Effect of exercises of muscular system
4. Fatigue

5. Symptoms of fatigue
6. Factors responsible for fatigue

**Unit-III** (14 Hours)

1. Effect of exercise on circulatory system
2. Effect of exercise on respiratory system
3. Effect of exercise on digestive system
4. Cardiac output, heart rate, vital capacity, second wind, oxygen debt, dead space & tidal volume.

**Unit-IV** (15 Hours)

**1. *Balance between heat loss and heat production***

- a. Radiation
- b. Convection
- c. Evaporation
- d. Conduction

**2. *Measurement of body temperature***

- a. Effects of high altitude on sports performance, heat cramps
- b. Dehydration, heat stroke and shivering
- c. Acclimatization with hot and cold temperature

**Reference Books:**

- 1. Brooks, G. Fahey, T. and Baldwin, K. (2004). Exercise physiology, MC Graw Hill. USA
- 2. McArdle, WD, Katch, FI and Katch VL (2000), Essentials of Exercise physiology 2<sup>nd</sup> edition Lippincott Williams and Wilkins, USA.
- 3. Powers, S. and Howley, E. (2006), "Exercise Physiology" MC Graw Hill. USA.
- 4. Wilmore Hack Hand Costil David L. (2004), "Physiology of sports and exercise Human Kinetics.
- 5. Rowland Thomas W. Children's (2005), "Exercise Physiology" 2<sup>nd</sup> edition Human Kinetics.

## SEMESTER II

### PRACTICAL

### ATHLETICS

#### LESSON

**COURSE CODE: BPE-P-206**

**(ELECTIVE GROUND COURSE-III)**

**Credit:4**

**Marks=100**

Objective:-

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

- Demonstrate an expert knowledge of the strategies and skills of the sport and use critical thinking skills to apply this knowledge in competitive situations in order to participate to the best of one's ability in competition.
- Demonstrate traits of good sportsmanship and teamwork in both competition and practice.

On any one of the following athletic activities:-

(120 Hours)

1. Discus Throw
2. Triple Jump
3. Hurdles
4. Middle and Long distance races

## SEMESTER-II

### PRACTICAL

### ATHLETICS LESSON

**COURSE CODE: BPE-P-0206**

**(ELECTIVE GROUND COURSE-IV)**

**Credit:4**

**Marks=100**

Objective:-

- **To enhance the sports performance:** It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

**CO-1** Demonstrate an expert knowledge of the strategies and skills of the sport and use critical thinking skills to apply this knowledge in

competitive situations in order to participate to the best of one's ability in competition.

**CO-2** Demonstrate traits of good sportsmanship and teamwork in both competition and practice.

Lessons on any one of the following athletic events:-

(120 Hours)

1. Sprints
2. Long Jump
3. Shot put
4. Relay

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in athletics and general lesson activities (5 lessons each in athletics and general lesson). In addition each trainee shall complete 1 assignment each in athletics and general lesson.
2. For the purpose of examination in practicals, one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weightage.

The contents of teaching for each activity are as follows:-

1. History of athletics.

2. Measurements of track & field events.
3. Equipments & specification of equipments.
4. Fundamental skills and lead up activities.
5. Rules and regulations of athletic events.
6. Tournaments at national and international level.
7. Records (World, Olympics, Asian and National games)
8. Awards in athletics.
9. Related books and magazines.
10. Officiating: -
  - a. Duties of official
  - b. Knowledge of score sheet
  - c. Officiating signals
  - d. Technical equipment for officiating.

## **SEMESTER-II**

### **PRACTICAL**

#### **YOGA PRACTICAL**

**COURSE CODE: BPE-P-208**

**(MINOR ELECTIVE COURSE-II)**

**Credit:4**

**Marks=100**

(120Hours)

(120Hours)

#### **Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

#### **The Course Learning Outcomes:**

**CO-1** Demonstrate basic skills associated with yoga and Pilates.

**CO-2** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO-3** Apply the knowledge of basic choreography, and effective group management.

**CO-4** Demonstrate the ability to create and present various yoga activities.

#### **ASANA**

Pawan Muktasana , Padmasana , Swastik Asanas , Bhadrasana , Uttanpadasana , Sarvangasana, Halasana, Matsyasana, Suptvajasana, Chakrasana, TiryakaTadasana, EkPadPranamasana, Hastottanasana, Makarasana, Balasana, Sarpasana, Hanumanasana, Sukhasana, Markatasana, VipritNaukasana, ParshvaTadasana, Sinhasana

**PRANAYAMA**

Chandra Bhedi Pranayama  
UjjayiPranayam

**SATKARMA**

Vaman Dhauti / Kunjal  
KriyaVatkram/Kapalbhati

**MUDHRAAND BANDH**

Jalandhar  
BandhaUddiyana  
BandhaMulbandha  
Yog Murda

## SEMESTER-III

**COURSE CODE:CC-301**

**(COMPULSORY COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### ENVIRONMENTAL SCIENCE

#### Objectives:

- Students will integrate knowledge from multiple disciplines representing physical and life sciences perspectives, political and economic perspectives, and social and cultural perspectives on humans' interactions with their environments;
- Students will contribute to and facilitate interdisciplinary research and problem solving, through independent and collaborative work; and
- Students will use quantitative and qualitative research tools and techniques to analyze, implement, envision, assess, and report sustainability efforts.

#### The Course Learning Outcomes (COs):

- CO-1.** Articulate the interconnected and interdisciplinary nature of environmental studies;
- CO-2.** Demonstrate an integrative approach to environmental issues with a focus on sustainability;
- CO-3.** Use critical thinking, problem solving, and the methodological approaches of the social sciences, natural sciences, and humanities in environmental problem solving;
- CO-4.** Communicate complex environmental information to both technical and non-technical audiences;
- CO-5.** Understand and evaluate the global scale of environmental issues & problems; and
- CO-6.** Reflect critically on their roles, responsibilities, and identities as citizens, consumers and environmental actors in a complex, interconnected world.

#### **Unit- 1: Introduction to environmental studies and Ecosystem**

**[15 Hrs.]**

Multidisciplinary nature of environmental studies; Scope and importance; Need for public awareness; What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).

#### **Unit-2: Natural Resources: Renewable & Non-renewable Resources**

**[15 Hrs.]**

Land resources and land use change; Land degradation, soil erosion and desertification; Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations; Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state); Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

**Unit-3: Biodiversity & Conservation****[15 Hrs.]**

Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots; India as a mega-biodiversity nation; Endangered and endemic species of India; Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity; Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

**Unit 4: Environmental Pollution, policies & practices****[15 Hrs.]**

Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution; Nuclear hazards and human health risks; Solid waste management: Control measures of urban and industrial waste; Environmental Policies & Practices; Sustainability and sustainable development; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture; Environment Laws: environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

## **TEXT BOOKS**

1. Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.
2. Carson, Rachel. 1962. Silent Spring (Boston: Houghton Mifflin, 1962), Mariner Books, 2002.
3. Economy, Elizabeth. 2010. The River Runs Black: The Environmental Challenge to China's Future.
4. Gadgil, M. & Ramachandra, G. 1993. This fissured land: an ecological history of India. Univ of California Press.

## **REFERENCE BOOKS:**

1. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
2. Grumbine, R. Edward, and Pandit, M.K. Threats from India's Himalaya dams. Science 339.6115 (2013): 36-37.
3. Heywood V.H. & Watson, R.T. 1995. Global Biodiversity Assessment. Cambridge University Press.
4. Mc Cully, P. 1996. Silenced rivers: the ecology and politics of large dams. Zed Books.



**SEMESTER-III**

**COURSECODE: BPE 302**

**(MAJORCOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

**METHODOFTEACHINGYOGA**

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**Objectives:** Following the completion of this course, students shall be able to

- Understand the basic principles of Teaching Methods.
- Have knowledge of different aspects of teaching methods used in Yoga.

**Course Outcomes:-**

**CO-1** To enable the student to have good health

**CO-2** To practice mental hygiene.

**CO-3** To possess emotional stability.

**CO-4** To integrate moral values.

**Unit-I: Principles and methods of teaching yoga [15 Hrs.]**

1. Teaching and Learning : Concepts and Relationship between the two;
2. Principles of Teaching: Levels and Phases of Teaching,
3. Quality of perfect Yoga Guru; Yogic levels of learning, Vidyaarhi, Shishya, Mumuksha;
4. Meaning and scope of Teaching methods, and factors influencing them;
5. Sources of Teaching methods; Role of Yoga Teachers and Teacher training.

**Unit-II: Basics of yoga class management [15 Hrs.]**

1. Practice of Yoga at different levels (Beginners, Advanced, School Children, Youth, Women and Special attention group);
2. Techniques of mass instructions;
3. Techniques of Individualised teaching;
4. Techniques of group teaching;
5. Organisation of teaching (Time Management, Discipline etc.).

**Unit-III: Lesson planning in yoga [15 hrs.]**

1. Essentials of Good Lesson Plan: concepts, needs, planning of teaching Yoga (Shatkriya, Asana, Mudra, Pranayama & Meditation);
2. Models of Lesson Plan;
3. Action Research of Yoga: Meaning, Roles, Steps in action research in Yoga Teaching;
4. Effective use of Library and other resources; Lesson Plan and its Practical applications.

**Unit-IV: Educational tools of yoga teaching [15 hrs.]**

1. Yoga classroom: Essential features, Area, Sitting arrangement in Yoga class etc.;
2. Class room problems: Types and Solutions, Characteristics and essentials of good Yoga teaching;
3. Time table: Need, Types, Principles of Time table construction; Time Table for Yoga teaching;
4. Meaning, Importance and Types of Educational technology; Role of Educational Technology in Yoga.

**TEXT BOOKS**

1. Dr. Shri Krishna : Notes on basic principles & methods of teaching as applied to yogic practices and a ready reckoner of yogic practices, Kaivalyadhama, Lonavala, 2009

**BOOKS FOR REFERENCE**

1. Dr. Gharote M L : Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007
2. Dr. Raj Kumar : Principles & methods of Teaching, Printo graphics, Delhi,
3. Saket Raman Tiwari & others : Teaching of Yoga, DPH Publishing Corporation, Delhi, 2007

### SEMESTER-III

**COURSE CODE: BPE 303**

**(MAJOR COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

#### METHOD IN PHYSICAL EDUCATION

##### Objective:-

- Develop motor abilities like strength, speed, endurance, coordination, flexibility, agility and balance, as they are important aspects for good performance in different games and sports.

**The Course learning outcomes (COs):**On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the Meaning and types of Teaching Methods.

**CO-2.** Discuss the Presentation Techniques in Physical Education.

**CO-3.** Generalizing the Methods of Words of command.

**CO-4.** Determining the knowledge to Lesson Planning.

**CO-5.** Applying the knowledge to take Lesson Plan in different categories.

**CO-6.** Reviewing the impact of all units in conduction of competitions

1

##### Unit-I (17 Hours)

1. Meaning, scope and importance of teaching methods in physical education.
2. Basic types of teaching methods.
3. Factors affecting teaching methods.
4. Command and types of command:
  - a. For beginners
  - b. For advance groups
  - c. For large groups
  - d. For complicated exercises
5. Techniques of commanding:
  - a. Counting
  - b. Continuous counting
  - c. Counting the beat
  - d. Rhythmic counting
  - e. Counting aloud
  - f. Use of whistle
  - g. Procession instruments and music

##### Unit-II (13 Hours)

###### 1. Preliminary preparation:

- a. Personal preparation

- b. Technical preparation
- c. Steps of preparation

**2. *Presentation Techniques:***

- a. Orientation
- b. Verbal explanation
- c. Demonstration
- d. Explanation

- e. Discussion
- f. Supervision
- g. Evaluation

**3. *Teaching aids and types of teaching aids***

- a. Motion pictures
- b. Charts & diagrams
- c. Models and exhibitions
- d. Musical instruments and recording

**Unit-III** (17 Hours)

1. Lesson planning and objectives of lesson planning.
2. Parts of lesson planning and their order:
  - a. Introductory part
  - b. Fundamental or main body part
  - c. Concluding part
3. Types of lesson planning:
  - a. General lesson plan
  - b. Specific lesson plan
4. Principles of lesson planning.
5. Lesson plan evaluation and re-planning.

**Unit-IV** (17 Hours)

1. Class formation, its values and types of class formation:
  - a. Single line
  - b. Double line
  - c. File formation
  - d. Semi-circle
  - e. Circle formation
  - f. Spoke
  - g. Horse shoe
  - h. L- shape
  - i. Triangular
  - j. Rectangular
  - k. Double sided
  - l. Three sided
  - m. Free formation

2. Supervision and inspection of teaching methods.
3. Methods of supervision and qualities of a supervisor.
4. Evaluation of teaching methods.
5. Need and importance of evaluation.

**Reference Books:**

1. Kamalesh M.L. and Sangral M.S., "Methods in Physical Education" Parkash Brothers, 5,6 Books Market Ludhinana 1986.
2. Tirunarayan and Hariharan, "Methods in Physical Education." M/S C.T. and S.H. Allagappa College of Physical Education Karaikudi-4.
3. Kazmer, H.C. and Cassidy, R., "Methods in Physical Education" W.B. Saunders andCo. Philadelphia, London 1958.
4. Charrles, E. Forrythe and Irrn A. Keller, "Administration of High School Athletics." Prentice Hall Inc. Englewood, N.J. 1979.

### SEMESTER-III

**COURSE CODE: BPE304**

**(ELECTIVE COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

#### **FUNDAMENTALS OF BIOMECHANICS IN SPORTS**

Objectives:-

- The major goal of biomechanics of sport and physical exercise is to **improve performance in given sport or physical exercise**.
- In a wider context the goal of biomechanics of sport and physical exercise is also to increase physical fitness.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

- CO-1.** Memorizing the Meaning, nature, role and scope of Biomechanics.
- CO-2.** Explaining the CG, Line of gravity Vectors and Scalars Quantities.
- CO-3.** Acquiring the knowledge of Linear and Angular Kinematics.
- CO-4.** Acquiring the knowledge of Linear and Angular Kinetics.
- CO-5.** Applying the concept of Lever & Equilibrium in game situation.
- CO-6.** Estimating the role of resistance in sports.

#### **Unit-I (15 Hours)**

1. Meaning, definition and importance of biomechanics in the field of sports.
2. Fundamental mechanical concept of:
  - a. Mass
  - b. Weight
  - c. Volume
  - d. Density
  - e. Pressure
3. Introduction to kinematics and its related terms:
  - a. Time
  - b. Displacement
  - c. speed
4. Role of kinematics in the field of sports.

#### **Unit-II (17 Hours)**

1. Fundamental biomechanical terms:
  - a. Friction
  - b. Inertia

- c. Force
  - d. Centripetal force
  - e. Centrifugal force
  - f. Center of gravity
2. Equilibrium, types of equilibrium and principles of equilibrium.
  3. Kinetics and its role in the field of sports.

**Unit-III** (17 Hours)

1. Motion and types of motion.
2. Newton's laws of motion and their implications in the field of physical education and sports.

3. Lever and types of lever.
4. Advantages of lever.

**Unit-IV** (17 Hours)

1. A brief description of mechanical principles:
  - a. Projectile
  - b. Aerodynamics
2. Mechanical analysis of following:
  - a. Walking
  - b. Running
  - c. Jumping
  - d. Throwing
3. Application of Biomechanics in the field of sports.

**Reference Books:**

1. Barrlea, R. (20047), "Introduction to Sports Biomechanics." Ran sedge Publishers, USA.
2. Blazeovich, A. (2007), "Sports Biomechanics." A and C Black Publishers USA.
3. Beer and Zarmicks (1979), "Efficiency of Human Movement." WIB Sounders CO. USA.
4. Hamill. J and Knutzen, K.M. (2003), "Biomechanical Basis of Human Movement." Lippincott Williams and Wilkins USA.
5. McGimsis, P. (2004), "Biomechanics of Sports and Exercise." Human Kinetics, USA.
6. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers Ludhiana second revised addition 2008.

## SEMESTER-III

**COURSE CODE: BPE 305**

**(ELECTIVE COURSE-III)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **ADAPTED PHYSICAL EDUCATION**

#### **Objectives:-**

- To develop a healthy level of balance, flexibility, muscular strength, body composition, and cardio-respiratory endurance.
- To learn new games and their rules and to demonstrate it correctly in the game settings.

**The Course learning outcomes (COs):**An individualized program of developmental activities, exercises, games, rhythms, and sport designed to meet the unique physical education needs of individuals.

#### **A sub discipline of PE or emerging field of studying**

- 1) Designed to meet long term unique needs
- 2) May take place in mainstream classes or segregated classes
- 3) An active program rather than a passive one
- 4) Adapted or modified sport can be used in APE program
- 5) Adapted means to adjust and to fit
- 6) Service to 3-21 years old (IEP) and may include 0-2 (IFSP)

#### **Unit-I (15 Hours)**

1. Introduction :
  - a. Meaning and aim of adapted physical education.
  - b. Objectives of the adapted physical education.
  - c. Basis for adapted physical education.
  - d. Functions of adapted physical education.
2. The adapted program in action :
  - a. Scope of adapted program.
  - b. Adapted program for elementary schools, high/secondary schools, colleges and university.

#### **Unit-II (16 Hours)**

1. Personal preparation :
  - a. Guiding principles of adapted physical education.
  - b. The policies for adapted physical education.
  - c. Preparation of personal.

- d. In-service training programe.

**Unit-III** (14 Hours)

- 1. Evaluation and measurement :
  - a. Selection of evaluation procedures.
  - b. Classification of handicapped and disabled individuals.
  - c. Determination of specific disabilities.
  - d. Need based program emphasis for individual handicapped.

**Unit-IV** (17 Hours)

- 1. Social and psychological adjustment :
  - a. Courses of maladjustment.

- b. Role of physical education in preventing maladjustment and in the promotion of adjustment.
- c. Recreation for the handicapped.
- d. Postural defects-flat foot, spinal defects and shoulder deformities and their rehabilitation.
- e. Special physical education programs for blind, deaf, dumb and mentally challenged children.
- f. Rehabilitation programs for bone and joint injuries, ankle, knee, shoulder, elbow and hand injuries.
- g. Neurological disabilities- Spastic poliomyelitis (Cerebral Palsy).

**References Books:**

1. H.H. Clark and D.H. Clark, "Development and Adapted Physical Education", Englewood, Prentice Hall, 1964.
2. A.S. Daniels, "Adapted Physical Education", New York, Harpers and Brothers, 1972.
3. G.T. Stafford, "Prevention and Corrective Physical Education", New York, A.S. Barnes and Co. 1970.
4. V.V. Hunt, "Recreation for the Handicapped", Prentice Hall inc. 174.
5. B.J. Gratty, "Adapted Physical Education in the Main Stream" Move Publisher Co. Denver Colorado-802222, 1989.

**SEMESTER-III**  
**PRACTICAL**  
**GAMES LESSON**

**COURSE CODE: BPE-P-306**

**(ELECTIVE GROUND COURSE-V)**

**Credit:4**

**Marks=100**

**Objectives:-**

- Collaboration. A key element of any successful teams is how well the team collaborates together and how well it collaborates with other teams. ...
- Communication. ...
- Change management. ...
- Problem solving. ...
- Flexible thinking. ...
- Morale building. ...

**The Course learning outcomes:**

**CO-1** Experiencing the General & Specific warming up for games

**CO-2** Acquiring the Basic skills of games.

**CO-3** Demonstration and application of various techniques of games

**CO-4** Warming up: - General & Specific

**CO-5** Specific conditioning program for games

**CO-6** Basic skills- offensive & defensive

Lesson on any one of the following games:- (120Hours)

1. Kho-Kho
2. BasketBall
3. Judo
4. Boxing
5. Table tennis

**SEMESTER-III**  
**PRACTICALS**  
**GYMNASTICS**  
**LESSON**

**COURSE CODE: BPE-P-307**

**(ELECTIVE GROUND COURSE-VI)**

**Credit:4**

**Marks=100**

**Objectives:-**

(120Hours)

- Helping members to develop physical confidence.

- Helping members to develop mentally.
- Promoting balance and co-ordination.
- Developing strength, improving flexibility.
- Improving body posture.
- Developing social skills.

## **The Course learning outcomes:**

**CO-1.** Define the meaning and general principles of

Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

On any one of the following gymnastics activities:-

1. Floor Exercises (Both for men&women)
2. Vaulting Horse (Both for men&women)
3. Parallel Bar (For men only)
4. Balancing Beam (For women only)

The contents of teaching for each activity are as follows:-

1. History of game/ gymnastic.
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.

7. Tournaments at national and international level.
8. Records (world, Olympic, Asian games and National Games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating: -
  - a. Duties of official.
  - b. Knowledge of score sheets.
  - c. Signals officiating.
  - d. Technical equipment for officiating.

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastics activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weightage.



## SEMESTER-III

### PRACTICALS

#### YOGA PRACTICAL

**COURSE CODE: BPE-P-308**

**(MINORELECTIVE COURSE-III)**

**Credit:4**

**Marks=100**

**(120Hours)**

#### **Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values.

#### **The Course learning outcomes:**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

#### **ASANA**

Utkatasana , Chakrasana , Vrishabhasana , Kukkutasana , Vakrasana , Hasta Padangusthasana ,Paravatasana , Bhunamanasana , Konasana , Vatayanasana , Tulasana , Garbhasana , Mandukasana ,TiryakBhujangasana,Ardhchandrasana

#### **PRANAYAMA**

Shitali  
PranayamaShitkariPranay  
am

#### **SATKARMA**

Aganisar Kriya Shitkram  
Kapalbhati SutraNeti

#### **MUDHRAAND BANDH**

Shambhavi MurdaTadagi  
MurdaPran Murda

Kaki Murda

## SEMESTER-IV

COURSE CODE: BPE-401

(MAJOR COURSE-VII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### REMEDIAL AND MASSAGE

#### Objectives:

- Reducing stress and increasing relaxation.
- Reducing pain and muscle soreness and tension.
- Improving circulation, energy and alertness.
- Lowering heart rate and blood pressure.

#### The Course learning outcomes (COs):

**CO-1.** Use observation, verbal and other assessment tool to plan and perform a general relaxation massage.

**CO-2.** Apply the detailed knowledge of anatomy as it relates to the study of muscles, joint and ligament.

**CO-3.** Use the knowledge of physiological principles as it relates to the different system of the body and massage therapy.

**CO-4.** Apply the knowledge of pathological condition as they indicate or contraindicate the application of massage therapy

#### Unit-I (15 Hours)

1. Definition of Remedial, physiotherapy and corrective exercises.
2. Concept of posture, its meaning and characteristics of correct and incorrect posture.
3. Causes of incorrect posture
4. Necessity and importance of correct posture.
5. Principles of correct posture.
6. Tests for correct posture.

#### Unit-II (16 Hours)

1. *Classification of posture :*
  - a. Good Type
  - b. Bantom Type
  - c. Fatigue Type
2. *Postural deformities and their causes :*
  - a. Kyphosis
  - b. Lordosis
  - c. Scoliosis

- d. Bow legs
- e. Knock knee
- f. Flat foot

**3. *Preventive and remedial measures for postural defects :***

- a. Psychological and habitual consideration in preventing and correcting postural defects.
- b. Corrective exercises for various postural defects.
- c. Physiotherapist treatment in correcting postural defects.

**Unit-III** (17 Hours)

1. Massage :
  - a. Meaning, definition and a brief history of massage.
  - b. Massage as means of relaxation and points to be considered while giving massage.
  - c. General effects of massage.
  - d. Classification of the manipulation and movements in the massage :
    - i. Effleurage and stroking
    - ii. Petrissage
    - iii. Percussion/Tapotement
    - iv. Vibration and shaking
  - e. Effects of manipulation and movements on the different systems of humanbody.

**Unit-IV** (13 Hours)

1. ***Classification of positions :***
  - a. Fundamental positions
  - b. Derived positions
  - c. Modified positions
2. ***Classification of exercises along with their practical instructions :***
  - a. Free mobility exercises
  - b. Assisted exercise
  - c. Resisted exercises

**Reference Books:**

1. Smith Lara K. and Others, "Srunnstrem's Clinical Kinesiology", Jaypee Brothers P.B.No-7193 New Delhi 1998.
2. J.L. Rathoore, "Corrective Physical Education", Philadelphia W.B. Saunders Co.1968.
3. P.G. Rasch and R.K. Burke, "Kinesiology and Applied Anatomy", Lee and Febriger, Philadelphia 1978.
4. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana,Second revised addition 2008.

## SEMESTER-IV

**COURSE CODE: BPE402**

**(MAJOR COURSE-VIII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION**

#### **Objectives:**

- It is the education that concerns physical activities, which develop and maintain human body
- Activity
- Teaching.
- Direction, coordination and control of group efforts

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the Students will be learning and able to do/perform the following.....

**CO-1.** Memorizing the Importance of Organization and Administration.

**CO-2.** Describing the Scope, Need and Importance of Organization and Administration.

**CO-3.** Acquiring the knowledge of Leadership in Physical Education and Sports.

**CO-4.** Determining the Role of Reports and records.

**CO-5.** Estimating the concept of drawing Fixtures.

#### **Unit-I** (15 Hours)

1. Meaning and definition of planning, organization, administration and management and their nature and scope.
2. Importance of management in educational institution.
3. Principles of management.
4. Theories of management.
5. Scheme of organization in school, college and university.

#### **Unit-II** (16 Hours)

##### **1. Facilities and equipment :**

- a. Layout of physical education facilities and sports facilities.
- b. Need and importance of equipment for physical education.
- c. Procedure for the purchase of equipment.
- d. Development of improvised equipment.

- e. Care, maintenance and disposal of unserviceable equipment.

**2. *Office management and budget :***

- a. Maintenance of records.
- b. Office correspondence and reports.
- c. Physical education budget and its preparation.
- d. Income and expenditure.
- e. Petty cash.

**Unit-III** (14 Hours)

**1. *Intramurals and extramural :***

- a. Intramurals :
  - i. Its importance and planning.
  - ii. Events of competitions, time and facility factor.

- b. Extramurals :
  - i. Planning and conduct.
  - ii. Outcomes of participations (Educational).
  - iii. Limitations in participations.
  - iv. Selection and training of teams.
  - v. Participation, finance and other aspects.

**Unit-IV** (18 Hours)

**1. Curriculum designing:**

- a) Curriculum designing its need and importance.
- b) Factors affecting time table.
- c) Place of physical education periods in curriculum and teacher-pupil ratio.

**2. Tournament organization:**

- a) Conduct of tournaments and athletic meet.
- b) Types of tournaments.
  - i. Elimination (knockout).
  - ii. League.
  - iii. Combination.

**Reference Books:**

1. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers Ludhiana Second revised addition 2008.
2. Kamlesh M. L. and Sangral M.S., "Methods in Physical Education", Parkash Brothers, 5,6 Book Market Ludhiana 1986.
3. Kamlesh M. L. "Principles and history of physical Education" , ParkashBrother Paliala, 1991.
4. Charles, E. Foxythe and Irrn A. Keuer, "Administration of High School Athletics" , Prentice Hall Inc. Englewood, N.J. 1979.

## SEMESTER-IV

**COURSE CODE: BPE403**

**(ELECTIVE COURSE-IV)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **BASIS OF YOGA THERAPY**

#### **Objectives:**

- the application of Yogic principles to a particular person with the objective of achieving a particular spiritual, psychological, or physiological goal.

#### **The course learning outcomes (COs):**

**CO-1.**Effect of yoga in different factors

**CO-2.** Physical activity implement in asana and pranayama

**CO-3.** Yoga help in improves strength, balance and flexibility

**CO-4.** Yoga therapy benefits with disabilities and limitations.

**Unit-I: Yogic concepts of health and disease [15 Hrs.]**

1. Definition & Importance of Health According to WHO;
2. Dimensions of Health: Physical, Mental, Social and Spiritual;
3. Concept of Health and Disease in Indian Systems of Medicine i.e. Ayurveda, Naturopathy and Siddha Systems of Medicine, Utility and Limitations of these systems in health and healing;
4. Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi, Yogic concept of Health and Disease, role of Yoga in preventive health care – Heyam dukham anagatam;
5. Potential causes of Ill-health: Tapatrayas and Kleshas. Physical and Physiological manifestation of Disease: Vyadhi, Alasya, Angamejayatva and Svasa-prashvasa. Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva;
6. Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi).

**Unit-II: Yogic concepts for health and healing [15 Hrs.]**

1. Concepts of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing;
2. Concept of Pancha-koshas & Shat-chakra and their role in Health and Healing;
3. Concept of Abhyas and Vairagya, Chitta and Chitta Prasadana, Kriya-yoga, Ashtanga Yoga of Patanjali for Health and Healing;
4. Concept of Cleansing (Shuddhi), its role and importance in Health and Healing;
5. Concept of Swara Yoga and its efficacy in Health and Healing.

**Unit-III: Yogic principles and practices of healthy living [15 Hrs.]**

1. Yogic Principles of Healthy Living: Aahara, Vihara, Aachara and Vichara;
2. Role of Yogic Positive Attitudes (Maitri, Karuna, Mudita and Upeksha) for Healthy Living,
3. Concept of Bhavas and Bhavanas with its relevance in Health and well-being;
4. Yogic principles of Lifestyle management and its role in prevention of disease and health promotion;
5. Yogic Principles of Diet and its role in Healthy living;
6. Yogic Practices of Healthy living : i.e. Yama, Niyama, Shatkarma, Asana, Mudra & Bandha Pranayama, Pratyahara, Dharna and Dhyana, and their role in Healthy living.

**Unit-IV: Health benefits of yogic practices [15 Hrs.]**

Psycho-physiological effects and health benefits of Yogasana , Pranayama, Shatkarma, Bandha and Mudra, and Meditation.

### **TEXT BOOKS**

1. Preeti Goel and Rita Jain : Spectrum of Health (Sports Publications, New Delhi, 2003)
2. M. M. Gore : Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008)
3. Dr. K. Krishna Bhat: The power of Yoga

### **BOOKS FOR REFERENCE**

1. Dr. R. S. Bhogal : Yoga Psychology, Kaivalyadhama Publication
2. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
3. T.S. Rukmani: Patanjala Yoga Sutra
4. Sahay, G. S.: Hatha Yoga Pradeepika, MDNIY Publication, 2013
5. Kdham : Gheranda Samhita, Kaivalyadhama, Lonavla.

## SEMESTER-IV

COURSE CODE: BPE404

(ELECTIVE COURSE-IV)

Credit:4

Marks:(ESE=70+CCA=30)=100

### OFFICIATING AND COACHING

#### Objectives:

- They provide leadership and guidance to participants, ensuring that the competition is conducted in a safe and fair manner.
- to unlock people's potential to maximize their own performance.

**The Course learning outcomes (COs):**On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the meaning and general principles of Officiating.

**CO-2.** Discuss financial and legal aspects of officiating.

**CO-3.** Describe the qualification and qualities of an officiating.

**CO-4.** Classify the duties of officials.

**CO-5.** Define the ingredients of officiating.

**CO- 6.** Discuss enforcement, Facilities, Arrangement, and environment for officiating

**CO-7.** Explain the relations of officials with management, players, coaches, captains, spectators, and fans.

**CO-8.** Classify the preparations of officials before, during and after the game.

#### Unit-I (14 Hours)

1. Coaching :
  - a. Meaning and definition of coaching.
  - b. Principles of coaching.
  - c. Qualification and Qualities of a good coach.
  - d. Duties and responsibilities of a good coach.
  - e. Measures for improving the standard of coaching in India.

#### Unit-II (17 Hours)

1. Training Schedule :
  - a. Concept of Training Schedule.
  - b. Types of Training Schedule (Plan) :
    - i. Short term.
    - ii. Long term.
  - c. Periodization : Meaning of single and double periodization.
  - d. Principles of training schedule.

- e. Preparation of training schedule.

**Unit-III** (13 Hours)

1. Officiating :

- a. Meaning and definition of officiating.
- b. Principles of officiating.
- c. Qualification and qualities of a good official.
- d. Duties and responsibilities of an official.
- e. Measures for improving the standard of officiating in India.

**Unit-IV** (18 Hours)

1. Rules, regulations and plan of the following athletic events :
  - a) Sprints
  - b) Long jump
  - c) Shot put
  - d) Relay races
  - e) Middle and long distance races
  - f) Hope step and jump
  - g) Discus throw
  - h) Hurdles.
2. Score sheets and award of points for the above mentioned athletic events

**Reference Books:**

1. AAFB, "Officiating in Athletics", 2012.
2. Bunn, J.N. "Art of officiating in Sports", Prentice Hall Englewood N.J. 1968.
3. "Pearson G.F. Athletics", Thomson Nelson and sons ltd. London.
4. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, LudhianaSecond revised addition 2008.

## SEMESTER-IV

COURSE CODE: BPE405

(ELECTIVE COURSE-V)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPECIALIZATION IN WOODBALL

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, ground marking, rules and duties of officials, etc.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Chapter-I Introduction

Brief introduction of Woodball, Meaning & Definition of Woodball, History of Woodball (Invention, Player etc.), Woodball in India (origin Player etc.), Working Federation of Woodball in International, National, State Level.

#### Chapter-II Woodball-Equipments & Course

General Principles of woodball. Woodball course design (Figure), Specifications of course, layout plans of different woodball course, Shape & Size of Mallet, Ball & Gate.

#### Chapter-III Woodball Skill :

Player movement, Rules of Hitting & Penalties Putting  
, Penalties

Short Distance stroke. Mid

Distance stroke. Long

Distance stroke. Stroke

completion

**Penalties :** Penalties Rules in 1<sup>st</sup> shot.

Penalties Rules of Hitting

Penalties Rules in play Penalties

Rule in gate area.

#### Chapter-IV

Organization of woodball team & Dress, referee in woodball & recording methods.

##### Tournaments

State Level, National Level, International Level, AIU & SGFI Games, Distribution of Medals

##### Teams in Woodball

About woodball team, Manager Coach, Single event, Double event, Mix Double event

##### Players dress

Function of referee & chief referee line man

International Referee: Hand signs & Referee Marking

methods in score sheet, Results making

## **Chapter-V**

### **Yoga & Exercise for Woodball Player**

Asana, Pranayama, Mudra & Bandha, Dhyan, Shatkarma

#### **Reference :**

1. Woodball Association of India <[woodballindia.com](http://woodballindia.com)>
2. International Woodball Federation <[www.iwbf-woodball.org](http://www.iwbf-woodball.org)>
- 3.

## SEMESTER-IV

**COURSE CODE: BPE0406**

**(ELECTIVECOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN KABADDI**

#### **Objectives :**

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### **The Course Learning Outcomes (COs):**

- CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of various team games.
- CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (15 Hours)

1. Origin and brief history of Kabbadi
2. Development of Kabaddi in India and worldwide.
3. Establishment of national and international federations/associations of Kabaddi.
4. Major tournaments of Kabaddi.
5. Awards associated with Kabaddi.

#### **Unit-II** (16 Hours)

1. Measurements and marking of Kabaddi court.
2. Preparation and maintenance of Kabaddi court.
3. Officials, no. of officials and duties of officials in the game of Kabaddi.
4. Technical equipments for officiating.

#### **Unit-III** (16 Hours)

1. Fundamental skills of Kabaddi:
  - a) Holding
  - b) Dodging
  - c) Kicking

- d) Chain formation
- e) Raiding
- 2. Lead-up games.
- 3. AAHPERD Youth Fitness Test.

**Unit-IV** (16 Hours)

- 1. Major rules and regulations of Kabaddi.
- 2. Important Signals in Kabaddi.
- 3. Knowledge of score sheet.
- 4. Related sports terminologies.
- 5. Eminent sports personalities associated with Kabaddi.

**Reference Books:**

1. “Training Manual of Kabaddi”, NSNIS, Patiala.
2. Mishra S.C. (2007), “Teach Yourself Kabaddi”, Sports Publishers, New Delhi.
3. Rao, C.V. (1983), “Kabaddi : Native Indian Sports”, NSNIS, Patiala Publishers, Patiala.
4. Rao, E.P. (1994), “Modern Coaching in Kabaddi”, DVS Publishers, New Delhi.
5. “Official Rule Book of Kabaddi”, International Kabaddi Federation.

## SEMESTER-IV

**COURSECODE: BPE407**

**(ELECTIVECOURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN JUDO

#### Course Objectives

- Judo, Japanese jūdō, system of unarmed combat, now primarily a sport.
- The rules of the sport of judo are complex.
- The objective is to cleanly throw, to pin, or to master the opponent, the latter being done by applying pressure to arm joints or to the neck to cause the opponent to yield.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques,

stances, forms, rules and duties of officials, etc. in the event of Judo.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Judo.
2. Development of Judo in India and worldwide.
3. Contribution of 'Jigaro Kano' in the promotion of Judo.
4. Establishment of national and international federations/associations of Judo.
5. Major tournaments of Judo.
6. Awards associated with Judo.

#### Unit-II (16 Hours)

1. Measurements of Competition Area for Judo.
2. Preparation and maintenance of Competition area of Judo.
3. Officials/Judges, no. of officials and duties of officials in the game of Judo.
4. Technical equipments for officiating.

#### Unit-III (17 Hours)

1. Fundamental skills of Judo:
  - a) Rolling.
  - b) Rei.

- c) Kumikata.
  - d) Ushiro Ukemi.
  - e) Yoko Ukemi.
  - f) Mai Ukemi.
2. Lead-up game.
  3. AAHPERD Youth Fitness Test.

**Unit-IV** (17 Hours)

1. Major rules and regulations of Judo.
2. Important Signals in Judo.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Judo.

**Reference Books:**

1. “Training Manual of Judo”, NSNIS, Patiala.
2. Law, M. (2009), “Falling Hard : A Journey in to the world of Judo”, Trumperer Publishers, Japan.
3. Takahashi, M. (2005), “Mastering Judo”, Human Kinetics, USA.
4. Harison, E.J. (2002), “Coaching Successfully Judo”, Sports Publishers, New Delhi.
5. “Official Rule Book of Judo”, International Judo Federation.

## SEMESTER-IV

**COURSE CODE: BPE408**

**(ELECTIVE COURSE-V)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN BADMINTON

#### Objectives :

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

#### The Course Learning Outcomes (COs):

**CO-1.** To be able to learn and deliver the knowledge of fundamental skills, techniques,

stance, rules and their interpretation and duties of officials in the event of badminton.

**CO-2.** To develop a knowledge about the historical development of this game.

#### Unit-I (15 Hours)

1. Origin and brief history of Badminton.
2. Development of Badminton in India and worldwide.
3. Establishment of national and international federations/associations of Badminton.
4. Major tournaments of Badminton.
5. Awards associated with Badminton.

#### Unit-II (17 Hours)

1. Measurements and marking of Badminton court.
2. Specifications of equipments related to Badminton.
3. Preparation and maintenance of Badminton court.
4. Officials, no. of officials and duties of officials in the game of Badminton.
5. Technical equipments for officiating.

#### Unit-III (16 Hours)

1. Fundamental skills of Badminton:
  - a) Holding (Grip) of the racket
  - b) Service
  - c) Smash
  - d) Drop
2. Lead-up games.
3. AAHPERD Youth Fitness Test.

**Unit-IV****(17 Hours)**

1. Major rules and regulations of Badminton.
2. Important Signals in Badminton.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Badminton.

**Reference Books:**

1. "Training Manual of Badminton", NSNIS, Patiala.
2. Grice, T. (2007), "Badminton : Steps to Success", 2<sup>nd</sup> Ed., Human Kinetics, USA.
3. Singh, M.K.(2006), "A to Z Badminton", Friends Publication, New Delhi.
4. Jain, D. (2001), "Teaching and Coaching Badminton", Khel Sahitya Kendra, New Delhi.
5. "Official Rule Book of Badminton", International Badminton Federation.

**SEMESTER-IV**

**PRACTICAL**

**GENERAL**

**LESSON**

**COURSE CODE: BPE-P-409**

**(ELECTIVE GROUND COURSE-VII)**

**Credit:4**

**Marks=100**

**Objectives:**

- enhance the sports performance
- It is also one of the significant objectives to enhance the sports performance of athletes or players.
- Without proper planning, it is impossible to improve the performance of sportspersons.

**The Course Learning Outcomes:**

**CO-1.** Define the meaning and general principles of Rhythmic activities.

**CO-2.** Discuss the Rules and their interpretation.

**CO-3.** Describe the types of exercises.

**CO-4.**Examine the performance of skills.

Lesson on any one of the following general lesson activities:- (120Hours)

1. Class formation
2. Lazium
3. Indian club&rings
4. Aerobics.

**SEMESTER-IV**

**PRACTICAL**

**GYMNASTICS PRACTICAL**

**COURSECODE: BPE-P-410**

**(ELECTIVE GROUND COURSE-VIII)**

**Credit:4**

**Marks=100**

**Objectives:-**

**(120Hours)**

- Gymnastics, the performance of systematic exercises—often with the use of rings, bars, and other apparatus—either as a competitive sport or to improve strength, agility, coordination, and physical conditioning.

## **The Course Learning Outcomes:**

- CO-1.** Define the meaning and general principles of Rhythmic activities.
- CO-2.** Discuss the Rules and their interpretation.
- CO-3.** Describe the types of exercises.
- CO-4.** Examine the performance of skills.

Lessons on any one of the following gymnastics activities:-

1. Uneven bar (for women)
2. Rhythmic gymnastics ( for women)
3. Horizontal bar ( for men)
4. Pommel horse ( for men)
5. Roman rings ( for men)

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastic activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its weight age.

The contents of teaching for each activity are as follows:-

1. History of game/gymnastics.
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead-up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.
7. Tournaments at national and international level.
8. Records (World, Olympic, Asian and National games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating :-
  - a. Duties of the official.
  - b. Knowledge of score sheets.
  - c. Officiating signals.
  - d. Technical equipment for officiating.

e. .

## **SEMESTER- IV YOGA**

### **PRACTICAL**

**COURSE CODE: BPE-P-411**

**(MINOR ELECTIVE COURSE-IV)**

**Credit:4**

**Marks=100**

**(120Hours)**

#### **Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values

#### **The Course Learning Outcomes:**

**CO1-** Demonstrate basic skills associated with yoga and Pilates.

**CO2-** Demonstrate the ability to perform yoga movements in various combination and forms.

**CO3-** Apply the knowledge of basic choreography, and effective group management.

**CO4-** Demonstrate the ability to create and present various yoga activities.

#### **ASANA**

Paschimottanasana , Natarajasana , Kurmasana , Uthit Padmasana , Padangusthasana , AkarnDhanurasana, BaddhaPadmasana, Astavakrasana, Guptpadmasana, Sarpasana, ArdhaChandrasana , ParivrttaJanushirasana, Sankatasana

#### **PRANAYAMA**

Bahyavriti  
pranayamaAbhyantaraVritipranayama

#### **SATKARMA**

VyutkramaKapalbhatiTratak

#### **MUDHRAAND BANDH**

MahamudraMahabandhaM  
urdaMahavedh Murda

## SEMESTER-V

**COURSECODE: BPE501**

**(MAJORCOURSE-IX)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

## KINESIOLOGY

### Objectives:-

- Kinesiology studies the mechanics of human movement and how they impact our health and wellbeing.
- During classes, students learn how to combine a holistic approach with Anatomy, Biomechanics, and Psychology principles to help increase or repair the physical mobility of patients.

**The Course learning outcomes (COs):** On completion of the B.P.E.S, program, the students will be

learning and

able to do/perform the following:

**CO-1.** Describe the definition and meaning of kinesiology.

**CO-2.** Discuss the aims and objectives of kinesiology.

**CO-3.** Explain the role of kinesiology in physical education.

**CO-4.** Interpret the fundamental concept of center of gravity, line of gravity, axis, and planes.

**CO-5.** Write about the composition, and classification of bones and Muscles

### Unit-I (13 Hours)

1. Meaning and definition of Kinesiology
2. Origin and development of kinesiology
3. Aim and objectives of kinesiology
4. Need and scope of kinesiology
5. Importance of kinesiology in Physical Education

### Unit-II (17 Hours)

1. Planes and axis
2. Joint and types of joints
3. Various fundamental movements
4. Movements around various joints :
  - a. Neck
  - b. Shoulder
  - c. Elbow
  - d. Wrist
  - e. Hip

- f. Ankle

**Unit-III** (15 Hours)

**1. *Muscle contraction and its types:***

- a. Isotonic
- b. Isometric
- c. Isokinetic

**2. *Corrective/therapeutic exercises:***

- a. Passive exercises
- b. Active assistive exercises
- c. Active exercise

- d. Resistive exercise
- e. Stretching exercises

**3. *Application of kinesiology in the field of physical education and sports***

**Unit-IV (17 Hours)**

1. Structural classification of skeletal muscles
2. Functional classification of skeletal muscles
  - a. Agonist
  - b. Antagonist
  - c. Stabilizer
  - d. Neutralizer
3. Location, origin, insertion and action of the following muscles :
  - a. Deltoid
  - b. Biceps
  - c. Gastrocnemius
  - d. Latissimus dorsi
  - e. Trapezius major
  - f. Sternocleidomastoid

**Reference Books:**

1. Rasch, P.I. and Burke R.K., "Kinesiology and Applied Anatomy", Lee and Febiger.
2. Wells K., "Kinesiology", Philadelphia W.B. Saunders Co. 1986.
3. Cooper and Cleseo, "Kinesiology", St. Louis C.V. Mosby Co.1968.
4. Smith Lara K. and Others, "Srunnstrem's Clinical kinesiology", Jaypee Brothers P.B.No-7193 New Delhi 1982.
5. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers LudhianaSecond revised addition 2008.

## SEMESTER-V

**COURSECODE: BPE502**

**(MAJORCOURSE-X)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### FUNDAMENTALS OF SPORTS TRAINING

#### Objectives:-

- Every sport activity needs specific type of physical fitness, and hence, the improvement of various components of physical and skills related fitness like strength, speed, coordination, endurance and flexibility is an important aim and objective of sports training.

#### The Course Learning Outcomes (COs):

**CO-1.** The learners will be able to identify the fundamental concepts, theories and principles of human body training related to sports performance.

**CO-2.** The learners will be able to demonstrate the skills to train different fitness components and related planning.

**CO-3.** The learners will be able to understand the organization to achieve high performance in sports.

#### Unit-I (15 Hours)

1. Meaning, definition, aim and objectives of sports training.
2. Characteristics of sports training.
3. Principles of sports training.
4. Concept of warming up and cooling down, its use and importance.

#### Unit-II (17 Hours)

1. Meaning and definition of physical fitness and its components :
  - a. Speed.
  - b. Strength.
  - c. Endurance.
  - d. Flexibility.
  - e. Co-ordinative ability/agility.
2. Speed training :
  - a. Meaning of speed training, types of speed and methods of speed training.
  - b. Factors influencing speed.
3. Strength training :
  - a. Meaning of strength training, types of strength and methods of strength training.

- b. Factors influencing strength.

**Unit-III** (17 Hours)

1. Endurance training :
  - a. Meaning of endurance training, types of endurance and methods of endurance training.
  - b. Factors influencing endurance.
2. Concept of training load, adaptation and recovery :
  - a. Definition of load and training load.

- b. Types of load.
- c. Symptoms, causes and measures to overcome overload.
- d. Meaning, definition and benefits of adaptation.
- e. Meaning, definition and benefits of recovery.

**Unit-IV** (16 Hours)

1. Meaning and definition of technique, skill and style.
2. Implications of technical training in various phases.
3. Stages of technical training.
4. Meaning and definition of tactical training.
5. Methodology of tactical training, strategy and tactics.
6. Relationship between technical training and tactical training.

**Reference Books:**

1. "Fundamentals of sports training, progress publishers", Moscow, 1977.
2. Dyson, "The mechanics of Warwick square, Athletics."
3. Buwn J. "Scientific Principles of coaching." Prentice Hall.
4. Broer, M. "Efficiency of Human movement." Philadelphia W.B. Saunders Co. 1978.
5. "Science of Coaching" By Hardy Singh.
6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana Second revised addition 2008.

## SEMESTER-V

**COURSE CODE: BPE503**

**(MAJOR COURSE-XI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **COMMON SPORTS INJURIES ,PREVENTION AND CURE**

#### **Objectives:-**

- The ultimate goal of the rehabilitation process is to limit the extent of the injury, reduce or reverse the impairment and functional loss, and prevent, correct or eliminate altogether the disability

#### **The Course Learning Outcomes (COs):**

**CO-1.** To know the different type of injuries and illness associated with sports participation

**CO-2.** Understand risks and hazards associated with sports participation

**CO-3.** Be able to undertake a risk assessment relevant to sports

**CO-4.** Pupils will be able to recognize the common sign and symptoms for injuries

**CO-5.** Pupils will understand the difference between a chronic and acute injury.

#### **Unit-I (15 Hours)**

1. Sports injuries and its types:
  - a. Acute injuries
  - b. Overuse injuries
2. Common sport injuries:
  - a. Sprain
  - b. Strain
  - c. Fracture
  - d. Dislocations
  - e. Abrasion
  - f. Contusion
  - g. Bruise
  - h. Blisters
  - i. Corn
  - j. Athletes foot
  - k. Tennis elbow
  - l. Footballers Knee
  - m. Footballers Ankle
3. Preventive measures for common sports injuries
4. Treatment for common sports injuries

**Unit-II** (15 Hours)

1. Meaning, aim and objectives of first aid
2. First aid box and its articles
3. Types of bandages and splinters
4. Qualities and functions of a first aider
5. Principles of first aid
6. Causes of sports injuries

7. First aid for the common sports injuries
8. Concept of PRICE.

**Unit-III** (15 Hours)

1. Emergency treatment for common accidents:
  - a. Drowning
  - b. Burning
  - c. Insect stings & bitings
  - d. Snake bite
  - e. Dog bite
  - f. Poisoning
  - g. Unconsciousness
  - h. Fainting
  - i. Hysteria
  - j. Sunstroke
  - k. Shock
  - l. Electric shock
  - m. Acid burn
2. Ergogenic aids in sports and their ill effects :
  - a. Anabolic agents
  - b. Stimulants
  - c. Beta blockers
  - d. Narcotic analgesics
  - e. Diuretics
  - f. Blood doping

**Unit-IV** (15 Hours)

1. Rehabilitory exercises for sports injuries
2. Rehabilitation procedures of sports injuries :
  - a. Cold Therapy
  - b. Heat Therapy
  - c. Hydrotherapy
  - d. Electron radiotherapy
  - e. Ionization Therapy
  - f. Exercise Therapy
  - g. Massage

## Reference Books

1. Armstrong and Tuckler; "Injuries in sport", London, Staples press, 1964.
2. Bolan J.P., "Treatment and prevention of athletic injuries".
3. More house, L.E. and Resch, P.J., "Sports medicine for Trainers, Philadelphia".
4. Ryans Allan; "Medical Care of the Athlete", McGraw Hill.
5. Evans, A. William; "Everyday safety", Chicago: Iyan and Chamaha.
6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, Ludhiana, Second revised addition 2008.

## SEMESTER-V

**COURSE CODE: BPE504**

**(ELECTIVE COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN KHO-KHO**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills of running and chasing, techniques, sitting positions, field dimensions, rules of the games and duties of officials in the event of kho-kho.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Kho-Kho.
2. Development of Kho-Kho in India and worldwide.
3. Establishment of national and international federations/associations of Kho-Kho.
4. Major tournaments of Kho-Kho.
5. Awards associated with Kho-Kho.

#### **Unit-II (15 Hours)**

1. Measurements and marking of Kho-Kho playfield.
2. Preparation and maintenance of Kho-Kho playfield.
3. Officials, no. of officials and duties of officials in the game of Kho-Kho.
4. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Kho-Kho :
  - a. Offensive skills :
    - i. Giving Kho
    - ii. Covering

- iii. Tapping
- iv. Diving
- b. Defensive skills :
  - i. Running
  - ii. Chain
  - iii. Ring
- 2. Lead-up games.
- 3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Kho-Kho.
2. Important Signals in Kho-Kho.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Kho-Kho.

**Reference Books:**

1. "Training Manual of Kho-Kho", NSNIS, Patiala.
2. Chakaraborty, G.(2002), "Kho-Kho Avlokan", Khel Sahitya Kendra, New Delhi.
3. Pandey, L. (1982), "Kho-Kho Sarvaswa", Metropoliton, New Delhi.
4. "Official Rule Book of Kho-Kho", International Kho-Kho Federation.

## SEMESTER-V

**COURSECODE: BPE505**

**(ELECTIVECOURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALISATION IN BASKETBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of basketball.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of BasketBall.
2. Development of BasketBall in India and worldwide.
3. Establishment of national and international federations/associations of BasketBall.
4. Major tournaments of BasketBall.
5. Awards associated with BasketBall.

#### **Unit-II (15 Hours)**

1. Measurements and marking of BasketBall court.
2. Specifications of Basketball.
3. Preparation and maintenance of BasketBall court.
4. Officials, no. of officials and duties of officials in the game of BasketBall.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of BasketBall :

- a. Dribbling
  - b. Passing
  - c. Shooting
- d. Defense
2. Lead-up games.
3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of BasketBall.
2. Important Signals in BasketBall.
3. Knowledge of score sheet.
4. Related sports terminologies.
6. Eminent sports personalities associated with BasketBall.

**Reference Books:**

1. “Training Manual of Basketball”, NSNIS, Patiala.
2. Drewelt, J. (2007), “How to improve Basketball”, Crabtree Publishing Co., USA.
3. Sharma, O.P. (2003), “Basketball Skills and Rules”, Khel Sahitya Kendra, New Delhi.
4. Thani, Lokesh (1995), “Skills and Tactics of Basketball” , Sports Publication, NewDelhi.
5. “Official Rule Book of Basketball”, International Basketball Federation.

## SEMESTER-V

**COURSECODE: BPE506**

**(ELECTIVECOURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALISATIONIN BOXING**

#### **Objectives:-**

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, apparatus

used, court markings and dimensions, rules and duties of officials, etc. in the individual

event of boxing.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Boxing.
2. Development of Boxing in India and worldwide.
3. Establishment of national and international federations/associations of Boxing.
4. Major tournaments of Boxing.
5. Awards associated with Boxing.

#### **Unit-II (15 Hours)**

1. Measurements of Boxing Arena/Ring.
2. Specifications of equipments related to Boxing.
3. Preparation and maintenance of Boxing Arena/Ring.
4. Officials, no. of officials and duties of officials in the game of Boxing.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Boxing :
  - a. Shot Ring Boxing
  - b. Middle Ring Boxing

- c. Long Ring Boxing
2. Lead-up games.
3. Scott Motor Ability Test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Boxing.
2. Important Signals in Boxing.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Boxing.

**Reference Books:**

1. "Training Manual of Boxing", NSNIS, Patiala.
2. Gotay, A.L.(2008), "Boxing Basics", Outskirts Press, USA.
3. "Official Rule Book of Basketball", International Basketball Federation.

## SEMESTER-V

**COURSE CODE: BPE507**

**(ELECTIVE COURSE-VI)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN TAEKWONDO**

#### **Objectives:-**

- **To enhance the sports performance:** It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Taekwondo.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I (15 Hours)**

1. Origin and brief history of Taekwondo.
2. Development of Taekwondo in India and worldwide.
3. Establishment of national and international federations/associations of Taekwondo.
4. Major tournaments of Taekwondo.
5. Awards associated with Taekwondo.

#### **Unit-II (15 Hours)**

1. Measurements of Competition Arena for Taekwondo.
2. Specifications of equipments related to Taekwondo.
3. Preparation and maintenance of Competition area of Taekwondo.
4. Officials, no. of officials and duties of officials in the game of Taekwondo.
5. Technical equipments for officiating.

#### **Unit-III (15 Hours)**

1. Fundamental skills of Taekwondo :
  - a. Blocking

- b. Open & Closed Stance
  - c. Kicking & Striking
  - d. Punching
  - e. Stepping
  - f. Offensive & Defensive Techniques
  - g. Kicking Combinations
2. Introduction of Gyeorugi & Poomsae.
  3. Motor Ability Test.

## **Unit-IV**

(15 Hours)

1. Specific Taekwondo Goals for Individual Grades
2. Major rules and regulations of Taekwondo.
3. Important Signals in Taekwondo.
4. Knowledge of Score Sheet.
5. Related Sports Terminologies.
6. Eminent sports personalities associated with Taekwondo.

### **Reference Books:**

1. Anslow, Stuart (2013). From Creation to Unification: The Complete Histories Behind the Ch'ang Hon (Itf) Patterns: CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
2. Anslow, Stuart (2nd Edition 2009). Ch'ang Hon Taekwon-Do Hae Sul: Real Applications to the Itf Patterns; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
3. Kim, Bok Man (1<sup>st</sup> Edition 2015). Taekwon-Do: Origins of the Art: BOK Man Kim's Historic Photospective (1955-2015) ; Moosul Publishing, LLC.
4. Chun, Richard (2<sup>nd</sup> edition 2007). Tae Kwon Do: The Korean Martial Art ; Ymaa Publication Center.
5. Son, Duk Sung & Clark, Robert J.(1st edition 1968).Korean Karate: The Art of Tae Kwan Do ; Prentice-Hall.
6. Chun, Richard (1<sup>st</sup> Edition 2013). Tae Kwon Do Black Belt Poomsae: Original Koryo and Koryo ; Ymaa Publication Center.
7. Kim, Sang H (2010). Taekwondo Step Sparring ; Turtle Press.
8. Kim, Sang H (2009). Taekwondo Self Defense: Taekwondo Hoshinsool ; Turtle Press.
9. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 1 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
10. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 2 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
11. Anslow, Stuart Paul (2010). The Encyclopedia of Taekwon-Do Patterns, Vol 3 ; CheckPoint Press, Dooagh, Achill Island, Co.Mayo, Republic of Ireland.
12. Cook, Doug (3<sup>rd</sup> Edition 2001). Taekwondo: Ancient Wisdom for the Modern Warrior ; Ymaa Publication Center.

13. Cook, Doug (1<sup>st</sup> Edition 2006). Traditional Taekwondo: Core Techniques, History and Philosophy ; Ymaa Publication Center.
14. Cook, Doug (1<sup>st</sup> Edition 2009). Taekwondo: A Path to Excellence ; Ymaa Publication Center.
15. Gillis, Alex (1<sup>st</sup> Edition 2008). A Killing Art: The Untold History of Tae Kwon Do ; ECW Press, Canada.
16. Park, Yeon Hwan & Gerrard, Jon (Updated Edition 1999). Tae Kwon Do: The Ultimate Reference Guide to the World's Most Popular Martial Art; Checkmark Books.
17. Park, Yeon Hwan & Gerrard, Jon (1<sup>st</sup> Edition 2013). Black Belt Tae Kwon Do: The Ultimate Reference Guide to the World's Most Popular Black Belt Martial Art; Skyhorse.
18. Lee, Kyu Hyung & H. Kim, Sang (1<sup>st</sup> Edition 2007). Complete Taekwondo Poomsae: The Official Taegeuk, Palgwae and Black Belt Forms of Taekwondo ; Turtle Press, U.S.
19. Hornsey, Kevin (1<sup>st</sup> Edition 2003). Taekwondo: A Step-by-Step Guide to the Korean Art of Self-Defense ; Tuttle Publishing.
20. Park, Dong Keun & Schein, Allan (1<sup>st</sup> Edition 2006). Tae Kwon Do: The Indomitable Martial Art of Korea : Basics, Techniques, and Forms ; Invisible Cities Press Llc.

“Official Rule Book of Taekwondo”, World Taekwondo Federation. [www.worldtaekwondo.org](http://www.worldtaekwondo.org) , [www.taekwondofederationofindia.com](http://www.taekwondofederationofindia.com)

**SEMESTER-V**  
**PRACTICAL**  
**GAMES LESSON**

**COURSECODE:BPE-P-508**

**(ELECTIVE GROUND COURSE-IX)**

**Credit:4**

**Marks=100**

(120Hours)

Objectives:-

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

**The Course Learning Outcomes:**

- Experiencing and Immiting the General & Specific warming up for games
  - Acquiring the Basic skills of games
  - Demonstration and application of various techniques of games.
- Warming up: - General & Specific
- Specific conditioning program for games
- Basic skills- offensive & defensive

Lesson on any one of the following games:-

1. Cricket
2. HandBall
3. Taekwondo
4. Weight Lifting
5. Football.

## **SEMESTER-V**

### **PRACTICAL**

#### **ATHLETICS LESSON**

**COURSE CODE: BPE-P-0509**

**(ELECTIVE GROUND COURSE-X)**

**Credit:4**

**Marks=100**

#### **Objectives:-**

- To enhance the sports performance: It is also one of the significant objectives to enhance the sports performance of athletes or players. Without proper planning, it is impossible to improve the performance of sportspersons. In fact, training in sports is useless if it is not well planned.

#### **The Course Learning Outcomes:**

**CO-1.**Administrating of the skill performance.

**CO-2.**Practicing of the skill performance.

**CO-3.**Summarizing record file

Lesson on any one of the following athletics events:-

(120 Hours)

1. High Jump.
2. Hammer Throw
3. Javelin
4. Competitive walking.

#### **Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons in games and gymnastics activities (5 lessons each in games and gymnastics). In addition each trainee shall complete 1 assignment each in games and gymnastics.
2. For the purpose of examination in practical one lesson each of respective category is compulsion for each candidate which will be assessed by external examiner appointed by the university.

3. Each group of practical examination will be of three hours duration irrespective of its weight age.

The contents of teaching for each activity are as follows:-

1. History of Game/Athletics .
2. Measurement of the field.
3. Equipment and specifications of equipments.
4. Fundamental skills and lead-up games.
5. Techniques, strategies and system of play.
6. Rules and regulations of the game/activity.
7. Tournaments at national and international level.
8. Records (World, Olympic, Asian games and national games).
9. Awards in the game.
10. Related books and magazines.
11. Officiating: -
  - a. Duties of official
  - b. Knowledge of score sheets
  - c. Signals officiating
  - d. Technical equipment for officiating.

**SEMESTER-V**  
**PRACTICALSYOGAPRAC**  
**TICAL**

**COURSECODE: BPE-P-510**

**(MINORELECTIVECOURSE-V)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- 1) To enable the student to have good health.
- 2) To practice mental hygiene.
- 3) To possess emotional stability.
- 4) To integrate moral values

**The Course Learning Outcomes:**

- Demonstrate basic skills associated with yoga and Pilates.
- Demonstrate the ability to perform yoga movements in various combination and forms.
- Apply the knowledge of basic choreography, and effective group management.
- Demonstrate the ability to create and present various yoga activities.

**ASANA**

Mayurasana, Shirshasana, Eka Pada Skandasana, Vatayanasana, Titibasana, Garbhasana, Shirsha Padangusthasana, Guptasana, Padambakasana, Purna Ustrasana, Vibhaktapaschimottanasana, Karnapidasana

**PRANAYAMA**

Bhramari  
Pranayama Bhastrika  
Pranayama Udgeeth  
Pranayama Murcha Pranayama

**SATKARMA**

Shankh  
Prakshalan Nauli Kriya  
Vastra Dhauti

**DHYAN**

YogaNidra

## SEMESTER-VI

**COURSE CODE: BPE601**

**(MAJOR COURSE-XII)**

**Credit:4**

**Marks: (ESE=70+CCA=30)=100**

### **FUNDAMENTALS OF COMPUTER APPLICATIONS IN PHYSICAL EDUCATION**

#### **Objectives:-**

- **Operate a variety of advanced spreadsheet, operating system and word processing functions.**  
Solve a range of problems using office productivity applications, and adapt quickly to new software releases. Maintain quality assurance through critically evaluating procedures and results.

**The Course learning outcomes (COs):** On completion of the B.P.E.S program, the students will be learning and able to do/perform the following.....

- CO-1.** Memorizing the Importance of Computer, characteristics and application.
- CO-2.** Describing the block diagram and classification of the computers.
- CO-3.** Acquiring the knowledge of software, hardware, and storage devices of the computers.
- CO-4.** Determining the role of MS-Word, MS-Excel & MS Power point.
- CO-5.** Define Word processor and its types.
- CO-6.** Applying the concept of prepare the presentation and slide show, animation with function.
- CO-7.** Estimating the working with graph.

#### **Unit-I Concepts of Computer and its basics: (15 Hours)**

1. History, application, characteristics, types of computer (Analog, Digital, Hybrid) and generations of Computer.
2. Physical structure of computer.
3. Use of computer
4. Human V/s Computer
5. Role of computer in various fields
6. Aspects and need of computer in Physical Education.

#### **Unit-II Component of Computer System: An Introduction of Hardware and Soft ware (15 Hours)**

1. Components of computer system
2. CPU (CU, ALU and Main memory)
3. Input devices (Keyboard, Mouse and Track Ball, Touchpad, Joysticks, Touch Sensitive Screens, Data Scanning Device, Bar Code Readers, Optical Mark Reader (OMR) and Magnetic Ink Character Reader (MICR))

4. Output Devices (Monitor, Printer, LCD)
5. Hardcopy Devices (Printers and Plotter)
6. UPS and types of UPS
7. Operating System Programme Languages translator.
8. Application program/package

**Unit-III Operating System :** (15 Hours)

1. Operating system and its functions.
2. DOS, Internal and External DOS Commands
3. Window features
4. Windows accessories- Calculator, notepad, word-pad and paint.
5. Structure of window screen (Desktop, wallpaper, taskbar and icons)
6. Start button

7. Programme, documents, setting search, help and support, run, concept of file and folders and shut down.
8. Virus- Types, symptoms, effects and protection.

#### **Unit-IV MS Office :**

(15 Hours)

1. Work-Introduction to word processor, creating and saving documents, editing and formatting a document, including color, size, font, alignment of text, printing a document, inserting word art, clip art and picture, page sorting, bullets and numbering, inserting tables, creating rows and columns and mail-merge.
2. Power point.
3. Excel- Introduction to excel, need of spreadsheet, creating, opening and saving workbook, editing worksheet, using links, applying different views and types of functions.
4. Internet and its benefits.
5. Types of connections: dial up, dedicated or leased lines, Wi-Fi.
6. Using search engine downloading the information
7. Communication on the Internet: e-mail, chatting and internet newsgroups.

#### **Reference Books**

1. Arora S., "Introduction to Information and Technology", Dhanpat Rai and Co. (Pvt.)Ltd. Education and Technical Publisher (2002).
2. Nasib Fill, "Essential of Computer and Network Technologies", Khana Book Publishing Company Darya Ganj New Delhi.
3. Hussain; "Computer Technology and Application", 1996.
4. Carter Roger, "The Information Technology Handbook", Heinmar Professional Publishing (Ltd.) 1987.
5. Raja Raman V; "Fundamentals of Computer", Prentice Hall of India (Pct) Ltd. 1982.
6. Raja Gopalan R., "Understanding Computers", Tata McGraw Hill Publishing Company Ltd. 1920.

## SEMESTER-VI

COURSE CODE: BPE602

(MAJOR COURSE-XIII)

Credit:4

Marks:(ESE=70+CCA=30)=100

### SPORTS PSYCHOLOGY

#### Objectives:-

Most people study sport and exercise psychology with two objectives in mind:

(1) to understand how psychological and social factors influence an individual's behavioural outcomes (e.g., sport performance, exercise motivation)

(2) to understand how participation in sport and exercise influences psychological

**The Course learning outcomes (COs):** On completion of the four years B.P.E.S, program, the students will be learning and able to do/perform the following.....

State the Meaning and Definition of Psychology.

**CO-1.** Estimating the stages of Growth and Development.

**CO-2.** Acquiring the knowledge of Individual Differences.

**CO-3.** Estimating the Learning curves.

**CO-4.** Acquiring the knowledge of Individual differences and body types.

**CO-5.** Determining the factors of motivation in Physical Education & Sports.

**CO-6.** Estimating the knowledge of Mental Preparation Strategies.

**CO-7.** Combining the knowledge of Mental Preparation Strategies in relation to Sports performance.

#### Unit-I (13 Hours)

1. Meaning, definition, scope and importance Sports Psychology.
2. Relationship of sports psychology with other sports sciences.
3. Development of sports psychology in India.
4. Psychological factors effecting physical performance.
5. Utility of sports psychology in the field of physical education and sports.

#### Unit-II (16 Hours)

1. Concept of growth and development.
2. Physical, mental, social, intellectual and emotional development in infancy, later childhood and adolescence stages.
3. Learning: meaning, definition and nature of learning.
4. Laws of learning and learning curve.
5. Theories of learning.

#### Unit-III (16 Hours)

1. Meaning and definition of motivation.
2. Types of motivation and motivation in learning.
3. Individual differences its type and nature.
4. Determinants of individual difference:
  - a. Heredity
  - b. Environment
5. Intelligence, its meaning and types.

**Unit-IV** (15 Hours)

1. Meaning, definition and characteristics of personality.
2. Types of personality.
3. Factors affecting personality development.

4. Role of Physical Education and sports in the development of personality.
5. Description of Important psychological terms:
  - a. Anxiety
  - b. Stress
  - c. Self Confidence
  - d. Group Dynamic
  - e. Group Cohesion

### **Reference Books**

1. “Educational Psychology”, Little Field Adms OC. 1979.
2. Cratty B.J., “Psychology in contemporary sports”, Prentice Hall, Englewood Cliffs
3. Kamlesh M.L., “Psychology of Physical Education and sports”, MetropolitanBook Co. (P) Ltd. New Delhi 1983.
4. Sharma Y.P., “Psychology in Physical Education and sports”, Reliance PublishingHouse New Delhi 2000.
5. Singh Ajmer et.al, “Essentials of Physical Education”, Kalyani Publishers LudhianaSecond revised addition 2008.

## SEMESTER-VI

**COURSE CODE: BPE603**

**(MAJOR COURSE-XIV)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **TEST MEASUREMENT AND EVALUATION**

#### **Objectives:-**

- To frame the objectives –
- Test and Measurement helps in setting the target or goal according to the need and requirement.
- By adopting the Test and Measurement techniques the physical education teachers gets an accurate idea about the progress made by the students.

**The Course learning outcomes(COs):** On completion of the B.P.E.S, program, the students will be learning and able to do/perform the following.....

**CO-1.** Define the meaning and general principles of Test, Measurement &Evaluation

**CO-2.** Discuss the role and Importance of Test, Measurement & Evaluation.

**CO-3.** Acquiring the knowledge of Concept of Physical Fitness

**CO-4.** Determining the role of Endurance

**CO-5.** Calculating and examine the Anthropometric Measurements

#### **Unit-I (15 Hours)**

1. Meaning and definition of test, measurement and evaluation
2. Relationship between test, measurement and evaluation
3. Principles of evaluation
4. Need and importance of test, measurement and evaluation in the field of physical education

#### **Unit-II (15 Hours)**

1. Criteria for test selection
2. Characteristics of an effective test:
  - a. Validity
  - b. Reliability
  - c. Objectivity
  - d. Norms/subjectivity
3. Classification of tests :
  - a. Standardized test
  - b. Teacher made test
4. Construction of a test:

- a. Knowledge test
  - b. Skill test
5. Administration of a test:
- a. Advance preparations
  - b. During test duties
  - c. After test duties

**Unit-III** (15 Hours)

- 1. Meaning and definition of motor ability
- 2. Tests for motor ability:

- a. Barrow motor ability test
- b. Scott motor ability test
3. Meaning and definition of physical fitness
4. Test of physical fitness and cardiovascular endurance test:
  - a. AAHPERD test
  - b. Harvard step test

**Unit-IV** (15 Hours)

1. Specific sports skill test:
  - a. Badminton- French short serve and clear test.
  - b. Basket ball- Johnson basket ball test.
  - c. Kabaddi- Schmithals French test in field Kabaddi.
  - d. Volley ball- SAI Volleyball Test.

**Reference Books:**

1. Clarks H. Harrison; "Application of measurement to health and Physical Education" Prentice Hall Inc., Englewood Cliffs, N.J. 5<sup>th</sup> Edition, 1976.
2. Scott Gladys and French; "Measurement and Evaluation in Physical Education", W.M.C. Brown Co. Publishers, Dubuque, Iowa, 1959.
3. Mathews K. Donald; "Measurement in Physical Education" W.B. Saunders Co., Philadelphia, London (Second Edition).
4. Mayer J.C; "Tests and Measurements in health and Physical Education", AppletonCentury Crafts, Inc. Third Edition.
5. Johnson, Barry L. and Nelso Jack K; "Practical Measurement for Evaluation in Physical Education", Surjeet Publications, 1982.

## SEMESTER-VI

**COURSE CODE: BPE604**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN YOGA**

#### **Objectives:-**

- 1- To enable the student to have good health.
- 2- To practice mental hygiene.
- 3-To possess emotional stability.
- 4- To integrate moral values

#### **The Course Learning Outcomes (COs):**

**CO-1.** The purpose of this course is to create awareness among everyone about yoga that helps in

transforming body and mind and promoting well-being of the society.

**CO-2.** To teach knowledge, skills, proficiency and

teaching techniques necessary for teaching Yoga.

#### **Unit-I (16 Hours)**

1. Meaning, definition and origin of Yoga.
2. Aims, objectives and scope of yoga.
3. Historical development of yoga in India.
4. Importance of yoga in the modern era.
5. Types of Yoga:
  - a. Gyana Yoga
  - b. Karam Yoga
  - c. Bhakti yoga
  - d. Raj Yoga
  - e. Hatha Yoga
  - f. Mantra Yoga
  - g. Laya Yoga

#### **Unit-II (14 Hours)**

1. Concept and philosophy of Asthanga Yoga.
2. Constituents of Asthanga Yoga & Shat Chakras :
  - a. Yama
  - b. Niyama
  - c. Asana

- d. Pranayama
- e. Pratyahar
- f. Dharma
- g. Dhyana
- h. Smadhi

3. Role and mode of practice of each step in the attainment of goal.

**Unit-III** (14 Hours)

- 1. Asanas and their importance.
- 2. Classification of asanas:

- a. Meditative
  - b. Relaxative
  - c. Cultural
3. General techniques and benefits with lesson plan any one of the following: Padmasana, Vajrasana, Halasana, Bhujangasana, Sarvangasana, Chakrasana, Dhanurasana, Salabhasana, Paschimotanasana, Mayurasana, Shirshasana.
  4. Technique and benefits of Surya namaskar.
  5. Difference between yoga and general exercises.

#### **Unit-IV** (16 Hours)

1. Lesson Plan (any one)
2. Concept of Shat Karma (Shudhi Kriyas), Hast Mudras and brief description of the following:  
Neti, Dhوتي, Basti, Nauli, Tratak, Kapalbhathi
3. Meaning and definition of Pranayama, general techniques and physiological benefits of the following :  
Ujjai, Sitkari, Shitali, Bhastrika, Bhramari, Kapalbhathi, Anlom-Vilom
4. Meaning and definition of Hast Mudra and Bandhas.
5. Rule & Regulation of Yoga Competition (All India Yoga Society Reg.)
6. Equipments, Officiating & Coaching

#### **Reference Books:**

1. "Facts about Yoga", By Shri Jogindera, The Yoga Institute, Santa Cruz, Bombay-55(1975)
2. "The Complete Book of Yoga", By Shre Anand Publishers Orient.
3. "Yoga in Modern Life", By Shri Jogindera, The Yoga Institute Santa Cruz, Bombay-55 (1966).
4. Singh Ajmer et.al, "Essentials of Physical Education." Kalyani Publishers, Ludhiana, second revised addition 2008.
5. Ramdev, S. (2006). *Yoga Sadhana and Yoga Chikitsa Rahasya*. Haridwar, India: Divya Prakashan.
6. Ramdev, S. (2009). *Pranayam Rahasya*. Haridwar, India: Divya Prakashan.

## SEMESTER-VI

**COURSE CODE: BPE605**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### SPECIALIZATION IN HANDBALL

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes:**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, Techniques, stances, forms, rules and duties of officials, etc. in the event of Handball.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of Handball.
2. Development of Handball in India and worldwide.
3. Establishment of national and international federations/associations of Handball.
4. Major tournaments of Handball.
5. Awards associated with Handball.

#### **Unit-II** (17 Hours)

1. Measurements and marking of Handball court.
2. Specifications of Handball.
3. Preparation and maintenance of Handball court.
4. Officials, no. of officials and duties of officials in the game of Handball.
5. Technical equipments for officiating.

**Unit-III** (14 Hours)

1. Fundamental skills of Handball :
  - a. Dribbling
  - b. Passing
  - c. Shooting
  - d. Defense
2. Lead-up games.
3. Barrow motor ability test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of Handball.
2. Important Signals in Handball.
3. Knowledge of score sheet.
4. Related sports terminologies.

5. Eminent sports personalities associated with Handball.

**Reference Books:**

1. Training Manual of Handball”, NSNIS, Patiala.
2. Phillips, B. E. (2009), “Fundamental Handball”, Kessinger Publishers, USA.
3. Jain, D. (2003), “Play and Learn Handball”, Khel Sahitya Kendra, New Delhi.
4. Surbone, L.M. et. al. (2010),“Team Handball ”, Betascript Publishing Co.,USA.
5. “Official Rule Book of Handball”, International Handball Federation.
6. .

## SEMESTER-VI

**COURSECODE: BPE606**

**(ELECTIVECOURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN VOLLEYBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes (COs):**

- CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Volleyball.
- CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of VolleyBall.
2. Development of VolleyBall in India and worldwide.
3. Establishment of national and international federations/associations of VolleyBall.
4. Major tournaments of VolleyBall.
5. Awards associated with VolleyBall.

#### **Unit-II** (16 Hours)

1. Measurements and marking of VolleyBall court.
2. Specifications of VolleyBall.
3. Preparation and maintenance of VolleyBall court.
4. Officials, no. of officials and duties of officials in the game of VolleyBall.
5. Technical equipments for officiating.

#### **Unit-III** (15 Hours)

1. Fundamental skills of VolleyBall :

- a. Service
  - b. Pass
  - c. Smash
  - d. Blocking
2. Lead-up games.
  3. Barrow motor ability test.

**Unit-IV** (15 Hours)

1. Major rules and regulations of VolleyBall.
2. Important Signals in VolleyBall.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with VolleyBall.

**Reference Books:**

1. Training Manual of Volleyball”, NSNIS, Patiala.
2. American Volleyball Coaches Association (2005), “Volleyball : Skills and Drills”, Human Kinetic, USA.
3. Scates, A.E.(1993), “Winning Volleyball”, W. C. Brown, USA.
4. Sagar, S. K.(1994),“Cosco skill Tactics -Volleyball ”, Sports publication, Delhi.
5. “Official Rule Book of Volleyball”, International Volleyball Federation.

## SEMESTER-VI

**COURSE CODE: BPE607**

**(ELECTIVE COURSE-VII)**

**Credit:4**

**Marks:(ESE=70+CCA=30)=100**

### **SPECIALIZATION IN FOOTBALL**

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning outcomes (COs):**

**CO-1.** To be able to learn and deliver the knowledge of basic fundamental skills, techniques, stances, forms, rules and duties of officials, etc. in the event of Football.

**CO-2.** To develop a knowledge about the historical development of this game.

#### **Unit-I** (14 Hours)

1. Origin and brief history of Football.
2. Development of Football in India and worldwide.
3. Establishment of national and international federations/associations of Football.
4. Major tournaments of Football.
5. Awards associated with Football.

#### **Unit-II** (17 Hours)

1. Measurements and marking of Football ground.
2. Specifications of Football.
3. Preparation and maintenance of Football ground.
4. Officials, no. of officials and duties of officials in the game of Football.
5. Technical equipments for officiating.

#### **Unit-III** (15 Hours)

1. Fundamental skills of Football :
  - a. Passing
  - b. Kicking
  - c. Trapping
  - d. Heading
  - e. Throw in
2. Lead-up games.
3. Barrow motor ability test.

**Unit-III** (14 Hours)

1. Major rules and regulations of Football.
2. Important Signals in Football.
3. Knowledge of score sheet.
4. Related sports terminologies.
5. Eminent sports personalities associated with Football.

**Reference Books:**

1. Training Manual of Football”, NSNIS, Patiala.
2. American Football Coaches Association (2002), “The Football Coaching Bible”, 1<sup>st</sup> edition, Human Kinetic, USA.
3. Sharma, O.P.(2001), “Teaching and Coaching Football”, Khel SahityaKendra, New Delhi.
4. Thani, Yograj (2002), “Coaching Successfully Football ”, Khel SahityaKendra, New Delhi.
5. “Official Rule Book of Football”, Federation International Football Association.

## SEMESTER-VI

### PRACTICAL

#### MARKING&OFFICIATINGIN GAMES

**COURSE CODE: BPE-P-608**

**(ELECTIVE GROUND COURSE-XI)**

**Credit:4** Marks=100 (120Hours)

#### **Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

#### **The Course Learning Outcomes:**

- Know the role of and the correct terminology used by a Marker
- Know the role of and the correct terminology used by a Referee
- Know the correct times allowed for various intervals during a game of squash
- Know the rules relating to the serve
- Understand the basic rules relating to interference on court
- Know the different categories relating to injuries and the times allowed for recovery (including for bleeding)
- Have a basic knowledge of the Conduct Rule and when it can be used

**SEMESTER-VI**  
**PRACTICAL**  
**MARKING&OFFICIATING IN ATHLETICS**

**COURSE CODE: BPE-P-609**

**(ELECTIVE GROUND COURSE-XII)**

**Credit:4**

**Marks=100**

**(120Hours)**

**Objectives:-**

- Address interpersonal problems within the group.
- Improve inter-team communication.
- Enhance the productivity of employees.
- Increased motivational levels among team members.
- Inculcate leadership skills among employees.
- Encourage out of the box & creative thinking.

**The Course Learning Outcomes:**

- Know the role of and the correct terminology used by a Marker
  - Know the role of and the correct terminology used by a Referee
  - Know the correct times allowed for various intervals during a game of squash
  - Know the rules relating to the serve
  - Understand the basic rules relating to interference on court
  - Know the different categories relating to injuries and the times allowed for recovery (including for bleeding)
- **Have a basic knowledge of the Conduct Rule and when it can be used**

Lessonsonmarkingandofficiatingonanytwoevents(oneontrackandonefieldevent)ofathleticsoveredinthepractical'scoursecontentofB.P.E.course(SemesterItoV).

**Instructions:-**

1. Each student shall take a minimum of 10 supervised lessons on marking & officiating in athletics and games (5 lessons each in athletics & games). In addition each trainee shall complete 1 assignment each in marking & officiating in athletics & games.
2. For the purpose of examination in practical's one lesson each in marking and officiating of respective games & athletic events is compulsory for each candidate which will be assessed by external examiner appointed by the university.
3. Each group of practical examination will be of three hours duration irrespective of its

weight age.

The contents of teaching for each activity are as follows:-

1. Measurements & marking of track & field events and play fields of games.
2. Equipments & specification of equipments.

3. Rules & regulations of athletic events and games.
4. Related books & magazines.
5. Officiating :
  - a). Duties of official
  - b). Knowledge of score sheets
  - c). Officiating signals
  - d). Technical equipment for officiating
  - e). No. and types of officials.

## **SEMESTER-VI PRACTICAL**

**(Fundamental of Computer Application In Physical Education Practical)**

**COURSECODE:BPE-P-610**

**(MINOR ELECTIVELAB COURSE-VI)**

**Credit:4**

**Marks=100**

**(120Hours)**

### **Objectives:-**

- **Operate a variety of advanced spreadsheet, operating system and word processing functions.**  
Solve a range of problems using office productivity applications, and adapt quickly to new software releases. Maintain quality assurance through critically evaluating procedures and results.

### **The Course Learning Outcomes:**

- CO-1.** Memorizing theImportance ofComputer, characteristics and application.
- CO-2.** Describing the block diagram and classification of the computers.
- CO-3.** Acquiring the knowledge of software, hardware, and storage devices of the computers.
- CO-4.** Determining the role of MS-Word, MS-Excel& MS Power point.
- CO-5.** Define Word processor and its types.
- CO-6.** Appling the concept of prepare the presentation and slide show, animation with function.
- CO-7.**Estimating the working with graph.

1. M.S. Word :
  - a. Creating Document
  - b. Typing Text
  - c. Text Formatting

- d. Inserting Tables, rows and columns
  - e. Mail- Merge
  - f. Page Formatting
2. Excel:
    - a. Creating Spread Sheet and Sorting
  3. Power Point Presentation:
    - a. Creating PPT's
  4. Creating e-mail, Id and Web-browsing.





**ORDINANCE AND COURSE CURRICULUM FOR**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**

**TWO YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

**[www.universityofpatanjali.com](http://www.universityofpatanjali.com)**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**Scheme of Examinations**  
**MASTERS OF TOURISM & TRAVEL MANAGEMENT (MTTM)**  
**SEMESTER LAYOUT**

<b>Semester-I</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-101</b>	<b>Tourism Concepts and Principles</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -102</b>	<b>Tourism in Uttarakhand</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -103</b>	<b>Yoga Health &amp; Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-104</b>	<b>Adventure Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-105</b>	<b>General Viva-Voce</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-II</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-201</b>	<b>Travel Agency &amp; Tour Operation</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -202</b>	<b>Tourism Resource in India</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -203</b>	<b>Transport Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -204</b>	<b>Computer Applications in Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-205</b>	<b>Educational Tour</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-III</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM-301</b>	<b>Culture Heritage and Tourism</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -302</b>	<b>Airlines Ticketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM -303</b>	<b>Hotel &amp; Resort Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-304</b>	<b>Research Methodology</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM-305</b>	<b>Project Report &amp; Presentation</b>	<b>100</b>	<b>-</b>	<b>100</b>

<b>Semester-IV</b>				
<b>Paper Code</b>	<b>Paper Name</b>	<b>Examination Marks</b>		
		<b>External</b>	<b>Internal</b>	<b>Total</b>
<b>MTTM -401</b>	<b>Major Destinations of world</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --402</b>	<b>Tour Packaging Management</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --403</b>	<b>Tourism Marketing</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --404</b>	<b>Tourism Policy &amp; Planning</b>	<b>70</b>	<b>30</b>	<b>100</b>
<b>MTTM --405</b>	<b>On-The Job Training</b>	<b>100</b>	<b>-</b>	<b>100</b>

## Semester -I

### **TOURISM CONCEPTS & PRINCIPLES (MTTM-101)**

#### **Course objectives:**

1. This will be an introductory module giving the basis of tourism studies.
2. This will give an overview of the Tourism Industry and various organisations.
3. Give an insight into how travel and tourism involved over a period of time and reached the modern stage.
4. Enhance the knowledge of students in various areas related to Tourism and how it affects the destination.

**Course Outcomes:** After studying this paper, students will able to

CO 1. assume the elementary concepts of Tourism that are applied in Tourism and Hospitality Industry.

CO 2. classify the role, function and operation in Tourism Industry.

CO 3. divide the concept of Travel and Tourism, the framework of the system, types and form of tourism as well as the impacts of tourism.

CO 4. describe the different types tourism resources of India, there importance in tourism and management.

#### **Unit – I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components
4. Different approaches to the study of tourism.

#### **Unit – II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

#### **Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

#### **Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

#### **Unit- V Tourism Organization:-**

Origin, location, and functions of WTO, IATA,PATA,TAAI, ITDC.

**Suggested Readings:**

- Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.
- Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.
- Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.
- Mill, R.C., (1990), Tourism: The International Business, Pretience Hall, New Jersey.
- Bhatia, A.K., - International Tourism  
Seth, P.N., (1999) Successful Tourism Management (Vol 1 & 2 )

## **Tourism in Uttarakhand (MTTM-102)**

### **Course Objectives:**

1. The module gives information of tourist places of Uttarakhand that helps students to know the background elements of tourism resources of Uttarakhand state.
2. Establishing world class infrastructure, attracting private sector for infrastructure development and identifying new tourism destination.
3. Gives the knowledge of religious and pilgrimage sites.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Enrich about the different Tourism resources of Uttarakhand that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. List of the Tourism prominent role in Uttarakhand. The draw of the Himalayas, the beauty and cool relief of hill stations and the wealth of Hindu religious pilgrimage sites are a part of the attraction.

CO 3. Explore the importance of religious places.

### **Unit 1 Geographical and Historical Background**

Geographical features, divisions, mountain ranges, rivers, main symbol of Uttarakhand Reason , climate, General introduction of History Garhwal and Kumaon region.

### **Unit 2 Social and Cultural Heritage**

Important caste and tribes, Main dances, Fairs and Festival, Handicrafts, Tradition, Main Cusin.

### **Unit 3 Spiritual Tourism in Uttarakhand**

Background of historical tourism, important places -Haridwar, Rishikesh, Jageshwar, Chardham in Uttarakhand, Panch Prayag, Hemkund, panch Badri ,panch kedar.

### **Unit 4 Natural Based Tourism**

Vedani and Dayara Bugyal, Roopkund, Nainital, Devtaryatal, Sahastra tal, Mussiore, Kosani, Ranikhet, Munasyari, ,Kotdwar, Valley of Flowers, Rajaji and Jim Corbett National Park.

### **Unit 5 Adventure Sports**

Trekking, Mountaineering, Skiing, River Rafting and Paragliding, Bungi Jumping - General Introduction.

### **Suggested Readings:**

- - Uttranchal 'the abode of gods'
- - Uttrakand ka smagra darshan – Savita Mohan.
- - Uttrakhand year book – 2010 –Lokesh Navbani
- - Uttranchal- Aitihashik avem Sanskritic Ayam- Uma Prashad Thapaliya
- Uttranchal ke Devalaya – Triloke Chandra Bhatt.
- Uttranchal me Paryatan naye chitize – Dr. Harimohan.

## **Yoga Health and Tourism (MTTM-103)**

### **Course Objectives:**

1. The course intent to upgrade the knowledge of the latest trends in tourism particularly the health tourism in the country.
2. Since health tourism constitute a niche market for the industry and the government as well, it becomes desirable for the students to get in touch with this new segment of tourism industry.
3. After studying this course, the student shall be able to define the trends, issues and challenges in the field of health tourism in India.
4. After reading this subject, students get the knowledge of health and wellness.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Classify the Health and wellness tourism paper can provide opportunities to students to learn new skills or knowledge related to nutrition, fitness, and other aspects of health and wellness.

CO 2. Interpret in enhancing self-awareness among the students by practically taking them in various health & wellness activities, as per the requirements and needs.

CO 3. Classify the importance of health and wellness of the country.

### **Unit 1**

Meaning of word 'Yoga', its definition, Aims & objects, Brief history of yoga, Introduction of Patanjali Yoga Sutra, Relevance of Yoga in relation to Tourism.

### **Unit II**

Health aspects of Yoga: Meaning of Health Yoga, its definition, Aims & objects, its brief history and significance of Hathyoga in Tourism, limbs of Hathyoga.

### **Unit III**

Role of Asanas, Pranayama & Mudra during Travelling. Importance of Yoga while in high Altitudes, Study of Depiction of Yogic love in the places of Pilgrimages.

### **UNIT – IV**

Health and Medical Tourism: Meaning, nature and scope Health and Medical tourism Product

Health and Medical Tourism markets at global level Advantages and disadvantages for India in Global Medical Tourism Market

### **UNIT – V**

Health and Medical Tourism in India Role of Private sector in health and medical tourism

Traditional Health Care system in India Government incentives for health and medical tourism in India

## **References**

1. Asana- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
2. Pranayama- Swami Kuvalyanada, Kaivalyadham, Lonavla (Pune, Maharashtra)
3. Ghrand Samhita ----do----
4. Hath Pradipika ----do----
5. Ghrand Samhita-Swami Niranjananda Saraswati, Bihar School of Yoga, Mungher.  
Asana, Pranayama, Bandha and Mudra-: Swami Satyananda Paramhansa Bihar School of  
Yoga, Maugher
6. Smith, Melanie, & Puczko, Laszlo, Health and Wellness Tourism.
7. Conell, John, Medical Tourism.
8. Kumar, Medical Tourism in India (Management and Promotion)
9. Edlin, Gordon & Golanty, Eric, Health and Wellness.

## Adventure Tourism (MTTM-104)

### **Course Objectives:**

1. Memorize the concepts related to adventure tourism.
2. Explains the status of the adventure tourism market in India.
3. Illustrate the challenges, opportunities, and future prospects for adventure tourism in India.
4. Examine the various types of adventure sports in India
5. Evaluate the role of government and other stakeholders in adventure tourism.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Relate the adventure tourism.

CO 2. Explain this type of tourism tourists do some adventures activities like as skydiving, hill climbing, scuba diving for their pleasure and fun purposes.

CO 3. Demonstrate the practical & theoretical aspects of Adventure Tourism.

### **Unit –I: Introduction:-**

Definition, Nature and scope of Adventure tourism: Adventure motives through the ages and their contribution to inventions, explorations and discoveries.

Adventure in the present context, contemporary trends in Adventure tourism Geographical diversities and opportunities for A.T.in India. Potential and existing adventure tourism in different states. Planning and development perspective, major thrust areas, promotional steps taken by states and centers. Organization and institutions promoting Adventure Tourism in India.

### **Unit –II: Land based Adventure activities:-**

Mountaineering, Trekking, Rock climbing, skiing, skating; their necessary equipments, techniques and problems. Wildlife tourism: status of wildlife tourism, popular National parks and Wildlife sanctuaries.

### **Unit –III: Water based activities:-**

Water resources of India; rivers, sea and lakes. River reading, nature of white water, silent water and sea water. Rafting, Kayaking canoeing, yachting, water scooter, Hover craft. Surfing, SCUBA diving, under water activities, coastal activities. Places, organizations, equipments associated with above activities.

### **Unit-IV: Air based activities:-**

Air based activities, Atmosphere, seasons, wind pressure and wind movement in India. Hang gliding, Ballooning, Para jumping , Sky diving, Para sailing. Places, organizations and equipments associated with above activities.

**References:-**

1. Ahmad Aizaz : 'General Geography of India, NCERT, New Delhi
2. Goh Cheong long : An Economic Atlas of India, Oxford University
3. National Atlas of India, Govt. of India Publication, Calcutta
4. Atlas of World Oxford
5. Singh, R.L.(ed) India : A Regional Geography National Geographical Society of India (Varansi 1989)
6. Manorama Year Book
7. Indian Year book, Publication Division, Govt. of India, New Delhi
8. Aluwalia H.P.S. and Manfred Garner : Himalayas: A Practical Guide, Himalayan Books ( Delhi, 1985)
9. Bedi, Ramesh and Rajesh : Indian Wildlife, Brijbasi Printers ( New Delhi, 1989)
10. Bose, S.C. Geography of the Himalayas, National Book trust, India ( New Delhi,1976)
11. Chand Gian and Manohar Puri 'Trekking' International publisher India ( new Delhi,1989)
12. Gamma, Karl 'The Handbook of Skiing Pelham Books (London, 1985)
13. Lozawa, Tomoya : Trekking in the Himalayas, Allied published Pvt. Ltd., ( New Delhi, 1980)
14. Law, B.C. (ed) : Mountains and Rivers of India, Calcutta, 1968
15. Rowe, Ray 'White in Water Kayaking', Salamander Books (London, 1987)
16. Saharia, V.B. "Wildlife in India' Natraj Publisher (Dehradun, 1982)

## **General Viva-Voce (MTTM-105)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions studied in current semester.
2. The purpose is to study the destinations followed in different circuits.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

- CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.
- CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.
- CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will go for the general Viva Voce Examination. The curriculum of this exam is curriculum of MTTM 1<sup>st</sup> sem and the major tourist interest in India.**

The Viva exam and evaluation will jointly taken by the internal & external examiner.

## **Travel Agency & Tour Operation (MTTM-201)**

### **Course Objectives:**

1. The students will understand the conceptual meaning and differentiation between Travel agency and Tour operation. Further they will understand formalities and documentation needed to set up these units.
2. Organize the services being provided to the customer, such as transportation and accommodation.
3. Understand various skills necessary for travel agency and tour operation business
4. Understand various travel terminology.
5. Acquire knowledge on documentation in travel industry.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend the travel agencies can be defined as a sector that books, sells, and arranges travel, tour, and accommodation services provided by suppliers of the industry.
- CO 2. Interpret everything possible even with complicated dates.
- CO 3. Infer Some of primarily engaged in making travel arrangements and reservation services.
- CO 4. Outline the skills necessary to identify sales and marketing strategies for travel agencies

### **Unit - I : Travel Agency and Tour Operation business:**

Travel Agencies and Tour Operators- meaning, concept, types and importance Historical growth and development of travel agency and tour operation business. Linkages and integrations in travel agency and tour operation The future role of Travel intermediaries

### **Unit - II: Organizational structure and functions**

Organizational structure of travel agency and tour operator-main operational and managerial staff. Travel agency HR planning and job analysis of major positions Major functions of Travel agency and tour operators

### **Unit - III: How to Set Up a Travel Agency**

Procedure for approval of Travel Agents, Tour Operators by Department of Tourism, Government of India and IATA Ownership structure and revenue source of travel agency and tour operation fiscal and non-fiscal incentives available to travel agencies and tour operators business.

### **Unit - IV: Understanding the role of Government and other organizations in Travel Trade**

Role and contribution of Department of Tourism, Government of India, ITDC and State Government Travel Trade Associations and Organizations- Role and contribution of WTO, IATA, TAAI and IATO. Present business Trends and Future prospects of travel agencies and tour operators business.

**Unit - V: Case Studies**

THOMAS COOK

COX & KINGS

ORBIT

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**Suggested Readings:**

Holloway, J. c., The Business of Tourism (1983), Mac Donald and Evans, Plymouth.

Syratt Gwenda, Manual of Travel Agency Practice, Butterworth Heinmann, London, 1995

Stevens Laurence, Guide to Starting and Operating Successful Travel Agency, Delmar Publishers Inc., New York. 1990

Gee, Chuck and Y. Makens, Professional Travel Agency Management, Prentice Hall, Nt.: York, 1990.

Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

Foster D.L. The Business Of Travel Agency Operations and Administration

## **Tourism Resource in India (MTTM-202)**

### **Course Objectives:**

1. The module gives information of countries tourist places of national and international importance and it helps students to know the background elements of tourism resource
2. To provide entertainment to tourists, organise tourism related activities such as cultural shows, fairs and festivals etc.
3. To take over and develop and manage places of tourist interest, parks, lakes, avenues, beaches and recreational places, sports etc.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. Compare about the different Tourism resources of India that attracts millions of tourists every year through Domestic and Inbound Tourism.

CO 2. Go through the planning of tourists will often gain a greater respect for the lifestyle of the people living in the area they are visiting.

CO 3. Increase tourism that leads to local communities improving their skills and improving their social status.

### **Unit – I Introduction:**

Concept of resource, attraction & product in tourism, meaning & characteristics, Typology & nature of tourism resources. Nature & Scope to tourist places in India.

### **Unit- II Natural Resources:**

Study of wild life Parks, Sanctuaries & Tiger Reserves in India with case studies of Raja Ji National Park, Jim Corbett, Bharatpur Bird Sanctuary, Valley of Flowers & Gir National Park, Kaziranga National Park.

### **Unit-III Pilgrimage Destinations:**

**Hindu-** Char Dham Yatra, Haridwar, Khajuraho, Mahabalipuram, Tirupati, Madurai, Konark.

**Buddhist:** Lumbini, Bodhgaya, Sarnath, Kushinagar, Sanchi, Ajanta.

**Jain:** Mount Abu, Sharavanbelgola.

**Islamic:** Delhi, Agra, Fatehpur Sikri.

**Sikh:** Patna, Nanded, Golden Temple (Amritsar) Hemkund Sahib (Uttarakhand).

### **Unit- IV Socio-Cultural Resource:**

Socio cultural resources - Important fairs and festivals with case studies of Kumbha Mela, Dussehra, Onam, Puri Rath Yatra- & Chhath.

### **Unit - V: Hill Station & Coastal Destination:**

**Hill Station:** Study of Hill Station attractions and their environs with case studies of Mussoorie, Nainital, Shimla, Manali and Ooty.

**Beaches:** Beaches and Islands: Beaches in Goa, Kerala, Andaman & Nicobar Islands.

**Suggested Readings:**

- Gupta, SP, Lal, K, Bhattacharya, M. Cultural Tourism in India (DK Print 2002)
- Dixit, M and Sheela, C. Tourism Products (New Royal Book, 2001)
- Oki Morihiro, Fairs and Festivals, World Friendship Association, Tokyo, 1988.
- Mitra, Devla, Buddhist Architecture, Calcutta.
- Michell, George, Monuments of India, Vol. 1. London.
- Tourists Resource of India- Ram Acharya.
- Tourists Resources of India- Ratandeeep Singh.
- Tourists Resources of India-Jagmohan Negi.
- Himachal Pradesh, The Land, the people by S.S. Negi

## **Transport Management (MTTM-203)**

### **Course Objectives:**

1. Transport is a vital component of the travel and tourism industry.
2. It becomes imperative for the students of tourism to learn about different modes of transportation and modern world.
3. It is the most important accessibility in terms of exploring world.
4. Promotes social cohesion, accelerate economic prosperity and insure security and territorial integrity.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Demonstrate Transport helps people to move from tourist generating area to tourist destination area.
- CO 2. Elaborate different modes of transport like road transport, rail transport, water transport and air transport.
- CO 3. Get the knowledge about transport management in tourism.
- CO 4. Shape cities, promoting community and enhance quality of tourism

### **Unit-I: Transport and Tourism**

Transportation as dynamic & visual manifestation of tourism. History of different modes of transportation. Landmarks in the development of transport sector and factors affecting the development of different modes of transport.

### **Unit-II: Air Transport**

Airlines & tourism: history of airlines' in India. Role and contribution of air India, Indian Airlines, private airlines & helicopter services. Infrastructural basis of airlines in India. Role of airlines in tourism promotion: recent policies regarding airlines, problems of airlines business.

### **Unit-III: Surface Transport**

Surface transport & tourism: Growth and development of surface transport in India. Importance of surface transportation. Infrastructural basis for surface transport. Coaches & car rental system in India. Problems faced by surface transport sector. Role and contribution of NHAI.

### **Unit-IV: Railway Transport**

Railway & tourism: history & present status of Indian railway. Zonal distribution, infrastructural basis of Indian Railway. Role of Indian railway in tourism promotion. Special trains & packages for tourists. Problems faced by Indian railway.

### **Unit-V: Water Transport**

Water transport: history & present status of water transport, Waterways of India. Types of water transport: Ocean liners, Cruise liners, ferries, hovercraft, river and canal boats and fly cruise.

**References:**

1. Ahmad Aizaz: ' General Geography of India, NCERT, New Delhi.
2. National Atlas of India, Govt. of India, Publication Calcutta.
3. Atlas of World Oxford.
4. Singh, R.L.(ed) India: A Regional Geography National Geographical Society of India (Varanasi 1989)
5. India year book, Publication Division, Govt. of India, New Delhi.
6. Aggarwal Surinder : 'Travel Agency Management', communication India, New Delhi.
7. Hannel Christine, Robert Harshman and Grahan Draper- Travel and Tourism A world regional geography , john Wiley and Sons, New York
8. Hurst, Elist, 'Transporation Geography' McGraw Hill, New York
9. OAG Airlines time table
10. OAG Cruise lines time table
11. Indian Railway Time table

## Computer Applications in Tourism (MTTM-204)

### **Course Objectives:**

1. This module is to inform the students about the role of Computer Information systems in travel trade.
2. The prescribed unit enhance the skills of students especially when they will be attached for practical.
3. This course provides the knowledge of basics computers.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Demonstrate the term Application refers to Software which is a set of instructions or code written in a program for executing a task or an operation in a Computer.

CO 2. Extent applications play a vital role in a Computer as it is an end-user program that enables the users to do many things in a system.

CO 3. Explain the basic rules of computer science.

### **UNIT-I: Computer System**

Introduction to Computers, Characteristics of computers, Applications of computers, Different units of computer, Component of computers, Input / Output and auxiliary storage Devices. CD/DVD ROM, RAM, ROM, Computer application In Tourism.

### **UNIT-II : Windows & MS Office**

Introduction to windows MS –Office: MS Word, MS Excel, MS Power Point.

### **UNIT – III :Network and Communication**

Networking: Concept, User, Types, Devices Used, LAN, MAN, WAN.

Basic Communication Components: Modems, Routers, Client, Server, Communication processors, Host Computers, Types of Transmission.

### **UNIT – IV: Internet**

Internet: Concept, uses, components, browsing, Search Engines, E-mail: Opening Account. Internet and Tourism. Information and Communication Technology (ICT) ICT: need definition, uses for tourism, and future role. ICT in tourism sector, Strategic and tactical role of ICTs for Tourism.

### **UNIT – V: Hotel & Travel Software:**

What is CRS, How it functions. CRS for Rail Transport, Hotel Bookings, Airlines: Different packages used: Amadeus, Galileo, Sabre etc.

**REFERENCES:**

1. Leon Alexis and Mathews Leon: Introduction to Computers, Vikas Publishing House Pvt Ltd. New Delhi
2. Bhatnagar S C and Ramani K V: Computers and information management. A Primer for Practicing Managers, New Delhi, Prentice Hall of India Pvt. Ltd.
3. Bansundara, S: Computer Today.
4. Goel Ritender and D N Kakkar: Computer Application in Management, New Age International Publishers, New Delhi.
5. Jaggi V P and Jain Sushma: Computers for Every one, New Delhi, Academic India Publishers.
6. Simpson Alan: Your First Computers (2nd Edition) New Delhi-BPB Publications.
7. Saxena S: and Prabhpreet Chopra: Cumputer Applications in Management, Vikas Publishing house Pvt. Ltd. New Delhi.
8. Saxena S: MS Office2000 for Everyone Vikas Publishing house Pvt. Ltd. New Delhi.
9. Internet Sites and resources.

## **Educational Tour MTTM-205**

### **Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

### **COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

### **Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

## **Culture Heritage and Tourism (MTTM-301)**

### **Course objectives**

- 1.This module is important to study because India is rich in heritage properties and its maintenance is necessary.
- 2.This will help to understand the nature of heritage properties and conservation.
- 3.prevention and promotion of tribes and communities of the state.
- 4.It helps in studying traditional culture and preserve with modernity.

**Course Outcomes:** After studying this subject, students will able to

CO 1. Contrast of sustainable tourism is defined as “tourism that respects both local people and the travels.

CO 2. Translate the cultural heritage and the environment” It seeks to provide people with an exciting and knowledgeable fair.

CO 3. Supports culture and helps renewing tourism.

CO 4. Relate the strategies of many organizations regarding cultural heritage

### **Unit 1: Understanding Culture & Tourism**

Concept and Fundamentals of Indian Culture.

Culture – Tourism Relationship; Socio-Cultural Impacts of Tourism.

Spiritual basis of Indian culture

### **Unit-II: UNESCO Heritage Sites**

What is Heritage? Meaning and concept. Criteria for selection as heritage sites, monuments and zone by UNESCO (WHC). Types of heritage property. World famous heritage sites and monument in India and abroad.

### **Unit - III: Living Culture and Performing Art of India**

Major Fairs and festivals of India

Classical dances and Music of India

Indian handicrafts

### **Unit – IV: Heritage Management in India**

Heritage Management, objectives and strategies, Protection, Conservation and Preservation, Heritage Marketing, Destination development.

National and International Organisations engaged in Heritage Management (UNESCO, ICOMOS, ASI, INTACH and NGOs),

### **Unit – V: Museums**

Museums, Concept and classification. (National Museum, New Delhi; Bharat Kala Bhawan, Varanasi; Archaeological Museum, Sarnath, etc.), Heritage Hotels.

**Suggested Readings:**

- Allchin, B., Allchin, F.R. et al. (1989) Conservation of Indian Heritage, Cosmo Publishers, New Delhi.
- New Inskeep, Edward, Tourism Planning: An Integrated and Sustainable Development Approach (1991) VNR, New York.
- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- UNESCO-IUCN (1992) Eds. Masterworks of Man and Nature, Pantoga, Australia.
- IATA Special Mail Manual.

## Airlines Ticketing (MTTM-302)

### **Course Objectives:**

1. This module is intended to prepare the students to enter a travel agency where he will be required to be well-versed with the modalities of air ticketing and the study of air transportation industry.
2. Certificated air carriers, the freight and passenger business, general aviation.
3. Economic impact of aviation, understanding of competition and government regulations, Ownership of airlines.
4. The cyclical nature of the airline business. Distribution of world passenger traffic, etc

**Course Outcomes:** After studying this paper, students will able to

CO 1. Interpret the Airline tickets are important documents that confirm a passenger has a seat on a flight.

CO 2. Summarize the ticket includes important information about the passenger and the flight that they will take.

CO 3. Infer the ticket is exchanged for a boarding pass during the check-in process, and this gives the passengers permission to board the plane from studying this subject.

CO 4. Compare the global world class aircraft manufactures and airport providers.

**Unit-I** Aviation Geography: IATA areas, sub areas, sub regions, Longitude, Latitude, time calculation: GMT variation, concept of standard time and daylight saving time, calculator of elapsed time, flying time and ground time, Global Indicators, Aviation Organisation: IATA & ICAO.

**Unit II** Air Transportation: Concept of Airlines, Domestic and international airlines in India, Private sector and government airlines, types of aircraft, the hub and spoke system, interline agreements, role of DGCA, critical remarks on air transport industry of India, policies, practices.

**Unit III** Understanding of various codes: ABC codes, looking up schedules, flight connections, transfer connections, looking TIM:- Passport, visa, special permits, customs formalities and currency regulations, health regulations and Airport tax, passenger needing special attention. Minimum connecting time, general rules of currency conversion and rounding up of fare, different modes of payments e.g. cash, credit card etc.

**Unit IV** Introduction to fare construction:- Definition and understanding of published fares, various types, normal, child fare, one way, return, excursion etc; commissions, discounts, MCO, PTA, HIP, BHC, looking up MPM, calculating TPM, determining the fare breakup point, surcharges, excess mileage table. Ticketing-Insurance of tickets, Normal, one way, return, round the world, excursion, circle trip, child, etc. cancellation, reissue of tickets.

**Unit V** Documentation: Air way bill, charges correction advice, irregularity report, cargo manifesto, cargo transfer Manifesto, documents concerning postal mails and diplomatic mails. Shippers declaration for dangerous goods. Handling- Cargo capacity of Air and Ships. Cargo needing special attention, introduction to dangerous goods regulations. Some important Cargo companies.

**Suggested Readings:**

- Gupta S.K : International Airfare & Ticketing Methods & Technique UDH Publishers & Distributors (P) Ltd. New Delhi.
- Sinha P.C: Encyclopaedia of Tourism Management
- Jagmohan Negi: Travel Agency & Tour Operation Concepts & principle
- Galileo systems
- ABC World wide Airways Guide (Red & Blue)
- Air Tariff Book 1, Worldwide Fares.
- Air Tariff Book 1, Worldwide Rules, IT Fares etc.
- Air Tariff Book 1, World Wide Maximum Permitted Mileage
- Travel Information Manual ( TIM )
- IATA Ticketing Hand Book

## **Hotel & Resort Management (MTTM-303)**

### **Course Objectives:**

1. This Module is prescribed to appraise students about the important departments of classified hotel.
2. To teach various aspects related to accommodation Industry.
3. To determine various departments according to guests needs and safety.

**Course Outcomes:** After studying this paper, students will be able to

- CO 1. Extend The Hotel and Resort Management course is designed for students with a career interest in the lodging and resort industries.
- CO 2. Outline these fields represent a wide range of businesses, from the small country inn or bed and breakfast to multinational chains of hotels and resorts.
- CO 3. Interpret the students regarding different accommodations with their functions.

**Unit – I    Origin and Expansion:** Conversion of Tavern; Inns, Chalets and places into hotels, creation of private, Public and multinational hotel chains in India. Regional, National and International Hotel Associations and their operation.

**Unit – II    Departments of hotel:** Front Office, House Keeping, Food and Beverage, Personnel and Accounts. Role and functions of different departments.

**Unit – III    Type and forms of Hotels:** Classification of hotel on basis of location, size, clientele and range of service, hotel plan, type of room etc.  
Star classification- Criteria and Procedure adopted in India.  
Resort Properties, Heritage Hotels- concept and emerging dimensions.

**Unit – IV    Major Hotel Chain in India:**

Taj Group of Hotels  
Oberoi Hotels & Resorts  
Lalit Group of Hotels  
Ashok Group of Hotels

**Unit – V    Resort Planning:** Preliminary Consideration in Resort Planning and Development and Phases of Resort Planning and Development. Trends and factors in Developed Tourist Markets leading to growth of Resort Concept. Factors affecting rate. Basic Elements of a Resort Complex: Lodging facilities, landscaping, Dining and drinking facilities, Family Oriented Services, shops and services, Entertainment; Use of Community Resources.

**Suggested Readings:**

- Selected case studies from sterling. Delmia, Toshali and R.C.I. International will be managed from concerned organisations.
- Andrews, Sudhir : 1985, Hotel Front Office, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : Hotel House Keeping, Tata M C Graw – Hill, New Delhi.
- Andrews, Sudhir : (1991),Food and Beverage Service,Tata M C Graw–Hill, New Delhi.

## Research Methodology (MTTM-304)

### Course Objectives:

1. The main objective of this course is to introduce the basic concepts in research methodology related to Management & Tourism.
2. This course addresses the issues inherent in selecting a research problem and discuss the techniques and tools to be employed in completing a research project.
3. This will also enable the students to prepare report writing and framing Research proposals.

**Course Outcomes:** After studying this paper, students will be able to

CO 1. contrast and comprehend the basics in research methodology and applying them in research/ project work.

CO 2. take up and implement a research project/ study.

CO 3. develop skills in qualitative and quantitative data analysis and presentation used in Research activities.

**Unit-I: Research:** meaning, characteristics, types and relevance of research; trend and challenges with special reference to tourism and hotel business. Research process. Identification and formulation of research problem. **Research methodology:** meaning and procedural guidelines. **Literature review** – Meaning, Importance and sources of literature

**Unit-II: Research design-** Meaning of research design; need for research design; features of a good Research design; different research designs. **Sampling design:** the concept of sampling; Aims of sampling, census versus sample survey; steps in sampling design; characteristics of a good sample design; criteria for selecting a sampling procedure; sampling techniques/methods: probability sampling and non-probability sampling.

**Unit-III: Measurement and scaling techniques-** Measurement in research; sources of Error in measurement; test of sound measurement; technique of developing measurement tools; measurement scales; meaning of scaling; bases of scales- classification, importance; scaling techniques-rating and ranking; types of scales.

**Unit-IV: Collection of Data-** nature, sources of data; methods of data collection. **Processing of data:** Classification and Tabulation, Interpretation of data.

**Unit-V: Report writing-** meaning functions; types of research report; significance of report writing report.

### Suggested Reading:

1. Research Methodology (Pearson Publication) by Ranjit Kumar
2. Management Research Methodology (Pearson Publication) by Krishna swamy, Sivakumar & Mathirajan
3. Business Research Methods (Tata McGraw Hill Publication) by Cooper & Schindler
4. Research Methodology (New Age Publishers) by C.R. Kothari
5. Methods in Social Research (Surjeet Publications) by William J. Goode & Paul K. Hatt

## **Project Report & Presentation (MTTM-305)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

### **COURSE DETAIL**

**The students will have to submit a Project Report for Via-Voce of several places of tourist interest in India.**

The students will go for Viva Voce Examination which shall be evaluated jointly by the internal & external examiner.

## **Major Destinations of World (MTTM-401)**

### **Course Objectives:**

1. Though there are so many tourist destinations in the world, there are few most famous among them. The primary objective is to explore the major popular destinations of the world.
2. It is worthwhile to know the tourist products in the lights of their main attractions, existing infrastructure facilities, linkages etc.
3. To study the destinations of whole world which is changing in to a global village and outbound tourism from India is growing at a very fast pace.

**Course Outcomes:** After studying this paper, students will able to

CO 1. Illustrate the different tropical region, natural sites, historical heritage, and accommodation with cultural hospitality.

CO 2. Compare world that tells about major destination business around the world.

CO 3. studies about destination under UNESCO.

**Unit-I Main Destination of Asia and Pacific Region:** - Tokyo, Singapore, Dubai, Thailand, Malaysia.

**Unit-II Main Destination of Europe:** - London, Paris, Madrid, Athens.

**Unit-III Main Destinations of Africa:** - Cairo, Cape Town and Johannes berg, Mauritius, Nairobi.

**Unit -IV Main Destinations of Americas:** - New York, Los Angles, Montreal, Rio de Janeiro, San Francisco.

**Unit -V Other Destinations:** - Sydney, Fiji, Wellington, Buenos Aires.

### **References:**

- Ahmad, Aizaz: General Geography of India, NCERT, New Delhi
- Goh Cheong Long: An Economics Atlas of India, Oxford University.
- World Atlas , Oxford press.
- Singh, R.L. (ed) India: A Regional Geography National Geographical Society of India, Varanasi, 1989.
- □Manorama Year Book 2012
- □Indian Year Book 2012, Publication Division, Govt. of India, New Delhi
- Tourism Planner.
- Tour Brochures of related places.
- Lonely Planet-India and related destinations.
- Kumar Ravi Bhushan: Coastal Tourism and Environment, AOH Publishing Corporation, New Delhi.
- Websites of related destinations.

## **Tour Packaging Management (MTTM-402)**

### **Course Objectives:**

1. In this course tourism students are taught the details of tour packages, planning, framing itineraries and costing.
2. To gain knowledge about tours escorting and
3. To study and examine travel packages of known travel companies, so that the students can learn to prepare and run travel packages independently.
4. The students will set practical knowledge relating to travel and tour operation.

**Course Outcomes:** After studying this paper, students will able to

CO 1: Gain the operational knowledge of tour packaging business.

CO2 Acquire the skill of formulation of tour package.

CO3 Acquire the skill of tour costing and pricing techniques of various types of tour packages.

CO4 Apply the practical knowledge in making various real tour packages

**Unit 1** Meaning, definition, development, types components and significance of tour packages with relation to tourists, destinations and tour companies, role and input of public and private sector tourism organizations in promotion of tour packaging business.

**Unit II** Tour Formulation – Influencing factors, stages involved in tour formulation initial research (destination and market), itinerary development, negotiations, confidential tariff, costing & pricing marketing strategies. Brochure designing, Printing and distribution.

**Unit III** Itinerary preparation- meaning, types, do's and Don'ts of itinerary preparation. Limitations and constraints., Tour costing and pricing-cost concept, types of costs. Tour cost sheet. Procedure of costing; group tour, independent tours, and business tours pricing in tour operation Industry-Tour pricing strategies in India. Pricing of deferent tour packages.

**Unit IV** Detailed study of passport-definition, how to get the passport form, essential documents, photographs & fee for passport, type of passport. Visa- meaning, type of visa issued by India, necessary documents to get visa. Health regulations. Customs and currency regulations, baggage rules and insurance.

**Unit V** Tourists activities based on Mountains, Deserts, Forests and Wildlife, White Water, Marinas, Aero sport etc. and cultural and pilgrimage i.e. place of religions, historical archaeological, architectural and monumental significance, fairs and festivals, Conference and conventions and special events, Case studies of Tour Packages offered by government & private sectors and Thomas Cook and SITA etc.

**Suggested Readings**

1. Marketing of Travel & Tourism by Middleton.
2. International Encyclopaedia of Tourism Management by P.C. Sinha.
3. Dynamics of Tourism by R.N. Kaul.
4. Mohinder Chand, Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd. New Delhi, 2007.

## Tourism Marketing (MTTM-403)

### Course Objectives:

1. The course includes the operation techniques of tourism marketing. The students are expected to attain a basic knowledge of marketing principals.
2. Study to suitability of alternative promotional approaches to and formulate marketing plans and promotional approaches to tourism and other related organizations.
3. It helps the learner to develop an understanding of the nature of different tourism products.
4. Provide insights into the process of developing and managing various tourism products enhance the knowledge of students about various tourism products of India.

**Course Outcomes:** By studying this course, students able to

CO 1. Demonstrate about tourism marketing is the collective name given to the various marketing strategies used by businesses within the tourism industry.

CO 2. Plan the hotels, understand and can identify tourism products that are associated with Marketing.

CO 3. Explain the central, peripheral services and public services in tourism product.

CO 4. Contrast the role of Indian architectural heritage in the tourism industry.

**Unit – I Marketing:** Core concepts in marketing; Needs, Wants, Demands, Products markets. Marketing management philosophies-Production, Product, Selling, Marketing and societal perspectives. Economic importance of marketing.

**Unit –II Analysis and selection of market:** Measuring and forecasting tourism demand; Forecasting methods, Managing capacity and demand. Market segmentation and positioning (STP)

**Unit– III Marketing Strategies:** Developing marketing environment, Consumer buying behaviour, Competitive differentiation and competitive marketing strategies. New product development. product life cycle, Customer satisfaction and related strategies in internal and' external marketing; Interactive and relationship marketing.

**Unit –IV Planning marketing programmes :** Product and product strategies; Product line, Product mix Branding and packaging. Pricing considerations. Approaches and strategies. Distribution channels and strategies.

**Unit –V Tourism Marketing :** Service characteristics of tourism. Unique features of tourist demand and tourism product, Tourism marketing mix. Marketing of Tourism. Services : Marketing of Airlines, Hotel, Resort, Travel Agencies and other tourism related services-Challenges and strategies..

**Suggested readings:**

- Kotler, Philip : Marketing Management & Hospitality and Tourism Marketing
- Sinha, P.C : Tourism marketing
- Vearne, Morrison Alison: Hospitality marketing.
- Crough, Marketing Research for Managers.
- Singh Raghbir, Marketing and Consumer Behaviour. Patel, S.G., Modern Market Research, Himalaya Publishing

## **Tourism Policy & Planning (MTTM-404)**

### **Course Objectives:**

- 1.The module will expose the students about the Tourism policy of India and of a few tourism states of the country.
- 2.To create jobs and entrepreneurial opportunities in the tourism sector and ensure the supply of a skilled labour pool.
- 3.To promote the destination trying to improve internal and external tourism demand.
4. To achieve international tourism growth and increase foreign currency income to support the balance of payments.

**Course Outcomes:** After studying this paper, students will able to

CO 1. To promote sustainable, responsible and inclusive tourism.

CO 2. Relate the policy and planning aims to promote sustainable tourism by minimizing the negative impact of tourism on social, environmental and economic aspects and maximizing the positive impact.

CO 3. outline the tourists to ensure about the propaganda tourism policy and planning.

**Unit – I Tourism Policy & Planning Framework:** Tourism Policy- meaning ,relevance & salient feature. Tourism Planning- meaning, levels & types of tourism planning.

**Unit – II Tourism Policy:** Study of National Tourism Policy 1982 and 2002, National Action Plan on Tourism, 1992: Special Tourism Area Development Programme. The concept of National Tourism Board, National Committee on Tourism, Case study of tourism policies of a few states (Uttar Pradesh, Rajasthan, Kerala, Madhya Pradesh,). Investment opportunities and government policy for investment in hotel/tourism industry. Sources of funding.

**Unit – III Destination Planning:** Destination Mix- concept and components. Step and stage in Destination Planning. Tourism Project Feasibility Study.

**Unit – IV Approaches to Tourism Planning:** Eco-centric or environment approach of tourism planning. Community approach of tourism planning. Concept of Tourism Complex Planning & its relevance in India context.

**Unit – V Tourism Policy & Planning:** Case Studies: Place of Tourism in India's Five Year Plan. Tourism Policy of india and contribution of NCT to this effect. Organizational structure of tourism in India at Central and State Level.

### **Suggested Readings:**

- New Inskeep, Edward, Tourism Planning : An Integrated and Sustainable Development Approach ( 1991) VNR, New York.

- Ashworth, G. J. (2000), The Tourist Historic City. Retrospect and Prospect of Managing the Heritage City, Pergamon, Oxford
- Dept. of Tourism, GOI Investment Opportunities in Tourism (Brochure).
- Sharma, J. K. (2000), Tourism Development. Design for ecological sustainability, Kaniska Publication, New Delhi.

## **On-Job Training & Report (MTTM-405)**

### **Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources from the industry experts based on primary and/or secondary analysis.
2. To collect the data available from outside sources such as stake holders and tourists can help the students in fulfilling the project's operations.
3. Connecting what the student has undergone till above semesters.
4. To build a harmony of theoretical and practical knowledge with actual work experience, in order to compliment field specific skills and learn new ones.

**Course Outcomes:** After undergone this training, students will able to

- CO 1. Analyse the current obstacles that are occurred in Tourism/Travel related business also they'll able to bring out certain solutions of the problem.
- CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.
- CO 3. Develop skills in the application of theory to practical work situations.
- CO 4. Develop skills and techniques directly applicable to their careers.
- CO 5. Internships will increase a student's sense of responsibility and good work habits.

### **Course Details:**

The Training is based upon the 45 days practical training with any recognised Travel Agency/Tour Operating Company/Hotel. The Department will circulate the placement brochure / letter to various organisations prior to the joining in the same. During the organisational work (training period), each student is required to prepare practical report of day to day activities to be submitted for evaluation.

The students will have to submit the Job Training Report after completion of their Job Training before Viva-voce examination.

### **Viva – Voce**

The Viva-Voce examination will be conducted on the basis of the Tour Package Prepared, Tour and Job Training Reports and other theory papers taught.

# **ORDINANCE AND COURSE CURRICULUM FOR**

**P.G. DIPLOMA YOGA HEALTH & CULTURAL TOURISM**

**ONE YEAR PROGRAMME**



**DEPARTMENT OF TOURISM**

**UNIVERSITY OF PATANJALI, HARIDWAR**

**UTTARAKHAND-249405**

[www.universityofpatanjali.com](http://www.universityofpatanjali.com)

**UNIVERSITY OF PATANJALI, HARIDWAR**  
**Course Syllabus**

**PGD (YH&CT) Semester-I**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-101	Fundamentals of Yoga	70	30	100
YH-102	Principles of Hath Yoga	70	30	100
YH-103	Tourism Theory and Practice	70	30	100
YH -104	Hospitality Management	70	30	100
YH-105	Yoga Practicum	70	30	100
YH -106	Project Report (Tourism)	100	-	100
YH CE 01	Communicative English (Non Credit)	70	30	100

**PGD (YH&CT) Semester-II**

Paper Code	Paper Name	Examination Marks		
		External	Internal	Total
YH-201	Patanjal Yoga Darshan	70	30	100
YH-202	Yoga Therapy	70	30	100
YH-203	Cultural Tourism Resources	70	30	100
YH -204	Itinerary Planning, Marketing, Tour Packaging and Costing	70	30	100
YH-205	Yoga Practicum	70	30	100
YH -206	Educational Tour	100	-	100
YH CE 02	Communicative English (Non Credit)	70	30	100

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-101)**  
**FUNDAMENTALS OF YOGA**

**Course Objectives:**

1. The main objective of this course is to attain higher level of consciousness and mental hygiene.
2. To possess emotional stability and integrate moral values.
3. To enable the student to have good physical and mental health.
4. To prepare students for spiritual journey and to become healthier.

**Course Outcomes:** After studying this course, students will able to

CO 1. Demonstrate basic skills associated with yoga activities including strength and flexibility, balance and coordination.

CO 2. Demonstrate the ability to perform yoga movements in various combination and forms.

CO 3. Explain and apply the knowledge of basic sequencing, and effective group management.

**Unit-1: General Introduction to Yoga**

Origin of Yoga, Psychological basis for origin of Yoga, History and development of Yoga (Vedic period, Darshan period, Commentary period, Bhakti Yoga and Hatha Yoga period, Modern period), Etymological meaning and definition of Yoga, Purpose of yoga, Current misconceptions regarding yoga, Major principles of yoga, Yoga practices for healthy life, Importance of yoga in present age.

**Unit - 2: Basis of Yoga and Tradition of Yoga**

General introduction of Vedas, Upanishads and Ayurveda in yogic context, General introduction of Samkhya, Yoga and Vedanta philosophy (in yogic context), General introduction of Bhagavadgita (in yogic context), General introduction of Puranas (in yogic context), Yoga in Yog Vashishtha and Narada Bhakti Sutra, Brief Introduction to Yoga in Jain Philosophy and Buddhist Philosophy, Bhakti Yoga of Medieval Saints (Kabir, Nanak and Sufism)

**Unit - 3: Basis of Yoga and Tradition of Yoga - II**

General introduction of Tantra and its currents (Shaiva, Shakta, Vaishnava, Buddhist Tantra), Concept of Shiva and Shakti, Yoga in Shaivite and Shakta Tantras, Concept of Nadi and Prana, Kundalini, Kundalini Shakti and Shatchakra Sadhana, Impact of Tantra in Hatha Yoga Tradition and Sadhana.

## **Unit - 4: Major Streams of Yoga**

Concepts of major streams of yoga and introduction of their limbs with the effects - Gyan Yoga, Bhakti Yoga, Karma Yoga, Ashtanga Yoga, Kriya Yoga, Hatha Yoga and Mantra Yoga

## **Unit - 5: Introduction to Renowned Yogis**

Introduction (life & works) of the great yogis of India - Maharishi Patanjali, Maharishi Vyas, Maharishi Kapil Muni, Adi Shankaracharya, Maharishi Dayanand Saraswati, Swami Vivekananda, Maharishi Arvind, Swami Kuvalayananda, Maharishi Raman, Yogarishi Swami Ramdev

### **Prescribed text book**

1. योगदर्शनम्- स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
2. दर्शनप्रवेश- दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
3. योगकेमूलभूतसिद्धांत - आचार्यबालकृष्णजी. दिव्यप्रकाशन, पतंजलियोगपीठ.हरिद्वार
4. गीतारहस्य (निर्धारितपाठ्यांश)- लोकमान्यतिलक
5. भारतकेमहानयोगी- विश्वनाथमुखर्जी
6. तंत्रदर्शन - स्वामीनिरंजनानंदपरमहंस - पंचदशनामअलखबाड़ा, देवघर, बिहार
7. Sharma, Chandradhar: A Critical Survey of Indian Philosophy. Motilal Banarasi Das, Delhi, 2013

### **BOOKS FOR REFERENCE:**

1. Agarwal MM: Six systems of Indian Philosophy, Chowkhambha Vidya Bhawan, Varanai, 2010
2. Swami Bhuteshananda: Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
3. Hiriyanna M.: Outlines of Indian Philosophy, Motilal Banarsidas, Delhi, 2009
4. Bhat, Krishnak.: The Power of Yoga: Suyoga Publications Mangalore, 2006
5. Swami Prabhavananda: Spiritual Heritage of India (English). Sri Ramkrishna Math, Madras, 2004
6. Swami Vivekananda: Jnana Yoga, Bhakti Yoga, Karma Yoga, Raja Yoga. Advaita Ashrama, Calcutta, 2000
7. Pandit, M.P.: Introduction to Upanishads: Theosophical Society of India, Adyar, Madras, 1976

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-102)**  
**Principles of Hath Yoga**

**Course Objectives:**

1. To Maintain a youthful body, develop physical and psychic powers, awakening the potential energy and finally attaining enlightenment.
2. To build asanas related Hatha yoga are practiced to bring health and energy to body and mind by opening the nadis.
3. It includes physical techniques to preserve and channel the vital force or energy.

**Course Outcomes:** After studying this course, students will able to

CO 1. Go through the mastery of the prana, or energy of the body, we can then easily master the control of the mind and obtain success.

CO 2. Gain self-control and self-discipline and an energetic body with the help of hath yoga.

CO 3. Get strengthen and purify physical body and cultivate prana and activate kundalini.

**Unit-1: General Introduction to Hatha Yoga**

Hatha Yoga - Meaning, Definition, Origin, Tradition and Purpose. Prevailing misconceptions regarding Hatha Yoga. Helping and obstructing elements of Hatha Yoga. The Hatha Yogic practice described in Hathayoga pradipika. Concept of Math, Manuals for the practitioner of Hatha Yoga, Concept of Mitahar, Pathya & Apathya. Tradition of Hatha Yoga. A brief introduction and contribution of the major yogis of the Nath Yoga tradition. Relations in Hatha Yoga and Raja Yoga.

**Unit-2: Practices of Hatha Yoga - Purification and Asanas**

Introduction to purification practices - Purification actions described in Hatha Yoga Pradipika and Gherand Samhita and their method, benefits and precautions. The role of purification practices in yoga sadhana and the importance of purification practices in modern life. Yogasana: Definition, characteristics and importance in yoga practice. Method, benefits, precautions and importance of asanas in Hatha Yoga Pradipika and Gherand Samhita.

**Unit-3: Practices of Hatha Yoga - Pranayama, Bandha and Mudras**

*Pranayama* : Introduction. Method of Proper Respiration, Yogic Deep Breathing. Concept of Inhale (*Purak*), Retention (*Kumbhak*) and Exhale (*Rechak*). Prana, types of prana and sub-

prana. Importance of Pranayama in *Hatha Yoga Sadhana*. Method and importance of *Nadishodhana* Pranayama. Preparation for Pranayama. Method, benefits and precautions of Pranayamas in *Hatha Yoga Pradipika* and *Gherand Samhita*. Signs of *Hatha siddhi* (success in hatha yoga). Bandha :introduction, the importance of bandha-triad in yoga sadhana. Main *mudras* in *Hatha Yoga Pradipika* and *Gherand Samhita* - their methods, benefits and precautions.

#### **Unit-4: Practices of Hatha Yoga - *Pratyahar, Nadanusandhana and Swarodaya Gyan***

*Pratyahara, Dharna and Dhyana* in *Gherand Samhita*, their methods, benefits and precautions. *Samadhi*, signs of *samadhi* in *Hatha Yoga Pradipika*. *Nāda*, the four stages of *Nadānusandhana* and their accomplishments (*siddhis*). Concept of *Swara*, the importance of *Swarodaya Gyan* in *Yoga Sadhana* (with special reference to *Gyan Swarodaya* and *Shiva Swarodaya*).

#### **Unit-5: Introduction and Importance of Major Texts of Hatha Yoga**

Introduction, Purpose and Importance of major texts of Hatha Yoga: *Siddha- Siddhantha Paddhati*, *Goraksha Samhita*, *Shiva Samhita*, *Hatha Yoga Pradipika*, *Gherand Samhita*. *Hatha Ratnavali*: Main applications of hatha yogic activities- preparation of *Raja Yoga Practice*, achieving holistic health, prevention of diseases, rejuvenation, healing and slow aging.

#### **Prescribed text book**

1. हठयोगप्रदीपिका - कैवल्यधाम, लोनावला
2. घेरंडसंहिता - कैवल्यधाम, लोनावला
3. गोरक्षसंहिता - डॉ. चमनलालगौतम (1985)
4. प्राणायामरहस्य - स्वामीरामदेव, दिव्यप्रकाशन, पतंजलियोगपीठ, हरिद्वार
5. Research Publication, P.R.I. Patanjali Yogpeeth

#### **BOOKS FOR REFERENCE:**

1. Woodroffe, Sir John: *The serpent power*, Ganesh & Company, Madras, 2000
2. Woods, J. H.: *The Yoga system of Patanjali*, M.L.B.D., Delhi, 1988
3. Swami Vivekananda: *Rajayoga*, Advaita Ashram, Culcutta, 2000
4. Burley, Mikel: *Hatha Yoga, its' Context Theory and Practice* (M.L.B.D. Delhi, 2000)
5. Burnier, Radha: *Hathayoga Pradipika of Svamarama*, The Adyar Library publications, Chennai

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-103)**

**TOURISM THEORY AND PRACTICE**

**Course Objectives:**

1. To deal with various aspects of sustainable tourism, ecotourism and responsible tourism.
2. To deal with all the fundamental aspects of tourism that are to be learnt by students of tourism, air transport, travel and hospitality disciplines.
3. To give an insight into the concept of tourism from different perspectives.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Gather various types of tourism aspects such as sustainable tourism etc.
- CO 2. Explain fundamental aspects of tourism such as air transport, tourism disciplines etc.
- CO 3. Classify full understanding of the challenges, assumptions, solutions and indicators for tourism.

**Unit - I Understanding Tourism:-**

1. Tours, tourists, visitors, excursionists, travelers, resources, attractive, Tourism product and concept.
2. Tourism: Meaning, nature and scope
3. Tourism: Types, elements and components

**Unit - II Exploring Tourism:-**

1. Historical development of tourism.
2. Travel motivators & deterrents.
3. Different approaches to the study of tourism.

**Unit- III Tourism Impact:-**

1. Economic impacts of Tourism
2. Socio-cultural Impacts of Tourism
3. Environmental Impacts of Tourism

**Unit- IV Major Tourism Services:-**

1. Transportation: Types and relevance in tourism
2. Accommodation: Types and relevance in tourism
3. Travel Agencies and Tour-Operators: Overview and relevance in tourism

**Unit- V Tourism Organization:-**

Origin, location, and functions of WTO / UNWTO, IATA, UFTAA, ASTA, PATA, TAAL, ITDC.

**Suggested Readings:**

Mill and Morrison, (1992), The Tourism System: An Introductory Text , Prentice Hall.

Cooper, Fletcher et al, (1993), Tourism Principles and Practices, Pitman.

Burkart and Medlik, (1981), Tourism: Past, Present and Future ,Heinemann, ELBS.

Mill, R.C., (1990), Tourism: The International Business, Prentice Hall, New Jersey.

Bhatia, A.K., - International Tourism

Seth, P.N., (1999) Successful Tourism Management (Vol 1 &2)

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-104)**  
**HOSPITALITY MANAGEMENT**

**Course Objectives:**

1. To appraise students about the important departments of a hotel.
2. To teach various aspects related to accommodation Industry.
3. To provide training, skill development and education, hospitality, tourism and entertainment industries.

**Course Outcomes:** After studying this course, students will able to:

- CO 1. Analyze information and make decisions using critical thinking and problem solving skills.
- CO 2. Describe and apply the fundamental principles of leadership and effective communication skills.
- CO 3. Evaluate diversity and ethical considerations relevant to the hospitality industry.

**Unit-I: Hospitality: Meaning, Nature and Typologies**

Defining Hospitality: Nature and its Meaning.

Age old Institution of Hospitality with the Spirit of 'Atithi Devo Bhav' in India and its present status.

Typology of Accommodation, Origin and growth of Hostel industry with special Reference to India.

**Unit-II: Organization and Functions of Various Department in Hotels.**

Front Office, Food Production, F& B Service, House Keeping, Back office and other Ancillary Departments.

**Unit-III: Type and Forms of Hotels**

Classification of Hotel on Basis of Location, Size, Clientele and Range of Service etc

Star Classification - Criteria and Procedure Adopted in India.

Resort Properties, Heritage Hotel and Ecotels- Concept and Emerging Dimensions.

**Unit-IV: Hospitality Institutions & Manpower Requirements.**

Manpower Requirement in Hotel Sector: designations, qualifications & remunerations.

Role and Contribution of I.T.D.C. and State Tourism Corporations in Development of Hotel Sector in India, Hospitality Educations of India-Growth & Development, Hospitality Associations (HAI, FHRAI)

**Unit-V: Major Hotel Chains in India**

The Taj Group of Hotels

Oberai Hotel & Resorts

Lalit Hotels

The Ashok Group of Hotels

**Suggested books**

Introduction to Hospitality Industry-Bagri &Dahiya

Introduction to Hospitality- J. Walker

Managing Hosopitality- D. Rutherford

Hotel Front Office Mannual-Sudhir Andrew

Housekeeping Maual-Sudhir Andrew

Hotel and Lodging Management and Introduction: by Alan T. Stutis & James F. Wortman, John Willy & Sons.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH-105)**  
**YOGA PRACTICUM**

**Course Objectives:**

1. To understand the benefits, contraindications and procedure of all practices.
2. To demonstrate each practice with confidence and skill.
3. To explain the procedure and subtle points involved.
4. To teach the yoga practices to any given group.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Rephrase the benefits, contradictions and procedure of all practices.  
CO 2. Demonstrate each practice with confidence and skill.  
CO 3. Explain the procedure and subtle points involved.  
CO 4. Teach the yoga practices to any given group.

**Shatkarma:** Jalneti, Rabarneti, Vamana Dhauti / Kunjar Kriya, Vat karma, Kapalbhathi. - 15marks  
**Asana** - 25 marks

SukshmaVyayam (Pawan mukta Asana) -1, Yogic Jogging, 12 Asanas (Mandukasana, Shashakasana, Gomukhasana, Vakrasana, Makarasana, Bhujangasana, Shalabhasana, Markatasana, Pawanmuktasana, Halasana, Padvrittasana, Dwi-Chakrikasana and Shavasana)

Siddhasana, Kati chakrasana, Ardhalasana, Padmasana, Vajrasana, Swastikasana, Veerasana, Udarakarsanasana, Bhadrasana, Janushirasana, Ardhamatsyendrasana, Gomukhasana, Ustrasana, Uttanapadasana, Naukasana, Sarvangasana, Halasana, Matsyasana, Suptavajrasana, Chakrasana, Tadasana, TiryakTadasana, Ek paadpranamasana, Vrikshasana, Garudasana, Hastotansana, Padahastasana, Trikonasana, Ardhadhanurasana, Marjari asana, Ardhashalabhasana, Bhujangasana, Makarasan, Shavasana, Samakonasana, Bakasana, Sarpasana, Hanumanasana, Sukhasana, Ardhpadmasana, Ek Pada Halasana, Setubandhasana, Markatasana, Shashankaran, Vipreetnaukasana, Dwikonasana, Parshvatanasana, Singhasana.

**Pranayama**-10 marks

Diaphragmatic Breathing, Pranayama: Kapalbhathi, Bhastrika, Bahya, Ujjayi, Anulom-Vilom, NadiShodhan, Bhramari and Udghith

**Mudra & Bandha:** Jnana Mudra, Chin Mudra, Vipreet Karni Mudra, Yoga Mudra, Jalandhar Bandh, Uddiyan Bandh, Moolbandha - 10 marks

**Viva:** Ishwar Stuti Prarthnopasana-10marks

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**PGD (YH&CT) Semester-I**  
**(YH-106)**  
**PROJECT REPORT (TOURISM)**

**Course Objectives:**

1. The main objective of this paper focuses on acquiring the tourism related resources on different attractions based on secondary analysis.
2. The purpose is to study one destination majorly or the destinations follow in one circuit. various destinations.
3. To connect the students what they have undergone in present semesters.

**Course Outcomes:** After undergone this project, students will able to:

CO 1. analyze the current obstacles that are occurred in that destination to bring out certain solutions of the problem.

CO 2. Get an opportunity to test their interest in a particular career before permanent commitments are made.

CO 3. Build a sense of responsibility and good work habits.

**Course Detail**

**The students will have to submit a Project Report for Via-Voce of several places of tourist destinations in India.**

The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce Examination.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-I**  
**(YH- CE 01)**  
**Communicative English (Non Credit)**

**Course Objectives:**

1. To improve the English communication of the students.
2. To analyze and restate the meaning of a text in English.
3. To develop the ability to speak English language with right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Will be able to use literary techniques in literary texts.
- CO 2. Will be able to gain confidence by speaking English in real life aspects.
- CO 3. Gain the skill to write English without grammatical errors.

**Communication:**

Communication definition and concept, Process of Communication. Elements of Communication steps/phase of Communication. Means, Methods, Mode of Communication. Verbal-oral-written Communication. Nonverbal-sign language, Body Language. Flow of Communication: Formal/Informal. Barriers of Communication- Intrapersonal, interpersonal and organizational barriers.

Recapitulation Linguistic Communication Patter of Communication Group Discussion (GD), History of print Media in India.

**Grammar and usage:**

- i. Noun
- ii. Pronoun
- iii. Verb, modal, Tenses
- iv. Adjective
- v. Adverb
- vi. Preposition
- vii. Conjunction
- viii. Interjection
- ix. Rules of Translation
- x. Punctuation
- xi. Capitalization and Abbreviation
- xii. Subject Verb Agreement
- xiii. Sentences Correction Rules

- XIV. One word substitution
- XV. Active and Passive voice xvi.
- XVI. Direct and Indirect Speech
- XVII. Direct and Indirect Speech Suffixes and prefixes  
Antonyms and synonyms  
Homophones and Homonyms Letters  
Writing

Gift of the Magi-O Henry

ShrinivasaRamanujan

MuktaDhara-R.N.Tagore

### **Readings (References)**

Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead effectively, by Helio Fred Garcia, 2012

Pone Communicates, Few Connect: 'What the Most Effective People Do Differently, haC. Maxwell, 2010

Interviewing: A Programmed Approach to Effective Communication, by David Dans, Margaret T. Hearn, Max R. Uhlemann and Allen E. Ivey, 2010

Art and Science of Communication: Tools for Effective Communication in the place, by P. S. Perkins and Les Brown, 2008  
Listening Effective Groups: The Art of Small Group Communication, by Randy Fujishin,

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-201)**  
**Patanjal Yoga Darshan**

**Course Objectives:**

1. To create yoga experts with in-depth knowledge based on yogic texts.
2. To establish holistic health, social harmony and world peace by training them to be good.
3. To teach citizens who can offer yogic way of right living.

**Course Outcomes:** After studying this paper, students will able to:

CO 1 Acquire and be equipped with skills in the application of theoretical & practical knowledge of Yoga.

CO 2. Practice for real life problem solving, in an increasing complex also for the corporate world.

CO 3. Maximize spiritual knowledge and various aspects of yoga with the help of yoga darshan.

**Unit 1: - Introduction of Yogasutra and Samadhi Pada**

Yoga Sutra :Introduction, Definition and Purpose of Yoga, Importance of Yoga Sutra as compared to other Yogic texts, Concept of *Chitta*, *Chitta Bhoomi*, *Chittavrittis* and their types, *Chitta Vritti Nidrodhopaya (Abhyas- Vairagya)*, *Chitta Vikshep (Antaraya)*, *Antarayabhava*, *Chitta Prasad* and its helpers, The metaphysics of Sankhyadarshana and its relation with Patanjali Yogadarshan.

**Unit-2: - Samadhi Pada-II and Sadhan Pada**

Ishwar: Swaroop, Pranava chanting and its results, Ashtanga Yoga - 1 (Bahirang Yoga- Yama, Niyam, Asana, Pranayama, Pratyahara), Importance and Relevance of Ashtanga Yoga and Kriya Yoga, Concept of Kriya Yoga, Describing *Klesha*, Measures of *Klesha* elimination, *Vivek Khyati*, *Chaturvyuhavaad*, the character of *Drishhta & Drishya*, , the form and types of samadhi - *samprajnata*, *asamprajnata*, *sabijand nirvij Samadhi*, *RitambharaPragya* and *Adhyatma Prasad*.

**Unit 3: - Vibhuti Pada**

Ashtanga Yoga - II (*Antaranga* Yoga - Dharna, Dhyana, Samadhi), Concept of *Sanyama - Sanyama* and its three consequences, Concept of *Vibhuti* and introduction of main vibhutis, Describing Ashtasiddhi.

## **Unit-4: - Kaivalya Pada**

Five types of Siddhis (birth, medicine, mantra, penance and samadhija), Nirmaanchitta.  
Types of Karma, *Vaasna*, *Vivek Gyan*, *Dharma Megha Samadhi*, *Kaivalya*

### **Prescribed text books**

योग दर्शनम् - स्वामी रामदेव, दिव्य प्रकाशन, पतंजलि योग पीठ, हरिद्वार

दर्शन प्रवेशदिव्य प्रकाशन-, पतंजलि योग पीठ, हरिद्वार

सहायक पुस्तक -

भोज वृत्ति

योगदर्शनम्-गीताप्रेस

### **BOOKS FOR REFERENCE**

BKS Iyengar: Introduction of Patanjali Yogasutra-s: MDNIY, New Delhi, 2011.

Swami Ved Bharti: Yogasutra of Patanjali (with the Exposition of Vyasa) M.L.B.D. New Delhi, 2004,  
Vol I & II.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-202)**  
**Yoga Therapy**

**Course Objectives:**

1. To promote positive awareness for the healthy body and healthy mind
2. To inculcate the teaching ability for conducting yoga sessions and offer various techniques.
3. To create yoga professionals of high caliber who know the concepts, techniques and can do the practical as well.
4. To create yoga experts with in-depth knowledge based on yogic texts.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Develop understanding of different yogic techniques.

CO 2. Attain perfection to perform different yogic practices and shat karmas.

CO3. Explain techniques of Pratyahara, Dharana, Dhyana and conduct practical sessions.

**Unit-1 Yoga Etiology, Diagnosis and Therapy**

Yogic Anatomy and Physiology: Concept of Psychic Centers, Pancha Kosha and three planes of human being; and effects of their activation and impairment over somatic, psychic and psycho-somatic levels of human existence. Yogic diagnostic techniques: Connections of SwarScience, Prana and Breathing Patterns over somatic, mental and psycho-somatic levels. Association of Psychic centers over nerve plexus and endocrine glands; Concept of health and wellness in terms of WHO, Ayurveda and Yoga; Concept of Yoga Therapy: Meaning, Definition, Aims, Principles, Factors Impacts and Limitations; Qualities of a yoga therapist.

**Unit-2: Musculo-Skeletal Disorders**

Back Pain: Classification of back pain: organic and functional: Lumbar Spondylosis, Intervertebral disc prolapse (IVDP), Spondylolisthesis, Spondylitis, Psychogenic- Lumbago, Medical and Yogic management; Neck pain: Classification- Cervical Spondylosis, radiculopathy, Functional neck pain; Medical and Yogic management, All forms of Arthritis: Rheumatoid Arthritis, Osteoarthritis, Medical and Yogic management.

**Unit- 3: Gastro Intestinal and Excretory Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Acid peptic disease - Indigestion Hyperacidity, Ulcer, Flatulence, Gastritis, Bowel problems - chronic Constipation and hemorrhoids, Irritable Bowel Syndrome, Ulcerative colitis or inflammatory bowel disease, Crohn's disease, gluten intolerance, food allergies; Excretory System: irritable bladder syndrome, stress incontinence, Chronic renal failure, Renal hypertension, Renal stones.

## **Unit- 4: Cardio-Pulmonary Disorders**

Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management of Hypertension and Hypotension, Ischemic heart diseases, Varicose veins, Peripheral vascular disease, Autoimmune Arteritis. Brief overview of the condition (Causes, Pathogenesis, Signs, Symptoms and complications), Yogic Management (rationale for the disease specific yoga protocol, scientific evidence if available, probable healing mechanisms, practices of choice and contra indications). Allergic, autoimmune respiratory conditions -Allergic Rhinitis & Sinusitis, Bronchial Asthma, COPD & Emphysema- Occupational pulmonary disease.

## **Unit-5: Neurological and Psychiatric Disorders**

Headaches: Migraine: Causes, Classification, clinical features, Medical and Yogic management, Tension headache: Causes and its symptoms and Medical and Yogic management; Cerebro vascular accidents: Causes, clinical features, Medical and Yogic management, Epilepsy, pain; Parkinson's disease: Causes, clinical features, Medical and Yogic management

Introduction to psychiatric disorders, classification - Neurosis, Psychosis: Neurosis: Anxiety disorders: Generalized anxiety disorder, Panic Anxiety, Obsessive Compulsive Disorder, Phobias: Medical and Yogic management: Depression: Dysthymia, Major depression, Medical and Yogic management; Psychosis: Schizophrenia, Bipolar affective disorder, Medical and Yogic management

### **TEXT BOOKS**

1. Nagarathna R and Nagendra HR, Yoga therapy for common ailments series, SVYPPublications, 2010
2. Swami Karmananda, Yoga therapy for common diseases, Yoga publication trust, Munger,2001
3. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers

### **REFERENCE BOOKS**

1. Shivanand Saraswati: Yoga Therapy (Hindi & English)
2. Rai, Lajpat: Discovering Human Potential energy: A Physiological Approach to Yoga (Anubhava Rai Publications, 1998)
3. Nagarathna, R and Nagendra, H.R.: Promotion of Positive Health, Swami Vivekananda Yoga Prakashana, Bangalore, 2002
4. Ramesh Bijlani: Back to Health through Yoga, Rupa Publications India Pvt. Ltd, 2011
5. MONIY publications: 10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi,2009
6. Swami SatyanandaSaraswati: Yoga and Cardio Vascular Management, Yoga PublicationTrust, Munger, 2005
7. Nagarathna R and Nagendra H R:Yoga for Arthritis, Back pain, Diabetes, Pregnancy Breathing Practices, Swami Vivekananda Yoga Prakashana, Bangalore, 2000

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-203)**  
**CULTURAL TOURISM RESOURCES**

**Course Objectives:**

1. To give information of countries Tourist places of India importance.
2. To help students to know the background elements of Cultural Tourism Resources.
3. To Discuss the importance of cultural and heritage tourism to national development.
4. To evaluate the culture and heritage of the Region.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Classify the concept of culture and its place in the tourism market.
- CO 2. Illustrate the impact of the cultures of visitors of the Caribbean cultures.
- CO 3. Identify the multiple cultures and its impact on its economic development.
- CO 4. Evaluate the study of folk dances, traditional music accessible in India.

**Unit - I**

Art Heritage of India- Indus valley architecture- Mauryan Architecture-Buddist Architecture, Temple Architecture through the ages-Islamic Architecture.

**Unit - II**

Pre historic paintings- Tribal and Folk-Indian manual painting-Ajanta, Ellora-Early western Chalukya-Pallava-Pandaya-early Chera-Rashtrakuta, Chola- Vijayanagar-Nayak School-Rajasthani- Mughal and Pahadi Schools-Modern paintings.

**Unit- III**

Classical dances and dances styles- (BharathaNatya, Kathakali, Mohiniattam. Kuchipudi, Oddisies, Manipuir) centers of learning and performances Indian folk dances.

**Unit- IV**

Music-Different types of Indian Music- Status of Vocal and instrumental music--various types- new experiments.

**Unit- V**

Handicrafts- Iconometry and Iconography- Metal works-stone ware wood carving-furniture-jewellery - dools- musical instrument

**Suggested Readings:**

- Banerjee, J.N.-The development of Hindu Iconography
- HamayanaKahan-Indian Heritage
- Percy Brawen-Indian Architecture
- Ragini Devi-Dance Dialects of India
- Sarswathi, S- Indian Sculpture
- Sivaramamoorthy –Indian painting
- Sunith V.A.- History of fine art in Indian and Cylon.

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-204)**

**ITINERARY PLANNING, MARKETING, TOUR PACKAGING AND  
COSTING**

**Course Objectives:**

1. To develop an understanding of the creation of the inclusive tour product in the leisure travel market.
2. To develop interactive and communication skills.
3. To examine human behavior as it relation to the purchase of tours Learning outcomes upon completion of this course.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. offer wide exposure to the students to handle issues in tourism related businesses professionally.
- CO 2. develop knowledge to be an explorer he will set practical knowledge relating to travel and tour operation.
- CO 3. bridge the gap between theoretical and practical knowledge of the students by adopting tourism significance.
- CO 4. develop socially, ethically responsible business leaders and innovative teaching pedagogy.

**Unit - I**

What is marketing? Marketing Management, Marketing Management Philosophies, Marketing Mix, Marketing challenges into the next century.

**Unit - II**

Concept of Tour-Itinerary, Steps in preparation of tour Itinerary, Effective principles in making tour itinerary, steps in doing tour costing, FIT & GIT.

**Unit- III**

Some itinerary planning of north and west India: Example: Agra, Khjuraho and Varanasi circuit, Naintal, Deharadun, Shimla and Leh Circuit. Jaipur, Jodhpur and Udaipur Circuit.

Selected out bound package tour: Salient feature of outbound package tour, package tour of far east and South East Asian countries like Singapore, Hong Kong, Thailand and Malayasia, package tour of South Asia Countries like Nepal, Srilanka, Bhutan etc.

**Unit- IV**

Factors to consider when setting prices, General pricing approaches, Nature of distribution channels, Channel behavior & organization, Channel Management decisions.

**Unit- V**

The marketing communication mix, Communication process, Steps in developing effective communication, Setting total promotional budget and mix, Advertising, Sales promotion, Public relation, Personal selling.

**Suggested Readings:**

1. Navin Berry: Travel Planner
2. Eric Law: Managing Packaged Tourism
3. Philip Kotler & Gray Armstrong: Principles of Marketing
4. S. Neelamegham: Marketing in India-Cases & Readings
5. Rama Swamy & Mamakumari: Marketing Management- Planning Implementation & Control

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-205)**

**Yoga Practicum**

**Course Objectives:**

1. To Enable the student to have good health.
2. To Practice mental hygiene and possess emotional stability.
3. To Attain higher level of consciousness and integrate moral values.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. get to know more about physical and mental exercise.  
CO 2. witness many changes accordingly with flexibility.  
CO 3. attain higher moral ethics and learning about spiritual path.

**Shatakarma:**Danddhauti,Vastrdhauti, Nauli, Trataka. -5 marks

**Aasana:** -15marks

Dvipada Skandhasana, Purna Bhujangasana, Purna  
Matsyendrasana,Pakshee Aasan, Vrishchik Aasana, Padma  
Mayurasana,  
Purna Vrishchikasana, Takiya Aasana, Padma Sheershasana,  
Karnapidasana, PurnaDhanurasana, Gorakshasana,  
Purna Chakrasana, Purna Shalabhasana, Ek Pada Bakasana,  
Omkar Aasana, Purna Natarajasana  
And all the practices of previous semesters.

**Pranayama –**

10 marks

Udgeeth, Moorchha.

**Dhyana & Viva:** Vijnanamaya & Anandamaya Kosha - 20marks

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH-206)**  
**EDUCATIONAL TOUR**

**Course Objectives:**

1. Educational tours that incorporate interactive learning can be a powerful tool for students to deepen their understanding of a subject or topic.
2. By actively participating in such learning process, students are more likely to retain information and develop critical thinking skills.
3. This course will sum up respect of culture, personal development, develop critical thinking of students.

**Course Outcomes:** After studying this paper, students will able to:

CO 1. Grab an opportunity for a rich immersion experience in a practical tour.

CO 2. get to know about the place, its importance, and a practical experience during their educational visit.

CO 3. Develop additional practical learning that can be more engaging in the conceptual part by a valuable source.

**COURSE DETAIL**

The Department will organize a One day Educational tour during 2<sup>nd</sup> sem to any of the nearest destination in Haridwar. On Completion of the tour each student shall be required to submit a Project Report (Minimum around 50 pages) to the H.O.D. Tourism, within 15 days of Completion of Tour. The report shall be evaluated jointly by the internal & external examiner followed by Viva Voce. The Project report shall incorporate:-

- Details of attractions seen during the destination visited.
- Accessibility to process, information of the destination.
- General Information on Tourism.
- Introduction to Patanjali Group.
- Details of Tourism Stake holders.

**Recommended Destinations:**

- a) Patanjali Yog Gram, Haridwar
- b) Patanjali Food & Herbal Park, Padartha, Haridwar
- c) Shanti Kunj, Haridwar
- d) Chilla Power Plant, Haridwar.
- e) Rajaji National Park, Chilla Haridwar

**University of Patanjali, Haridwar**  
**PGD (YH&CT) Semester-II**  
**(YH CE 02)**

**Communicative English (Non Credit)**

**Course Objectives:**

1. To analyze and restate the meaning of a text in English.
2. To demonstrate the skill to write in English without grammatical error.
3. To practice listening effectively to communication in English.
4. To develop the ability to speak English language with the right way of pronunciation.

**Course Outcomes:** After studying this paper, students will able to:

- CO 1. Express the viewpoints with confidence in English with right pronunciation.
- CO 2. Outline values and skills gained through effective communication to other disciplines.
- CO 3. Compose articles and compositions in English and discuss about English effectively.

**Communication:**

- i. Recapitulation
- ii. Face to Face Communication
- iii. Telephonic Conversation
- iv. Reading Techniques
- v. Letter writing
- vi. Creative Writing
- vii. Accent
- viii. Stress
- ix. Rhythm
- X. Intonation
- Xi. Seeking Introduction/Introduce oneself
- Xii. Making Enquires
- Xiii. Asking Questions and Discussion

## **Literature**

- i. The Kite Maker by Ruskin Bond
- ii. RabindraNath Tagore-Chandalika
- iii. Autumn by Kalidasa(Translated by Arthur W.Ryoler)
- iv. While the Auto Waits O Henry(Adapted for the stage by walter wykes)
- v. The Loss by Anjali Shukla.

## **Suggested Readings**

- The Power of Communication: Skills to Build Trust, Inspire Loyalty, and Lead Effectively, by Helio Fred Garcia, 2012
- Crucial Conversations Tools for Talking When Stakes Are High, by Kerry Patterson, Joseph Grenny, Ron McMillan and AlSwitzler, 2011
- Everyone Communicates, Few Connect: What the Most Effective People Do Differently, by John C. Maxwell, 2010
- Messages: The Communication Skills Book, by MatthewMcKay, Martha Davis and Patrick Fanning, 2009
- Communication: The Key to Effective Leadership, by Judith A.Pauley, 2009
- The Art and Science of Communication: Tools for EffectiveCommunication in the Workplace, by P.S. Perkins and Les Brown, 2008

University of Patanjali Haridwar



# Department of Psychology

Syllabus for Master of Arts in Psychology  
(w. e. f. Academic Session: 2017-18)

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# Department of Psychology

## University of Patanjali

### Haridwar

Syllabus for Master Degree (MA) in Psychology

(w.e.f. Academic Session: 2017-18)

#### 1. Program Educational Objectives (PEOs):

<b>PEO1</b>	Promotion of Scientific inquiry and critical thinking.
<b>PEO2</b>	Use scientific reasoning to understand and interpret psychological phenomena.
<b>PEO3</b>	Engagement in innovative and integrative thinking and problem solving.
<b>PEO4</b>	Apply psychological concepts and skills to career goals.
<b>PEO5</b>	Apply ethical standards to conduct and evaluate psychological science and practice.

#### 2. Program Outcomes (POs):

<b>PO1</b>	Use scientific Knowledge to understand and interpret psychological phenomena.
<b>PO2</b>	Applications of Rational thinking approach in the solution of problems.
<b>PO3</b>	To promote the ability to work with <i>Manoyoga</i> (passion).
<b>PO4</b>	Use psychological principles to understand local, regional, national and international issues.
<b>PO5</b>	Apply psychological principles and theories to serve and improve one's community.

#### 3. Program Specific Outcomes (PSOs):

<b>PSO1</b>	Students will be able to create Yogic-Psychological environment in different areas of life.
<b>PSO2</b>	Students of Psychology will be able to have unconditional positive regard and empathy towards others.
<b>PSO3</b>	Students will learn to work in a team and develop leadership qualities.
<b>PSO4</b>	Students will be able to conduct short empirical researches so that they develop an understanding about application of statistics and research methodologies.
<b>PSO5</b>	Students will be able to apply psychological principles and theories to serve and improve one's community.

The course requirements for the degree of Master in Psychology have been designed with the objective to provide comprehensive knowledge and training with research orientation in the details of modern Psychology. The students shall have to pass in the theory and practical papers separately.

**Eligibility for Admission:** Bachelors Degree in any discipline from UGC recognized University/Institute. Reservation will be as per University/ Central Government Rules.

**Duration:** Four semesters (Two years course)

The distribution of theory and practical papers for M.A I year and II year examinations (semester wise) is as follows-

### **FIRST YEAR (M.A. PART-I)**

#### **I Semester (500 Marks)**

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-101	Yoga Psychology	25	75	100
MAP-102	Experimental Psychology	25	75	100
MAP-103	Psychology of Personality	25	75	100
MAP-104	Advanced Social Psychology	25	75	100
MAP-105	Practical & Profiling of Equipments	25	75	100
	Total Marks			500

#### **II Semester (500 Marks)**

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-201	Statistical Techniques in Psychology	25	75	100
MAP-202	Cognitive Psychology	25	75	100
MAP-203	Counseling Psychology	25	75	100
MAP-204	Applied Psychology	25	75	100
MAP-205	Practical & Profiling of Equipments	25	75	100
	Total Marks			500

Important: In second year (Semester III and IV). Clinical Psychology course (Group-A) will be run by the department. However Organizational Behavior course (Group-B) may also be run in special condition if minimum five students of the course. In this case permission of the Head of the Department is required.

Group-A Clinical Psychology

Group-B Organizational Behaviour

## SECOND YEAR (M.A. PART-II)

### Group-A: Clinical Psychology

#### III Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-301	Applied Psychometry	25	75	100
MAP-302	Research Methodology	25	75	100
MAP-303	Health Psychology	25	75	100
MAP-304	Psycho Diagnostic Techniques	25	75	100
MAP-306	Practical	25	75	100
	Total Marks			500

#### IV Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-401	Psychological Testing	25	75	100
MAP-402	Clinical Interventions	25	75	100
MAP-403	Therapeutic Techniques	25	75	100
MAP-404	Dissertation	25	75	100
MAP-405	Practical and Project Report	25	75	100
	Total Marks			500

\*Dissertation will be of 100 marks.

## Group-B: Organizational Behaviour

### III Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-301	Applied Psychometry	25	75	100
MAP-302	Organizational Behaviour	25	75	100
MAP-303	Human Resource Management	25	75	100
MAP-304	Psychology at Work Place	25	75	100
MAP-305	Practical	25	75	100
	Total Marks			500

### IV Semester (500 Marks)

Paper Code	Name of the Paper	Marks		Total Marks
		Internal Assessment	External Examination	
MAP-401	Psychological Testing	25	75	100
MAP-402	Stress Management	25	75	100
MAP-403	Organizational Development and Change	25	75	100
MAP-404	Employee Counseling or Dissertation	25	75	100
MAP-405	Practical and Project Report	25	75	100
	Total Marks			500

\*Dissertation will be of 100 marks.

In each semester there shall be four theory paper each of 100 marks (4x 100 = 400) and one practical paper of 100 marks. The duration of examination shall be 03 hours for each theory paper. The total marks for all the papers shall be 2000, including sixteen theory papers (16x100=1600) and four practical papers (4x100=400). In each theory paper, out of 100 marks, 25 marks shall be assessed through internal assessment by the concerned teacher on the basis of student's academic activities (Quiz, Seminar, Internal tests & Classroom Presentation). The semester end examination shall consist of 75 marks in each theory paper. A theory paper shall be divided into five units and two questions will be formed from each unit. Students will have to answer five questions, selecting one question from each unit. The practical examination will be conducted and marks shall be awarded by Internal and External examiners jointly. However, HOD will act as coordinator during the practical examination.

## Dissertation in IV Semester:

The students securing a minimum of 55% marks in total in I, II and III Semester examination (Subject to clearing all the theory and practical papers) will have an opportunity to select a Dissertation Work (100 Marks) in lieu of only 4<sup>th</sup> paper of IV semester. The student opting for Dissertation will select a topic related to his/her group of specialization (Clinical Psychology or Organizational Behaviour) with the help of supervisor (one of the faculty member) and later on submit an applications along with relevant information through the supervisor to the Head of the Department within 30 days from the declaration of the result of III semester. The dissertation in typed form (two copies) following APA manual between seventy five to hundred pages shall be submitted on or before 30<sup>th</sup> April to the Head of the Department along with Supervisor certificate.

### Division of Marks:

Report Writing	:	70 Marks
Viva Voce	:	30 Marks
Total	:	<hr/> 100 Marks <hr/>

Note: Supervisor will act as an internal examiner. The marks will be awarded jointly by internal and external examiners. However, HOD will act as coordinator of the examination.

SEMESTER-I  
M.A. Psychology  
**Paper-I Yoga Psychology**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To initiate the understanding of psychological knowledge within yog and meditation linking with the idea of mental health and well-being.
- To create understanding about different Indian Yogic techniques of Physical and mental health.

**Course Outcomes (COs):**

After completion of the course students will be able:

- CO 1- To achieve spiritual and mental wellbeing.
- CO 2- To promote ancient Indian Knowledge.
- CO 3 -To understand human behaviour as per Yogic Perspectives

Unit 1:           **Concept of Yoga:** Meaning & Definition of Yoga. Brief History, Different Branches of Yoga- Raj Yog, Bhakti Yog, Karma Yog, JnanaYog.

Unit 2:           **Psychological Elements of Yoga in Patanjali Yog sutra:-**  
Concept of Chitta, Levels of Chitta, Manifestations of Chitta, Methods of controlling the modifications of Chitta.

Unit 3:           **Psychology Elements of Yoga in Srimad bhagvadgita:-**  
Concept of Sthitprajna (Ch.2-54 to 72), Desire & Anger (Ch.3-37 to 43), Concept of Jnana Yoga (Ch.4-33 to 42), Concept of Divine Virtues & Demonic Nature (Ch.16)

Unit 4:           **Psychological Elements of Yoga in Upnishadas:-**  
Motivator of Senses (Kenopnishad Ch.1-1 to 8), Concept of Chariot & Charioteer (Kathopnishad 1/3/3to 15),  
Extrovertness of Senses (Kathopnishad 2/1/1 to 5), State of Self Realization (Kathopnishad 2/3/10 to 15)

Unit 5:           **Practical Yogic Techniques for Psychosomatic Health:-**  
KunjarKariya, Shankh-Prakshalan, Jalneti, Tratak, Kapalbhati, Aasan, Pranayama, Dhyana.

**Books Recommended:**

- Taimni, I. K. (1961). The science of yoga. Adyar, India: The Theosophical Society of India.
- Feuerstein, G. (2002). The yoga tradition: Its history, literature, philosophy and practice. Delhi, India: Bhavana Books and Prints.
- Jacobsen, K. A., Larson, G. J. (2005). Theory and practice of yoga: Essays in honour of Gerald James Larson. Leiden, Holland: Brill.
- Vivekananda, S. (1982). Raja yoga or conquering the internal nature. Calcutta, India: Advaita Ashram.

Semester- I  
Code: MAP 102  
**Experimental Psychology**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To learn about basic psychological processes through scientific experiments.
- To understand various mental processes: Attention, perception, memory, thinking and problem solving ability.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- discusses various cognitive aspects of human behavior.
- CO2 - guide learners understand the importance of these cognitive processes in everyday life.
- CO3- analyzes scientific approach of different cognitive aspects.

Unit 1:	<b>Attention and Perception:</b> Attention – Concepts and Mechanisms, Selective attention. Perception – Figure-ground organization. Perception of depth and movement, Perceptual constancy – Brightness, size and shape.
Unit 2:	<b>Memory and Forgetting:</b> Memory – Types of memory (STM and LTM). Methods and Material, determinants of memory. Forgetting – Concepts, Causes and theories of forgetting – Interference Theory (Behaviouristic) and Memory Theory (Gestalt)
Unit 3:	<b>Thinking and Problem solving:</b> Thinking- Meaning and Types Concept formation, Language and thinking. Problem solving – Nature and theories factors affecting problem solving.
Unit 4:	<b>Verbal Learning:</b> Nature, materials and methods of verbal learning. Determinants of verbal learning and transfer of learning.
Unit 5:	<b>Human abilities</b> Nature and Definition of Intelligence. Biological, Social, Eco-cultural determinants. Theories of intelligence – Spearman, Thurston and Guildford.

**Books Recommended:**

- Baddley, A. (1997). *Human Memory: Theory and Practice*. New York, NY: Psychology Press.
- D. Amato, M.R. (1970). *Experimental Psychology: Methodology, Psychophysics and Learning*. Delhi, DL: Tata McGraw -Hill.
- Dodd, D.H., & White, R.M. ( Jr.) (1980). *Cognition: Mental Structures and Processes*. Boston, MA: Allyn and Bacon Inc.

Semester- I  
Code: MAP 103  
**Psychology of Personality**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To learn about basic concepts of personality through psychological theories.
- To understand various approaches of human personality.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- elaborates various personality theories of human behavior.
- CO2 – apply scientific knowledge of human personality.
- CO3- analyzes scientific approach of different personality psychologists.

Unit 1:           **Personality:** Meaning and Scientific Study of the Personality.

Unit 2:           Determinants of Personality: Biological – genetic determinants of personality, and Environmental (Socialization, Society and Culture) factors contributing to personality development.

Unit 3:           **Psychodynamic and Psychosocial Approaches:** Jung, Adler's and Freud. Humanistic and Self Approaches – Maslow, Murrary and Rogers.

Unit 4:           **Trait and type Approaches:**Allport, Cattell, Eysenck and Big Five Factors Models.

Unit 5:           **Behaviouristic and social Learning Approaches:** Skinner, Bandura and Mischel.

**Books Recommended:**

- Burger, J.M. (2004), *Personality*. United state of America, USA: ThomsonWadsworth.
- Hall, G.C., Lindzey, G.,&Campbell, J.C. (1998). *Theories of Personality*. New York, NY:John Wiley and Sons.
- Mischel, W. (1976). *Introduction to Personality*. New York, NY: HoltReinhart and Winston.

Semester- I  
Code: MAP 104  
**Advanced Social Psychology**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To learn about basic concepts of social psychology.
- To understand various approaches of social behavior.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- discuss about various social theories of human behavior.
- CO2 – apply scientific knowledge of social behavior.
- CO3- spread scientific approach of social psychology in various fields of life.

- Unit 1:           **Introduction:** Nature and scope of Social Psychology, Methods of Analysis of Social Behaviour. Relationship of Social Psychology with other Social Sciences, Current Trends in Social Psychology.
- Unit 2:           **Methods of Social Psychology:** Observation, Experimental, Survey, Field Studies and Questionnaire.
- Unit 3:           **Socialization:** Agents, Process and Characteristics of Socialization, Determinants of Socialization, Communication and Language.
- Unit 4:           **Attitude and Prejudice:** Attitude – Meanings, Attitude Formation, Attitude Change, Theories of Attitude – Heider’s Balance theory and Festinger’s Cognitive Dissonance Theory. Determinants of Attitude. Prejudice – Meaning, Development and Causes of Prejudice, Psychological Techniques to reduce prejudices.
- Unit 5:           **Social Influence and Social Problems:** Social Influence – Social Conformity, Conformity Bias, Impact of Feedback and Non-Conformity, Social Problems – Poverty and Deprivation, Gender Issues and Social Violence.

**Books Recommended:**

- Baron, R.A.,&Byrne, D. (2000). *Social Psychology*. New Delhi, ND: Prentice Hall ofIndia Pvt. Ltd.
- Fraser, C.,&Burchell, B. (2001). *Introducing Social Psychology*.Madlen, MA: Blackwell.
- Myers, D. (2007). *Social Psychology*. New Delhi, ND: Cengage Learning.
- Singh, A.K. (2009).*SamajManovigyanKeRuprekha*. New Delhi, ND:MotilalBanarasiDas.

Semester- I  
Code: MAP 105  
**Psychology Practical**

Marks-100  
Time- 04 Hrs

**Course Objectives:**

- The course aims to deliver practical and in-depth experience in accordance to the principles learnt in the theory courses covering the areas of verbal learning, memory, forgetting etc.
- To provide the students with the practical knowledge of conducting various experiments and Psychological Tests.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO 1-Describe the basic concepts of psychological testing.
- CO 2- Measure various psychological characteristics.
- CO 3- Compare individual differences.

**List of Practical**

Any five of the following:

1. Social Distance Inventory
2. Marital Adjustment Inventory
3. Verbal Intelligence Tests
4. Depth Perception – Pictorial Cues.
5. Size Constancy
6. Verbal Learning- Serial Anticipation Method.
7. Verbal Conditioning
8. Attitude Scale (Optimistic - Pessimistic)
9. Social Conformity Scale
10. Short Term Memory
11. Zeigarnik Effect.
12. Concept Formation.
13. Eysenck Personality Inventory
14. Sixteen Personality Factors
15. Retroactive Interference

**Profiling of Equipments:**

Candidate is required to prepare a profile of at least 8 equipments (4 Instruments and 4 Tests), other than those included in Practical. One equipment profiles will be allotted to a candidate during the examination and evaluation will be based on profile, report and Viva-voce.

Division of Marks:

Conduction of 02 Practical	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks

Total : 100 Marks

Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

Semester- II  
Code: MAP 201  
**Statistical Techniques in Psychology**

Marks-75  
Time- 03 Hrs

**Course Objectives (COs):**

- To develop an understanding of various statistical techniques in terms of their Applications
- To create understanding about different types of Design employed in Psychological Research

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO 1- To collect organizes, interpret and analyze of psychological data in various fields of life.
- CO 2- To obtain scientific results by using different statistical methods.
- CO 3- To utilize statistical knowledge in various field of science and arts.

- Unit 1:           **Introduction:** Nature of the Data, Nature of Measurement, Levels of Measurement. Measures of Central Tendency – Mean, Median and Mode.
- Unit 2:           **Measures of Variability:** NPC- Characteristics & Applications of Normal Probability Curve. Average Deviation, Quartile and Standard Deviation.
- Unit 3:           **Parametric Statistics:** Significance of difference between means: CR and ‘t’ test (Correlated & Uncorrelated). Analysis of variance (one way and two way). Post hoc comparison test (Duncon& Schaffer)
- Unit 4:           **Non-Parametric Statistics:** Chi-Square test, Sign Test, Median Test. Difference between parametric and non-parametric statistics.
- Unit 5:           **Correlation Methods:** Concept and Significance. Product Moment Correlation (Ungrouped Data), Rank Difference Correlation. Standard Error of Estimate.

**Books Recommended:**

- Biswal, B.,& Dash, P.C. (2009). *Statistics in Education and Psychology*. New Delhi, ND: Dominant Publishers India.
- Gareett, H.E. (2005). *Statistics in Psychology and Education*. New Delhi, ND: Paragon International Publishers.
- Guilford, J.P. (1975). *Fundamental Statistics in Psychology and Education*. New York, NY: Mc Graw Hill.

Semester- II  
Code: MAP 202  
**Cognitive Psychology**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To learn about basic concept of cognitive psychology.
- To understand physiological aspects of human behavior.

**Course Outcomes (COs):**

After completion of the course, students will be able to:

- CO1- discusses origin and current status of cognitive psychology.
- CO2 - guide learners understand the importance of these cognitive processes in everyday life.
- CO3- analyze scientific approach of human physiology.

- Unit 1:           **Origin and current status of cognitive Psychology, Approaches to cognitive development:** Piaget, Vygotsky and information processing. Development of cognitive neurosciences.
- Unit 2:           **Central Nervous System:** Structure and functions of human brain (spinal cord, medulla oblongata, cerebellum, thalamus and hypothalamus, cerebrum.)
- Unit 3:           **Peripheral Nervous System:** Cranial nerves and spinal nerves. Sympathetic and Para- Sympathetic nervous system- structure and functions. Endocrine glands and Psychological functions.
- Unit 4:           **Motivation and Emotion:** Motivation- Basic motivational concepts. Biological motives (Hunger, thirst, sleep and sex). Social motives (Achievement, affiliation, power, aggression and approval). Maslow's Need Hierarchy Theory. Emotion- Physiological correlates of emotions. Theories of emotions- James-Lange & Cannon- Bard.
- Unit 5:           **Creativity and Decision Making:** Creativity – Definition and measurement of creativity. Decision Making – Framing Effect, Individual and Group Decision Making, Risk taking and performance.

**Books Recommended:**

- Tiwari, B.D. (2001). *AdhunikDaihiKManovigyan*. Varanasi, MotilalBanarasidas.
- Morgan, C. T. (1965). *Physiological Psychology*. New York, NY: McGraw Hill.
- D. Amato, M.R. (1979). *Experimental Psychology: Methodology, PsychophysicsandLearning*. New Delhi, ND:Tata McGraw Hill.

Semester- II  
Code: MAP 203  
**Counselling Psychology**

Marks-75

Time- 03 Hrs

**Course Objectives:**

- To gain the knowledge about guidance and counseling.

- Importance of counseling in real life.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To understand bio- psycho-social issues of human life as per psychological perspectives.
- CO-2 To assist clients under the supervision of clinical psychologists in various areas of life.
- CO-3 To provide counselling in school, college and university levels.

- Unit 1:           **Counselling Psychology:** Definitions of counseling. Ethical issues in counseling, Distinctions between counseling and Psychotherapy.
- Unit 2:           **Expectations and goals of Counselling:** Goals and expectations, Process, Group counseling. Characteristics of counseled and counselors, Role and functions of the counselors and their professional training.
- Unit 3:           **Theoretical Approaches to Counseling:** Psychoanalytic, Behavioral, Rational- Emotive Behaviour Therapy, Client Centered, Transactional Analysis.
- Unit 4:           **Areas of Counselling:** Educational, Career, Family and Martial, Gerontological and Weaker Sections, Stress Management Oriented Counselling.
- Unit 5:           **Evaluation of Counselling:** Nature and purpose, steps in evaluation, and outcome research. Testing- Intelligence test, Achievement test, Aptitude test, Interest test, and Personality Test.

**Books Recommended:**

- C.J. Geslo., & Fretz, B.R. (1995). *Counselling Psychology*. Bangalore, Prism Books Pvt. Ltd.
- Patri, V.R. (2001). *Counselling Psychology*. New Delhi, ND: Authors Press.
- Rao, S.N. (2002). *Counselling and Guidance*. New Delhi, ND: McGraw Hill
- David, A. (2004). *Guidance and Counselling*. New Delhi, ND: Common Wealth Publishers.
- Gladding, S. (2009). *Counselling: A Comprehensive Profession*. New Delhi, ND: Pearson Education.
- Sodi, T.S., & Suri, S.P. (2006). *Guidance and Counselling*. New Delhi, ND: Tata McGraw Hill.
- Gladding, S. T. (2009) *Counselling*. New Delhi, ND: Dorling Kindersley Pvt. Ltd.
- Rai, A., & Asthana, M. (2006). *Guidance and Counselling*. Varanasi, New Delhi, ND: Motilal Banarasis.

Semester- II  
Code: MAP 204  
**Applied Psychology**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To gain the knowledge about applied psychology.
- Importance of various fields of applied psychology.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To understand applied issues of human life as per psychological perspectives.
- CO-2 To enhance quality of sports, media and information technology.
- CO-3 To provide scientific knowledge of applied psychology.

- Unit 1:           **Community Psychology:** Concepts of Community and their implication for community Psychology. Relevance of Psychology to community studies.
- Unit 2:           **Criminal Psychology:** Understanding Psycho-social factors of criminology, Offences (Juvenile delinquency, Crime against women, Robbery, Substance Abuse, Homicide and Suicide). Role of Voluntary agencies, Ethical issues in forensic practice, terrorism.
- Unit 3:           **Sports Psychology:** Nature and application, Psychological interventions to enhance mental health, cognitive skills and spiritual skills of sportsmen, team cohesion and team building.
- Unit 4:           **Military Psychology:** Mental health of army personnel. Psychological tests for selection and training, Psychological interventions.
- Unit 5:           **Psychology of Information Technology and Mass Media:** Promoting Wellbeing and Human rights through I.T. Media and Communication (Concepts, Process and Models), Media Violence, Media Management (Advertising and Public Relations), Cyber Crime.

**Books Recommended:**

- Mann, P.A. (1978). *Community Psychology*. New York, NY: The Free Press.
- Anastasi, A. (1979). *Fields of Applied Psychology*. New Delhi, ND: McGraw-Hill.
- Mishra, R. (2006). *Criminal Psychology*, New Delhi, ND: Sumit Enterprises.
- Singh, S. (2008). *Psychology of Sports Performance*. New Delhi, ND: Global Vision Publishing House.
- Swain, S. (2010). *Applied Psychology*. New Delhi, ND: Vishal Publications.
- Shanmugam, T.E. (1987). *Community Psychology*. Madras, Utsav Publisher.
- Smarak, S. (2009). *Applied Psychology*. New Delhi, ND: New Vishal Publications.

Semester- II  
Code: MAP 205  
**Psychology Practical**

Marks-75  
Time- 03 Hrs

**List of Practical:**

Any Five of the following:

1. Word Bio feedback
2. Aggression Scale
3. Achievement Motivation Scale
4. Life Stress Scale
5. Emotional Competence/Maturity Scale
6. Vocational Aspiration
7. Transactional Analysis
8. Quality of Life
9. Parent Child Relationship Scale
10. Level of Aspiration Test
11. Introversion- Extroversion Personality Scale
12. Aptitude Test
13. Interest Inventory
14. Adjustment Inventory
15. Mental Health Scale/Inventory.

**Profiling of Equipments:**

Candidate is required to prepare a profile of at least 8 equipments (4 Instruments and 4 Tests), other than those included in Practical. One equipment profiles will be allotted to a candidate during the examination and evaluation will be based on profile, report and Viva-voce.

Division of Marks:

Conduction of 02 Practicals	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
Total	:	100 Marks

Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

Semester- III  
Code: MAP 301  
Group A: Clinical Psychology  
**Applied Psychometry**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To inform students about the basics of applied psychometry.
- To make them learn the statistical rigors in designing psychological tests.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1- To construct psychological tests.
- CO 2- To utilize practical knowledge of various psychological tests.
- CO 3- To discuss about basic concepts of psychological scaling.

Unit 1: **Foundations of Psychometry:** Basic of measurement theory. Errors in measurement. Speed vs. power test, nature of Psychological testing. Ethical issues in Psychological testing.

Unit 2: **Test Construction:** Meaning of a test, classification, characteristics of a good test, general steps of test construction. Item writing – method of scoring. Item analysis – meaning and purpose, items difficulty, difficulty value and index of discrimination.

Unit 3: **Psychological Scaling:** Basic concepts, Types – Ordinal scale, Nominal scale, Interval scale and Ratio scale.

Unit 4: **Reliability and Validity:** Reliability – meaning of reliability, Methods – test retest, internal consistency/ split half. Factor influencing reliability of a test. Validity – meaning, types- content, criterion, predictive and concurrent, and construct validity. Factors influencing validity of the test.

Unit 5: **Application of Tests:** Applications of Psychological testing in various settings- education, counseling and guidance, clinical.

**Books Recommended:**

- Chadha, N.K. (2009). *Applied Psychometry*. New Delhi, ND: Sage Publications.
- Guilford, J.P. (1989). *Psychometric Methods*. New Jersey, NJ: John Wiley and Sons.
- Kline, T.J.B. (2005). *Psychological Testing*. New Delhi, ND: Vistarr Publication.
- Jackson, C. (2003). *Understanding Psychological Testing*. Mumbai, Jaico Publishings House.
- Nunnally, J.C. (1978). *Psychometric Theory*. New York, NY; McGraw Hill.
- Chandha, N.K. (1996). *Theory and Practice of Psychometry*. New Delhi, ND: New Age International Publishers.
- Singh, A.K. (1997). *Tests, Measurement, Research Methods in Behavioural Sciences* Patna, Bharati Bhawan.

Semester- III  
SEMESTER-I  
CODE: MAP -302  
**Research Methodology**

Marks-75

Time- 03 Hrs

**Course Objectives:**

- To inform students about the basics of scientific research in applied psychology.
- To make them learn the statistical rigors in designing research and processing data.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1- To conduct short empirical research.
- CO 2- To prepare and present scientific research report in various fields of life.
- CO 3- To prepare research reports.

- Unit 1:           **Research Process:** Nature of research, Problem and hypothesis Variables – Operational definition criterion and predictor variables, selection, manipulation and control of independent and extraneous variables, measurement of dependent variables.
- Unit 2:           **Types of Research:** Experimental, Quasi Experimental, Correlational Research and Ex-post facto research. Ethical issues in psychological research.
- Unit 3:           **Sampling:** Meaning, Purpose and Types. Sampling error. Factors influencing sampling decision size, accessibility and cost.
- Unit 4:           **Research Design:** Meaning, Characteristics and purpose. Criteria of good research design. Between groups design. Within groups design and factorial design. Randomized and matched group designs.
- Unit 5:           **Methods of Data Collection and Report Writing:** Observation. interview and questionnaire. Report Writing – Research Report Writing based on APA Style. Ethical issues in psychological research – APA ethics code.

**Books Recommended:**

- Broota, K.D. (1992). *Experimental Design in Behavioural Research*. New Delhi, ND:Willey Eastern.
- Ferlinger, F.N. (1973). *Foundation of Behavioural Research*. Delhi, DL:SurjeetPublications.
- Gupta, A.K. & Singh, R. (2009). *Research Methodology*. New Delhi,ND:Vayu Educationof India.
- Kidder, K.H. (1981). *Research Methods in Social Science*. Tokyo, Holt Saunders.
- Goodwin, C.J. (1998). *Research Psychology*. New York NY: John Wiley and Sons.

Semester- III  
Code: MAP 303  
**Health Psychology**

Marks-75

Time- 03 Hrs

**Course Objectives:**

- To familiarize with the concept of health psychology to live healthy life.
- To orient the students about management of stress.

**Course Outcomes (Cos):**

After completion of the course, students will be able to:

- CO 1- Maintain a holistic approach of health.
- CO 2 - Promote Indian psycho-yogic views of health in the society.
- CO 3- Describe conceptual knowledge of behavioural health.

Unit 1: **Concept of Health:** Definition of Health, Biopsychosocial model VS biomedical model. Interaction of biopsychosocial variables, clinical implication of biopsychosocial model, cross cultural perspective on health.

Unit 2: **Social and Environmental Factors:** Global health trends, Health care systems, socio-economic factors in health, Gender and Health.

Unit3: **Stress and Coping:** Meaning of Stress, Stress as stimulus and Response, Response moderators – Coping styles individual characteristics and social support. Interaction model of stress. Stress related health problems – cardiovascular disease hypertension, stroke, diabetes.

Unit 4: **Modification of Health Behaviour:** Changing health beliefs, cognitive behaviour approach, self-observation and self monitoring, classical conditioning. Systematic desensitization, shaping, modeling, self control. Health enhancing behaviour – Exercise, accident prevention, weight control. Health compromising behaviour- alcohol and smoking and their prevention.

Unit 5 : **Management of Stress:** self awareness, lifestyle modification, assertiveness, relaxation and exercise, management of Type A behaviour, yoga and meditation.

**Books Recommended:**

- Baum, A., Gatchel, R.J.,&Krantz, D.S. (1997). *An Introduction to Health Psychology*. New York, NY:McGraw-Hill.
- Baum, A., Revenson,T.A.,& Singer, J.E. (2001). *Handbook of Health Psychology*. New Jersey, NJ:Lawrence Erlbaum.
- Dimatteo, M.R. &Martin, L.R. (2010). *Health Psychology*. New Delhi: ND: DorlingKindersley Pvt. Ltd.
- Taylor, S.E. (1994). *Health Psychology*. New York, NY: Random House
- Khokhar, C.P. (2007). *A Text Book of Stress Coping and Health*.Meerut: ShalabPublication.

Semester- III  
Code: MAP 304  
**Psycho Diagnostic Techniques**

Marks-75

Time- 03 Hrs

**Course Objectives:**

- To familiarize with the concept of Psycho Diagnostic Techniques.
- To orient the students about Psycho logical testing.

**Course Outcomes (Cos):**

After completion of the course, students will be able to:

- CO 1- Maintain a holistic approach of Psycho Diagnostic Techniques.
- CO 2 - Promote knowledge of psychological testing.
- CO 3- Describe conceptual knowledge of neuropsychological testing.

Unit 1: **Psychodiagnostics:** Nature and Scope, Sources of Clinical Data- The assessment Interview, Behavioural Assessment, ratings and checklists. Psychological tests, Differential diagnosis.

Unit 2: **Psychological Interviewing:** Structured interviewing. Intake interviewing. Mental status examination and diagnostic Interviewing, Crisis Interviewing. Major characteristics of interview, Roles and tactics in the interview.

Unit 3: **Intelligence Testing:** Stanford – Binet test, Wechsler Intelligence test and Bhatia Battery Performance test. Difference between individual Vs group intelligence tests.

Unit 4: **Personality Testing:** Projective tests- TAT and Rorschach with specific indicators for neuroses and schizophrenia. Self report inventories – MMPI and NEO PI-R.

Unit 5: **Neuropsychological Testing:** Bender-Gestalt and Wechsler memory Scale. GSR and ECG techniques.

**Books Recommended:**

- Gullari, S. (1998). *Foundations of Clinical Psychology*. Boston, MA: Allyn and Bacon.
- Wolman, B.B. (1978). *Clinical Diagnosis of Mental Disorders: A Handbook*. New York, NY: Plenum.
- Maarnet, G. (2003). *Handbook of Psychological Assessment*. New Jersey, NJ: John Wiley and Sons.
- Winer, B. (1983). *Clinical Methods in Psychology*. New York, NY: John Wiley and Sons.
- Korchin, S.J. (1986). *Modern Clinical Psychology*. New Delhi, ND: CBS Publishers and Distributors

Semester- III  
Code: MAP 305  
**Psychology Practicals**

Marks-75  
Time- 03 Hrs

**List of Practical:**

Any Five of the following:

16. Word Association Test
17. Rorschach
18. T.A.T.
19. Inferiority – Insecurity Test
20. Defense Mechanism Test
21. Life Stress Scale
22. Biofeedback
23. Quality of Life Scale
24. State Trait Anxiety
25. Beck Anxiety Inventory
26. PGI Health Questionnaire
27. Mental Depression Scale
28. Frustration Scale
29. Personality Adjustment Inventory
30. Multidimensional Scale for Parenting

Division of Marks:

Conduction of 02 Practical	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
Total	:	100 Marks

Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

Semester- IV  
Code: MAP 401  
**Psychological Testing**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with psychological testing and its nature and functions
- To create understanding about different types of testing.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1-To administer psychological testing in various settings like school, hospitals and NGO.
- CO2-To provide help in the assessment of mentally retarded and physically handicapped persons
- CO3- To explain about various types of psychological testing.

Unit 1: **Psychological Test:** Nature, Functions and Types of Psychological Tests. Test Administration- Effects of examiner and situational variables. Test-takers perspective. Effects of training on test performance.

Unit 2: **Measurement of Aptitude and Abilities:** Group Tests – Multidimensional Aptitude Battery. Multilevel Aptitude Batteries – Cognitive Ability Test.

Unit 3: **Personality Testing:** Self Inventories – MMPI, EPPS, 16PF, Neo Personality, Inventory. Projective Techniques- Inkblot, TAT

Unit 4: **Interest Inventories:** Strong interest Inventory, Kuder Interest Inventory, Jackson's Vocational Interest Inventory.

Unit 5: **Tests for special Population:** Infant and Pre-school testing, Assessment of mentally retarded and physically handicapped.

**Books Recommended:**

- Anastasi, A. (1998). *Psychological Testing*. New Delhi, ND:McMillan.
- Kline, P (1993). *The Hand Book of Psychological Testing*. London, LDN:Poutlege.
- Morphy, K.R.,&Davidshofer, C. O. (1988). *Psychological Testing: Principles andApplication*. New Jersey, NJ: Prentice Hall of India Pvt. Ltd.
- Freeman, F.S. (1971). *Theory and Practices of Psychological Testing*. New York,NY:Oxford Press.
- Cropanbach, L.J. (1972). *Essentials of Psychological Testing*. New York, NY: Harperand Row.
- Mathur, K. (1983). *Psychological Testing*. Agra, Vinod PustakMandir.
- Alken, L.R.,&Marnat, G.G. (2009). *Psychological Testing and Assessment*. NewDelhi, ND: Dorling Kindersley Pvt. Ltd.

Semester- IV  
Code: MAP 402  
**Clinical Interventions**

Marks-75

Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with Clinical Interventions.
- To create understanding about different skill training program.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1-To administer clinical intervention program in various settings like school, hospitals and NGO.
- CO2-To provide help in the assessment of mentally retarded persons.
- CO3- To explain about various types of clinical interventions.

Unit 1: **Intervention Goals and Process:** Nature goals and course of interventions, objective and approaches. Basic Psychotherapeutic technique- Guidance, Catharsis, Reassurance and Persuasion common Features of Interventions.

Unit 2: **The Helping Process:** Clinical Psychologist and Counsellor as a person and professional, Counsellor Characteristics. Skills of a therapist- Listening, Leading, confronting.

Unit 3: **Issues Faced by Therapists and Clinical Intervention:** Issues faced by therapist, learning our limits, transference and counter transference, establishing realistic goals. Intervention – Group therapy. Family therapy, Creative Art therapies.

Unit 4: **Interventions:** Psychodrama. Yoga and Meditation, Placebo effect, Biofeed back, Assertion Training. Self instructional training.

Unit 5: **Skill Training Programme:** For anger control, Persons suffering from Psychological Problems, mentally retarded.

**Books Recommended:**

- Korchin, S.J. (1986). *Modern Clinical Psychology: Principles of Interventions in the Clinic and Community*. New Delhi, ND: CBS Publishers and Distributors.
- Baruth, L.G.,&Huber, C.H. (1985). *Counselling and Psychotherapy: Theoretical Analysis and Sill Applications*.London, LDN: Meeil A Bell and Howell.
- Hecker, J.E.,&Thorpe, G.L. (2005). *Introduction to Clinical Psychology: Science,Practice and Ethics*. New Delhi, ND: Person.
- Trull, T.J.,&Phares, E.J. (2001). *Clinical Psychology: Concepts, Methods and Profession*. Belmont, CA: Wadsworth.
- Abate, L.L.,&Milan, M.A. (1985). *Hand Book of Social Skills, Training andResearch*, New York, NY: John Wiley and Sons.

Semester- IV  
Code: MAP 403  
**Therapeutic Techniques**

Marks-75

Time- 03 Hrs

**Course Objectives:**

- To gain knowledge about different therapies
- To create understanding and awareness about the use of therapies in professional life.

**Course Outcomes (COs):**

After the completion of this course students will be able:

- CO1-To apply psycho - therapeutic knowledge in practical life.
- CO2-To assist psychotherapist and clinical psychologist.
- CO3- To explain the basic utility of psychotherapies.

Unit 1: **Psychotherapies:** Concept, Roles and responsibilities, The Client, Therapist Relationship, Ethical issues, Codes of Conduct.

Unit 2: **Psychodynamic Therapy:** Freudian Psychoanalysis, Alfred Adler and Erik Erikson.

Unit 3: **Behaviour Therapy:** Guided Exposure, Systematic desensitization, Aversion Therapy. Assertion training. Modeling, Biofeedback.

Unit 4: **Cognitive Behaviour Therapy:** Beck's Cognitive Therapy, Rational emotive behavior Therapy, Michenbaum's cognitive behaviour therapy.

Unit 5: **Humanistic Therapies:** Person centered therapy- Gestalt Therapy, existential therapy. Transactional therapy, Interpersonal Relationship Therapy- Marital and Family Systems Therapy.

**Books Recommended:**

- Corey, G. (2001). *Theory and Practice of Counselling and Psychotherapy*. BelmontCA, Brooks Cole.
- Culari, S. (1998). *Foundations of Clinical Psychology*. New York, NY:Allyn andBacon.
- Plante, T. (2005). *Contemporary Clinical Psychology*.New York,NY: John Wiley andSons.
- Erskine, R. (1988). *Integrative Psychotherapy in Action*. New York, NY:SagePublicatiions.
- Ghorpade, M.B.,& Kumar, V.B. (1988). *Introduction to Modern Psychotherapy*. New Delhi, ND:Himalaya Publishing House.
- Bandura, A. (1969). *Principle of Behaviour Modification*. New York,NY:HoltRinehard and Winston.
- Rastogi, G.D. (1991). *Psychopathology and Treatment*. New Delhi: ND: WileyEastern Ltd.

Semester- IV  
Code: MAP 405  
**Psychology Practicals**

Marks-75  
Time- 03 Hrs

**List of Practical**

(A) Practical : Any five of the following:

1. Biofeedback
2. Cognitive Therapeutic Technique
3. Behaviour Modification Technique
4. Death Anxiety
5. Beck Hopelessness Scale
6. Mental Retardation Test
7. Frustration Test
8. Type A/B Behaviour Pattern
9. Suicidal Ideation Scale
10. State-Trait Anxiety
11. Neurotic Measurement Scale
12. Depression Test
13. Alienation Scale
14. Locus of Control
15. Multi-Dimensional Personality Inventory

**Division of Marks:**

Conduction of 02 Practical	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
Total	:	100 Marks

Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

Semester- III  
Group B: Organizational Behaviour  
Code: MAP 301  
**Applied Psychometry**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with Psychometry and psychological measurement.
- Criteria of psychological test and the steps used in test construction.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO-1 To create critical understanding of measurement issues and techniques in psychological inquiry
- CO-2 To develop skills and competencies in test construction and standardization
- CO-3 To learn the application and contextual interpretation of data from psychological measurement

Unit 1: **Foundations of Psychometry:** Basics of measurement theory. Errors in measurement. Speed vs. Power tests, nature of Psychological testing. Ethical issues in Psychological testing.

Unit 2: **Test Construction:** Meaning of a test, classification, characteristics of a good test general steps of test construction. Item writing – meaning and types of items, general guide lines for item writing, method of scoring. Item analysis – meaning and purpose, items difficulty value and index of discrimination.

Unit 3: **Psychological Scaling:** Basic concepts. Types – Ordinal scale, Nominal scale, Interval scale and Ratio scale.

Unit 4: **Reliability and Validity:** Reliability – meaning of reliability, Methods test retest, internal consistency split half. Factor influencing reliability of a test. Validity – meaning, types – content, criterion. Predictive and concurrent and construct validity. Factors influencing validity of the test.

Unit 5: **Applications of Tests:** Applications of Psychological testing in various settings- education, counseling and guidance, clinical

**Books Recommended:**

- Chadha, N.K. (2009). *Applied Psychometry*. New Delhi, ND: Sage Publications.
- Guilford, J.P. (1989). *Psychometric Methods*. New Jersey, NJ: John Wiley and Sons.
- Kline, T.J.B. (2005). *Psychological Testing*. New Delhi, ND: Vistaar Publication.
- Jackson, C. (2003). *Understanding Psychological Testing*. Mumbai, Jaico Publishing House.
- Nunnally, J.C. (1978). *Psychometric Theory*. New York, NY: McGraw Hill.
- Chadha, N.K. (1996). *Theory and Practice of Psychometry*. New Delhi, ND: New Age International Publishers.
- Singh, A.K. (1997). *Tests, Measurement, Research Methods in Behavioural Sciences*. Patna, Bharati Bhawan.

Semester- III  
Code: MAP 302  
**Organizational Behaviour**

Marks-75

Time- 03 Hrs

- Unit 1: **Leadership:** Concept of leadership, Leadership styles and their effectiveness. Different theories of leadership. Transformational and transactional leadership. Importance of leadership in organization.
- Unit 2: **Organizational Climate and Culture:** Concept and determinants of organizational climate, Measurement of organizational climate, Impact of organizational climate. Difference between organizational climate and culture.
- Unit 3: **Nature and Scope of Organizational Behaviour:** Historical background, Concept and scope of organizational behaviour, Approaches, Challenges and Opportunities.
- Unit 4: **Work Motivation:** Nature of motivation, Internal and External Motives- Financial and Non-financial incentives in industry. Theories of work motivation – Maslow, Herzberg, Vroom, Porter and Lawler.
- Unit 5: **Organizational Effectiveness:** Conceptual analysis, Historical development. Factors affecting effectiveness. Models/ approaches of organizational effectiveness.

**Books Recommended:**

- Robbins, S.P. (2008). *Organizational Behaviour*. New Delhi, ND: Pearson Education.
- Luthans, F. (2008). *Organizational Behaviour*. New York, NY: McGraw Hill.
- Srivastava, S.K. (2005). *Organizational Behaviour and Management*. New Delhi, ND: Sarup and Sons Publishers.
- Prasad, L.M. (1995). *Organizational behaviour*. New Delhi, ND: Sultan Chand and Sons.
- Ahuja, K.K. (1990). *Organizational Behavior*. New Delhi, ND: Kalyani Publishers.
- Mullins, L.J. (1998). *Management and Organizational Behaviour*. Allahabad: Wheeler Publishing

Semester- III  
Code: MAP 303  
**Human Resource Management**

Marks-75  
Time- 03 Hrs

- Unit 1: **Fundamentals of Human Resource Management:** Meaning, Scope and Importance of Human Resource Management. Assumption and Characteristics of HRM. Difference between Personnel Management and HRM.
- Unit 2: **Acquisition of Human Resources:** Planning, Assessment and Job Analysis, Recruitment and Selection- Procedure, Sources.
- Unit 3: **Industrial Relations:** Nature and Objective of industrial relations. Importance and approaches in industrial relations. Strategy and role of human resource management.
- Unit 4: **Performance Appraisal:** Performance Management System. appraisal process. Methods, creating effective personnel management system.
- Unit 5: **Job Satisfaction and Well Being in organization:** Meaning, nature and factors of job satisfaction. Theories of job satisfaction. Importance of job satisfaction.

**Books Recommended:**

- DeCenzo, D.A. &Robbins,S.P. (1999). *Human Resource Management*. New York,NY:John Wiley and Sons.
- Sudha, G.S. (2008).*Human Resource Management*. Jaipur, Ramesh Book Depot.
- Kaila, H.L. (2006). *Industrial Organizational Psychology*. New Delhi, ND:KalpazPublication.
- Varkkey, B. (2008) *Human Resource Management*. New Delhi, ND:PearsonEducation.
- Hersy, P. &Blanchard, K.H. (1995). *Management of Organizational Behaviour: Utilizing Human Resources*. New Delhi,ND: Prentice Hall of India Pvt. Ltd.
- Dessler, G. (1998). *Human Resource Management*. New Delhi, ND:Prentice Hall of India Pvt. Ltd.

Semester- III  
Code: MAP 304  
**Psychology at Work Place**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with psychology at work place.
- To create understanding about various aspects of working conditions.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1-To administer psychological testing in various settings of work place.
- CO2-To provide help in the solution of working problems.
- CO3- To enhance the quality of communication within organization.

Unit 1: **Introduction** : Place of Psychology in industry and its scope. Historical development and Hawthorne Studies. Research methods of industrial/ organizational psychology – Experimental, Naturalistic observation, Survey and Opinion Polls. Ethical practices in research at work place.

Unit 2: **Working conditions:** Worksites, Child care facilities, office and work place design, Illumination, Noise ventilation, Work Schedules- Working hours, Rest Pauses, Flexible work schedules.

Unit 3: **Accidents and Safety in Work Place:** Meaning and Causes of Accidents, Accident Proneness. Measure to Preventing Accident.

Unit 4: **Fatigue and Monotony:** Meaning and causes of fatigue, Measurement of Fatigue, and methods of eliminating fatigue, Monotony and boredom. Elimination of boredom.

Unit 5: **Communication within Organization:** Meaning and Process of Communication Models and Perspectives of Communication in organizations. Communication barriers. Types of Communication.

**Books Recommended:**

- Ahuja, K.K. (1990). *Organizational Behaviour*. New Delhi, ND: Kalyani Publishers.
- Fisher, D. (2003). *Communication in Organization*. Bombay, Jaico Books.
- Schein, E.H. (1983). *Organizational Psychology*. New Delhi, ND: Prentice Hall of India Pvt. Ltd.
- Davis, K. (1981). *Human Behaviour at Work: Organizational Behaviour*. New Delhi, ND: Tata McGraw Hill.
- Smith, D.R. (1990). *The Psychology of Work and Human Performance*. New York, NY: Harper and Row.
- Newstrom, J.W., & Davis, K. (1995). *Organizational Behaviour : Human Behaviour at Work*. New Delhi, ND: Tata McGraw Hill.

Semester- III  
Code: MAP 305  
**Psychology Practicals**

Marks-75  
Time- 03 Hrs

**List of Practical**

Any five of the following:

- 1 Job Satisfaction Scale
- 2 Labour Welfare Inventory
- 3 Occupational Stress Scale
- 4 Work Adjustment Inventory
- 5 Vocational Interest Inventory
- 6 Job Anxiety Scale
- 7 Job Involvement Scale
- 8 Leadership Style Scale
- 9 Organizational Climate Inventory
- 10 Self Esteem Inventory
- 11 Work Motivation Scale
- 12 Functional Social Support
- 13 Executive Personality Scale
- 14 Organizational Health Questionnaire

**Division of Marks:**

Conduction of 02 Practical	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
Total	:	100 Marks

Note: Any five practical shall be conducted/administered by each student. Two practicals will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.

Semester- IV  
Code: MAP 401  
**Psychological Testing**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To gain familiarity with psychological testing and its nature and functions
- To create understanding about different types of testing.

**Course Outcomes (COs):**

After completion of the course, students will be able:

- CO1-To administer psychological testing in various settings like school, hospitals and NGO.
- CO2-To provide help in the assessment of mentally retarded and physically handicapped persons
- CO3- To explain about various types of psychological testing

Unit 1: **Psychological Test:** Nature, uses, Functions and Types of Psychological Tests. Test Administration – Effects of examiner and situational variables, Test – takers perspective. Effects of training on the test performance.

Unit 2: **Measurement of Aptitude and Abilities:** Group Tests – Multidimensional Aptitude Battery. Multilevel Aptitude Batteries-Multilevel Aptitude Batteries- Cognitive Ability Test. Multiple Aptitude Test Batteries-Differential Aptitude Test.

Unit 3: **Personality Testing:** Self Inventories – MMPI, EPPS, 16 PF, Neo Personality Inventory. Projective Techniques – Inkblot, Picture Completion.

Unit 4: **Interest Inventories:** Strong Interest Inventory. Kuder Interest Inventory.

Unit 5: **Tests for Special Population:** infant and Pre-school testing, Assessment of mentally retarded and physically handicapped.

**Books Recommended:**

- Anastasi, A.(1998). *Psychological Testing*. New Delhi, ND:McMillan.
- Kline, P. (1993). *The Hand Book of Psychological Testing*. London, LDN:Routledge.
- Morphy, K.R.,&Davidshofer, C.O. (1988). *Psychological Testing: Principles and Application*. New Jersey, NJ: Prentice Hall of India Pvt. Ltd.
- Freeman, F.S. (1971). *Theory and Practices of Psychological Testing*. New York, NY:Oxford Press.
- Cronbach, L.J. (1972). *Essentials of Psychological Testing*. New York, NY: Haper andRow.
- Mathur, K. (1983).*Psychological Testing*. Agra, VinodPustakMandir.
- Aiken, L.R.,&Marnat, G.G. (2009). *Psychological Testing and Assessment*. NewDelhi, ND: Dorling Kindersley Pvt. Ltd.

Semester- IV  
Code: MAP 402  
**Stress Management**

Marks-75

Time- 03 Hrs

**Course Objectives:**

- To gain knowledge about Stress Management.
- To create understanding and awareness about the therapeutic approaches to Stress Management.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Gain expertise in the understanding of stress and its management.
- COs 2- Organize stress management workshops in various government and public institutions.
- COs 3 – Apply stress management skills in various areas of life.

Unit 1: **Organizational Stress:** Meaning of Stress, Individual factor influencing job stress. Different perspectives and symptoms of stress, conflict –Concept and types of conflict, stages and sources of conflict. Approaches of conflict resolution.

Unit 2: **Causes of Job Stress:** Personal Characteristics, Organizational structure and change, Properties of work and work setting, job role machine pacing and shift work. Coping with Stress – Types of coping strategies.

Unit 3: **Consequences of job Stress:** Job behaviour, Job satisfaction, Performance, absenteeism, Health Strains- Physical illness, mental / Psychological Symptoms.

Unit 4: **Stress Management Interventions:** Individual centered – cognitive, behavioural and psychical, Organization centered – Preventing, mitigating and moderating organizational stressors.

Unit 5: **Therapeutic Approaches to Stress Management:** Counselling, Hypno- suggestive, Hypnosis, Self talk, music therapy.

**Books Recommended:**

- Pestonjee, D.M. (1992). *Stress and Coping*. New Delhi, ND: Sage Publications.
- Srivastava ,A.K. (1999). *Management of Occupational Stress: Theory and Practice*. New Delhi, ND: Gyan Publishing House.
- Davis, K. (1981). *Human Behaviour at Work: Organizational Behaviour*. New Delhi,ND: Tata McGraw Hill.
- Pestonjee, D.M. (1991). *Motivation and Job Satisfaction*. New Delhi, ND: MacmillanIndia Ltd.
- Gosh, P.K.,&Ghorpade, M.B (1991). *Industrial and Organizational Psychology*. New Delhi, ND: Himalaya Publishing House.

Semester- IV  
Code: MAP 403  
**Organizational Development and Change**

Marks-75  
Time- 03 Hrs

**Course Objectives:**

- To gain knowledge about organizational development and change.
- To create understanding and awareness about the therapeutic approaches to organizational development.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Gain expertise in the understanding of organizational development.
- COs 2- enhance the quality of government and private organizations.
- COs 3 – Apply management skills in various areas of Government and private organizations.

Unit 1: **Introduction:** Nature, Scope and Characteristics of organizational development, Historical development. Process of Management of Change. Revolution and Growth of Organizational Development in India.

Unit 2: **Management of Organizational Development:** Process and action research. Approaches – Survey, feedback, process consultation, team building.

Unit 3: **Organizational Development Interventions:** Team, Building, Role Analysis Techniques, Role Negotiation Technique. Life and Career Planning.

Unit 4: **Management of Change:** Organizational Structure, Organizational Culture, Employee relations and involvement strategies. Major phases in effective management and organizational development Resistance to change and its diagnosis.

Unit 5: **Evaluating change and future of organizational development:** Behavioural aspects of managing across cultures.

**Books Recommended:**

- Chandha, N.K. (2007). *Organizational Behaviour*. New Delhi, ND: Galgotia Publication.
- French, W.L., & Bell, C. H. (2006). *Organizational Development: A Behaviour Science Approach*. New Delhi, ND: Prentice Hall of India Pvt. Ltd.
- Prasad, L.M. (1995). *Organizational Behaviour*. New Delhi, ND: Sultan Chand and Sons.
- Robbins, S.P. (1989). *Organizational Behaviour*. New Delhi, ND: Prentice Hall of India Pvt. Ltd.

Semester- IV  
Code: MAP 404  
**Employee Counselling**

Marks-75

Time- 03 Hrs

**Course Objectives:**

- To gain knowledge about employee counseling.
- To create understanding and awareness about the therapeutic approaches of counseling.

**Course Outcomes (COs):**

**After completion of the course, the students will be able to**

- COs 1- Gain expertise in the understanding of employee Counseling.
- COs 2- Organize counseling program in various government and public institutions.
- COs 3 – Apply counseling skills in various areas of life.

Unit 1: **Nature and Scope of Employee Counselling:** Meaning and Scope of Employee Counselling. Various Stages in Employee Counselling, Need of Employee Counselling. Approaches to Employee Counselling.

Unit 2: **Work place counselling.:** Models of work place counselling. Models of Counselling. Performance counselling, Career counselling and Planning.

Unit 3: **Psychoanalytic Theory and Employee Counselling:** the topographical and Psychodynamic aspects of human mind. Conflicts and need for counselling. Emotional reeducation.

Unit 4: **Person Centered Therapy and Employee Counseling:** Conception of man. Actualizing Tendency, Development of Self Concept, Counselling Procedure. Directive and non-directive approaches- Reality therapy, Rational emotive therapy. Gestalt counselling and eclectic counselling

Unit 5: **Behavioural Counselling:** Development of behavioral counselling. Behaviour therapy. Criteria for counselling Goals. Strategies – Systematic desensitization, Social modeling. Assertive training, Aversion therapy, Cognitive behaviour modification.

**Books Recommended:**

- Sinha, A.K.P. (1990). *Employee Counselling*. New Delhi, ND: Prachi Publication.
- Gelso, C.J.&Fretz, B.R. (1995). *Counselling Psychology*. Bangalore, Prism Books Pvt. Ltd.
- Shertzer, B.& Stone, S.C. (1968). *Fundamentals of Counselling*. New York: NY:Houghton Mifflin.
- Patterson, C.H. (1959). *Counselling and Psychotherapy: Theory and Practice*. New York, NY: Harper and Row.

Semester- IV  
Code: MAP 405  
**Practical and Project Report**

Marks-75  
Time- 03 Hrs

(A) Practical : Any five of the following:

1. Job Satisfaction Scale\
2. Mental Fatigue
3. Personal Efficacy Scale
4. Role Conflict Inventory
5. Attitude Scale Towards Management
6. Aptitude Test
7. Conflict Resolution
8. Organizational Effectiveness Scale
9. Organizational Culture Scale
10. Personality Assessment Using any Projective Test.

**Division of Marks:**

Conduction of 02 Practical	:	40 Marks
Viva Voce	:	35 Marks
Practical Record Book	:	15 Marks
Internal Viva-Voce	:	10 Marks
Total	:	100 Marks

Note: Any five practicals shall be conducted/administered by each student. Two practical will be given to each student in practical examination. The marks shall be awarded jointly by internal and external examiners. However HOD will act as coordinator of the examination.