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 fitness, recreation, adventure sports, Camping, event of sports, 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 1st 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.

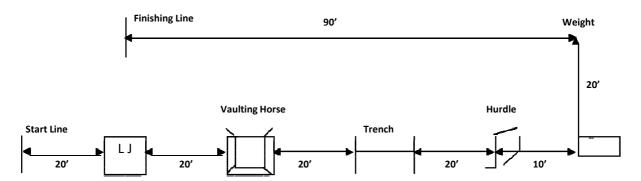
III. PHYSICAL EFFICIENCY TEST:

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
Vaulting horse	5′	4′	within 35 seconds. Carrying
Trench (7 Times)	5′	4′	weight equal to half of his/her
Hurdle	3′	2′	own body weight in buckets
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:

1st Position	50 Points
2nd Position	45 Points
3rd Position	40 Points
Participation	30 Points

2. Junior National/School National:

1 st Position	35 Points
2 nd Position	30 Points
3 rd Position	25 Points
Participation	20 Points

3. State Level:

1st Position 25 Points
2nd Position 20 Points
3rd Position 15 Points
Participation 10 Points

4. District/School Level:

1st Position20 Points2nd Position15 Points3rd Position10 PointsParticipation5 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. <u>Continuous Comprehensive Assessment (CCA)</u> 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 <u>Comprehensive Assessment (CCA)</u>: 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.
 - Y 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:-

$\geq 75\%$ 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.
 - Ye 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.
 - I' 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.
 - I' 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:

Y 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.

Y 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

Y 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

Y Part D (UNIT 1II)

One question out of two questions each of 8 marks. Each of these questions may contain sub parts and will be long type

Y Part E (UNIT 1V)

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	
2.	Major Core Course I	Human Anatomy and Physiology-I	BPE 102	4	Major Core – 8	
3.	Major Core Course II	History of Physical Education and Sports	BPE 103	4		
4.	Elective Course I	(i) Foundation of Yoga Or Any One (ii) Sports Journalism	BPE 104 BPE 105	4	Elective -16 Total = $4 + 8 + 16 = 28$	
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	
3.	Major Core Course IV	Introduction to Physical Education	BPE 203	4	Major Core – 8
4.	Elective Course II	(i) Health Education and Nutrition Or (Any One)	BPE 204	4	Elective – 16
		(ii) Exercise Physiology	BPE 205		Total = 4 +8 + 16 = 28
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	

	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	Major Core – 8
3.	Major Core Course VI	Methods in Physical Education	BPE 303	4	3
4.	Elective Course III	(i) Fundamentals of Biomechanics in Sports Or Any One (ii) Adapted Physical Education	BPE 304 BPE 305	4	Elective -16 Total = $4 + 8 + 16 = 28$
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	Yoga Practical	BPE-P- 308	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
2.	Major Core Course VIII	Organization and Administration of Phy. Edu.	BPE 402	4	Elective – 20
3.	Elective Course IV	(i) Basis of Yoga Therapy Or (Any One) (ii) Officiating and Coaching	BPE 403 BPE 404	4	Total = 8 + 20 = 28
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

		SEMESTER-V			
S.N.	Course	Course Name	Course Code	Credit	Cumulated Credits Category wise
1.	Major Core Course IX	Kinesiology	BPE 501	4	Major Core – 12
2.	Major Core Course X	Fundamental of Sports Training	BPE 502	4	Elective – 16
3.	Major Core Course XI	Common Sports Injuries Prevention and Cure	BPE 503	4	
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	Total = 12 + 16 = 28
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	
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	
2.	Major Core Course XIII	Sports Psychology	BPE 602	4	Elective – 16	
3.	Major Core Course XIV	Test, Measurement & Evaluation	BPE 603	4	Total = 12 + 16 = 28	
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

पाठय-विषय -

01. हिन्दी ध्वनियों का स्वरुप -

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. Explaining the 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." LondonEdward 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 LudhianaSecond 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 independents.
- **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". 2nd 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.]

- I. Brief about origin of Yoga: Psychological aspects and Mythological concepts;
- 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,
- 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,
- 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

- Lal Basant Kumar: Contemporary Indian Philosophy, Motilal Banarsidas Publishers Pvt. Ltd, Delhi, 2013
- 2. Dasgupta S. N : History of Indian Philosophy, Motifal Banarsidas, Delhi, 2012
- 3. Singh S. P : History of Yoga, PHISPC, Centre for Studies in Civilization 1st, 2010
- 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.
- o Acquiring the Basic skills of games
- Demonstration and application of various techniques of games Warming up: - General & Specific
- o Specific conditioning program for games
- o 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 , Ardhdhanurasana , Marjari asana , Ardhshalabhasana , Bhujangasana , Shavasana , Samkonasana , Setubandasana , Shashankasana , Mandukasana , Ardhhalasana, Ardhpadmasana

PRANAYAMA

Deep Breath Inhale – Exhale Diaphragm Breathing Nadi Shodhan Pranayama Suryabhedi 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 MCOs
- 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

- 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 SchoolEnglish 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 (2nd 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 (2nd Edition 1989) The Oxford English Dictionary (Oxford English Dictionary (20 Vols.)); Clarendon Press.
- 11. Stevenson, Angus (3rd Revised ed. Edition 2010) Oxford Dictionary of English;Oxford University Press, USA.
- 12. Dictionaries (7th Edition 2011) Oxford English Mini Dictionary IndianEdition; 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 Taittriya 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.]

- Potential causes of Ill-health: Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, 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 Devasthana, 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", 2nd 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 heath education.
- 2. Objective of health education.
- 3. Principles of heath 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.

- h. Cloths.
- 3. Eliminating of body wastes.
- 4. Rest, sleep and relaxation.
- 5. Effect of alcohol and smoking on health.

Unit-III School Health Program and Nutrition: (16 Hours)

1. Healthful school living:

- a. Place and location of school.
- b. Buildings.
- c. Infrastructure and facilities.
- d. Safety measures.

2. Health supervision/services:

- a. Physical medical examination and their follow up.
- b. Health inspection of students.

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 heart loss and heat production

- a. Radiation
- b. Convection
- c. Evaporation
- d. Conduction

2. Measurement of body temperature

- a. Effects of high attitude 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. MC Ardle, WD, Katch, FI and Katch VL (2000), Essentials of Exercise physiology2nd edition Lippincott Williams and Wilkons, 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 exerciseHuman Kinetics.
- 5. Rowland Thomas W. Children's (2005), "Exercise Physiology" 2nd 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. Middleand Long distanceraces

SEMESTER-II

PRACTICAL

ATHLETICSLESSON

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, Suptvajrasana , Chakrasana, Tiryaka Tadasana , EkPadPranamasana, Hastottanasana, Makarasana, Balasana, Sarpasana , Hanumanasana, Sukhasana , Markatasana, Viprit Naukasana, Parshva Tadasana, 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;
- 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

- 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:-

1

• 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. Appling the knowledge to take Lesson Plan in different categories.
- CO-6. Reviewing the impact of all units in conduction of competitions

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
 - 1. 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 and Co. 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. Appling 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. Blazevich, 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 EDUCAITON

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.
 - 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 programe for blind, deaf, dumb andmentally challenged children.
- f. Rehabilitation programe for bone and joints 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 Calorado-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.
- 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

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 a 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.
 - Massage as means of relaxation and points to be considered whilegiving 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.

COURSE CODE: BPE402 (MAJOR COURSE-VIII)

Credit:4

Marks:(ESE=70+CCA=30)=100

ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION

Objectives:

- o It is the education that concerns physical activities, which develop and maintain human body
- Activity
- O Teaching.
- o 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:

- 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.

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;
- 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. Cocept 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 (Shuddi), 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: Patanajala Yoga Sutra
- 4. Sahay, G. S.: Hatha Yoga Pradeepika, MDNIY Publication, 2013
- 5. Kdham : Gheranda Samhita, Kaivalyadhama, Lonavla.

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.

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 Intenational, 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 & ParmalitiesPutting

.Panalities

Short Distance stoke.Mid Distance stoke. Long Distance stoke.Stoke

completion

Panalities: Panalities Rules in Ist shot.

Panalities Rules of Hitting

Panalities Rules in play Panalities

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 Refree: Hand signs & Refree 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>
- 2. International Woodball Federation < www.iwbf-woodball.org>
- 3.

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.

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. Contibution 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.

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", 2nd 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.

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 , Akarn
Dhanurasana,Baddha Padmasana,Astavakrasana,Guptpadmasana,Sarpasana,Ardha
Chandrasana , Parivrtta Janushirasana,Sankatasana

PRANAYAMA

Bahyavriti pranayamaAbhyantaraVritipranaya ma

SATKARMA

VyutkramaKapalbhatiTratak

MUDHRAAND BANDH

MahamudraMahabandhaM urdaMahayedh Murda

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

- 1. Rasch, P.I. and Burke R.K., "Kinesiology and Applied Anatomy", Lee and Febiger.
- 2. Wells K., "Kinesiology", Philadelphia W.B. Sunders Co. 1986.
- 3. Cooper and Cleseo, "Kinesilogy", 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.

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.

- 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 Hardyal Singh.
- 6. Singh Ajmer et.al, "Essentials of Physical Education", Kalyani Publishers, LudhianaSecond revised addition 2008.

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 choric 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
 - i. Athletes foot
 - k. Tennis elbow
 - 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 fuctions 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
 - i. Sunstroke
 - k. Shock
 - 1. 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

- 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.

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.

- 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", Metropolition, New Delhi.
- 4. "Official Rule Book of Kho-Kho", International Kho-Kho Federation.

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.

- 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.

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.

- 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.

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.

- 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 (1st Edition 2015). Taekwon-Do: Origins of the Art: BOK Man Kim's Historic Photospective (1955-2015); Moosul Publishing, LLC.
- 4. Chun, Richard (2nd 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 (1st 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 (3rd Edition 2001). Taekwondo: Ancient Wisdom for the Modern Warrior; Ymaa Publication Center.

- 13. Cook, Doug (1st Edition 2006). Traditional Taekwondo: Core Techniques, History and Philosophy; Ymaa Publication Center.
- 14. Cook, Doug (1st Edition 2009). Taekwondo: A Path to Excellence; Ymaa Publication Center.
- 15. Gillis, Alex (1st Edition 2008). A Killing Art: The Untold History of Tae Kwon Do; ECWPress, 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 (1st 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 (1st Edition 2007). Complete Taekwondo Poomsae: TheOfficial Taegeuk, Palgwae and Black Belt Forms of Taekwondo; Turtle Press, U.S.
- 19. Hornsey, Kevin (1st Edition 2003). Taekwondo: A Step-by-Step Guide to the Korean Art of Self-Defense; Tuttle Publishing.
- 20. Park, Dong Keun & Schein, Allan (1st Edition 2006). Tae Kwon Do: The IndomitableMartial Art of Korea: Basics, Techniques, and Forms; Invisible Cities Press Llc.

"Official Rule Book of Taekwondo", World Taekwondo Federation. www.worldtaekwondo.org, www.taekwondofederationofindia.com

PRACTICAL

GAMES LESSON

COURSECODE: BPE-P-508

(ELECTIVE GROUNDCOURSE-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,EkaPadaSkandasana,Vatayanasana,Titibasana,Garbhasana,ShirshaPadangusth asana ,Guptasana, Padambakasana, PurnaUstrasana, Vibhaktapaschimottanasana,Karnapidasana

PRANAYAMA

Bhramari PranayamaBhastrika PranayamaUdgeeth PranayamMurchaPranayama

SATKARMA

Shankh PrakshalanNauliKriya VastraDhauti

DHYAN

YogaNidra

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.** Appling 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 Programe 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 andfolders 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 offunctions.
- 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.

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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

- 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.

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.

- 1. Clarks H. Harrison; "Application of measurement to health and Physical Education" Pretice Hall Inc., Englewood Cliffs, N.J. 5th Edition, 1976.
- Scott Gladys and French; "Measurement and Evaluation in Physical Education",
 W.M.C. Brown Co. Publishers, Dubugue, Lowa, 1959.
- 3. Mathews K. Donald; "Measurement in Physical Education" W.B. Sounders 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", Surject Publications, 1982.

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, Dhoti, Basti, Nauli, Tratak, Kapalbhati

3. Meaning and definition of Pranayama, general techniques and physiological benefits of the following:

Ujjai, Sitkari, Shitali, Bhastrika, Bhramari, Kapalbhati, 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

- 1. "Facts about Yoga", By Shri Jogindera, The Yoga Institute, Santa Cruj, 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 Cruj, 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.

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.

- 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. .

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.

- 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.

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.

- 1. Training Manual of Football", NSNIS, Patiala.
- 2. American Football Coaches Association (2002), "The Football Coaching Bible", 1st 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.

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

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(onetrackandonefieldevent)ofathleticsc overedinthepractical'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 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. 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.