

RADHA GOVIND UNIVERSITY

RAMGARH, JHARKHAND



**Regulations and Courses of Study For Bachelor of Physical Education (B.P.Ed)
Under Choice Based Credit System (CBCS)**

REGULATION FOR CONDUCTING THE B.P.Ed DEGREE PROGRAMME

I. Objective:

To Empower the students through learning toward realistic individual **goals** and Participate in a motivating and nurturing environment resulting in a greater sense of well-being and self-esteem. Also to encourage the students to Participate in active **learning** and stimulate continued inquiry about **physical education, health** and **fitness** through various courses during the two years B.P.Ed programme The total credit points for this course shall be 128.

II. Eligibility

- A. Bachelor's degree in any subject with 50% marks.
- B. Bachelor's degree in physical education with 45% marks.
- C. Bachelor's degree in any subject 45% marks and having studied physical education as compulsory/ elective subject.
- D. Bachelor's degree with 45% marks and having participated in National/ Inter university/ state competitions in sports and games as recognized by AIU/ IOA/ SGFI/ Government of India.
- E. Eligibility categories SC/ST students shall have a concession of 5% marks in degree for purpose of eligibility.
- F. Graduation with 45% marks and at least three year of teaching experience (for deputed in-service candidates i.e trained physical education teachers / coaches.

III. Duration of courses

- A. The bachelor of physical education (B.P.Ed) course shall be of two years duration. it will consist of four semesters of six months each. each paper , both theory as well as practical, shall be of 100 marks of which 70 marks will be for end semester examination (ESE) and rest 30 marks for Internal Assessment(IA). The bifurcated marks of 30 shall be as under

Component	Class test
Class test	10
Home assignment	10
Seminar / quiz etc.	05
Attendance *	05

Note:

- 5 Marks is to be allotted to the student with more than 95% attendance, 4 marks between 90%, 3 marks between 85% to 89%, 2 marks between 80% to 84% and 1 marks between 75% to 79% of attendance.
- A candidate, passing in all the paper, both ESE and IA separately in the semester examination, shall be declared pass. Those who fails in the maximum of three papers shall be treated on promoted otherwise (i.e fails more than three papers) declared fail in the semester examination. In each cases the student will have to appear in all the papers of the semester examinations.

IV. Attendance

Every student has to secure a minimum of 75% attendance in each semester for appearing at the end semester examination.

V. THE COURSE STRUCTURE

SEMESTER-I

Paper Code	Title Of Paper	Full Marks (Pass Marks)				Class Per Week		Credit Points
		Theory Paper		Practical Paper		Theory Paper	Practical Paper	
		ESE	IA	ESE	IA			
BPE 101	History, Principles and Foundation of Physical Education	70 (30)	30 (10)	-	-	4	-	04
BPE102	Anatomy and Physiology	70 (30)	30 (10)	-	-	4	-	04
BPE103	Yoga Education	70 (30)	30 (10)	-	-	4	-	04
BPE104	Sports Training	70 (30)	30 (10)	-	-	4	-	04
BPE105	Athletics	-	-	70 (30)	30 (10)	-	4	04
BPE106	Football	-	-	70 (30)	30 (10)	-	4	04
BPE107	Yoga	-	-	70 (30)	30 (10)	-	4	04
BPE108	Mass Demonstration Activities: Drill and Marching/ Mass/ P.T./ Dumbbells/ Lezium/ Minor Games/ Aerobics.	-	-	70 (30)	30 (10)	-	4	04
	Total	280	120	280	120	16	16	32

SEMESTER-II

Paper Code	Title Of Paper	Full Marks (Pass Marks)				Class Per Week		Credit Points
		Theory Paper		Practical Paper		Theory Paper	Practical Paper	
		ESE	IA	ESE	IA			
BPE 109	Sports Nutrition and Weight Management	70 (30)	30 (10)	-	-	04	-	04
BPE110	Education Technology and Methods Teaching in Physical Education	70 (30)	30 (10)	-	-	04	-	04
BPE111	Sports Medicine, Physiotherapy and Rehabilitation	70 (30)	30 (10)	-	-	04	-	04
BPE112	Officiating and Coaching	70 (30)	30 (10)	-	-	04	-	04
BPE113	Basketball	-	-	70 (30)	30 (10)	-	04	04
BPE114	Volleyball	-	-	70 (30)	30 (10)	-	04	04
BPE115	Badminton	-	-	70 (30)	30 (10)	-	04	04
BPE116	Swimming	-	-	70 (30)	30 (10)	-	04	04
	Total	280	120	280	120	16	16	32

SEMESTER-III

Paper Code	Title Of Paper	Full Marks (Pass Marks)				Class Per Week		Credit Points
		Theory Paper		Practical Paper		Theory Paper	Practical Paper	
		ESE	IA	ESE	IA			
BPE117	Health Education and Environmental Studies	70 (30)	30 (10)	-	-	04	-	04
BPS118	Test, Measurement and Evaluation in Physical Education	70 (30)	30 (10)	-	-	04	-	04
BPE119	Management In Physical Education	70 (30)	30 (10)	-	-	04	-	04
BPE120	Research in Physical Education	70 (30)	30 (10)	-	-	04	-	04
BPE121	Hockey	-	-	70 (30)	30 (10)	-	04	04
BPE122	Kho-Kho	-	-	70 (30)	30 (10)	-	04	04
BPE123	Handball	-	-	70 (30)	30 (10)	-	04	04
BPE124	Teaching Practical	-	-	70 (30)	30 (10)	-	04	04
	Total	280	120	280	120	16	16	32

SEMESTER – IV

Paper Code	Title Of Paper	Full Marks (Pass Marks)				Class Per Week		Credit Points
		Theory Paper		Practical Paper		Theory Paper	Practical Paper	
		ESE	IA	ESE	IA			
BPE125	Sports Psychology	70 (30)	30 (10)	-	-	04	-	04
BPE126	Kinesiology and Biomechanics	70 (30)	30 (10)	-	-	04	-	04
BPE127	Computer Application in Physical Education	70 (30)	30 (10)	-	-	04	-	04
BPE128	Theory of sports and games (Specifically sports and games specialization)	70 (30)	30 (10)	-	-	04	-	04
BPE129	Kabaddi	-	-	70 (30)	30 (10)	-	04	04
BPE130	Cricket	-	-	70 (30)	30 (10)	-	04	04
BPE131	General lesson plan: Indian Clubs. Dumbell Drill, Calisthenics, Aerobics, Lezium Drill and Marching.	-	-	70 (30)	30 (10)	-	04	04
BPE132	Specialization Coaching Lesson plan: Athletics. Badminton, Volleyball, Kabaddi, Kho – Kho, Cricket, Football, Hockey, Basketball. Handball, Yoga, Archery, Swimming	-	-	70 (30)	30 (10)	-	04	04
	Total	280	120	280	120	16	16	32

Note: The 30 marks and 10 marks respectively in end semester examination (ESE) and internal assessment (IA) are necessary for passing the paper separately in each semester examination.

VI. Script and duration of examination

The students are required to answer the questions in English and Hindi language in the examination in all the papers. Each individual paper of 100 marks shall be of three hour duration.

VII. Promotion rules and supplementary examination

A student shall be promoted to the next higher semester if of the semester of passes in at least from papers. This will be applicable in the from semesters i.e from I to II ,II to III and III to IV semester. The students will be given chance to clear the backlog papers (in which he/she failed) in subsequent regular end semester examinations.

There shall be no supplementary examination for I, II ,III , IV. However, there shall be a provision after the declaration of the result of semester-IV. Students failing in clearing the backlog papers previously may appear in supplementary examination to clear the result.

If student fails to clear all papers of all semesters including supplementary examination, the student will be given two more chances to clear in two subsequent years regular end semester examinations. Thus, the student will be given chance to clear the results during the maximum period of four years.

If a student fails to clear all papers of all semesters during the period of from years then the student registration will be automatically cancelled and he/she will have to start the course afresh from the semester-I

VIII. The Course Fee

The course fee per semester and fee structure shall be as determined by the University from time to time.

IX. Ranking of the candidate

Ranking shall be given to only those candidates who pass all the papers of all six semester examinations of the same session B.P.Ed. programme in one attempt. Further the total marks obtained by him/her at the examinations shall be considered as the basis for the University ranking, Scholarships and other distinctions.

X. Restriction of completing the course

Any student taking admission B.P.Ed. degree programme of the faculty shall not be allowed to pursue any other full time programme/ course in the faculty or elsewhere in the entire period of the programme meaning thereby that if a student leaves the programme after passing some of the semesters/ courses and takes up a full-time programme / course elsewhere, then he/she will have to pay the fee remaining semester of the course.

Courses Of Study For Bachelor Of Physical Education (B.P.Ed)

SEMESTER – I

PAPER 1

BPE101: HISTORY, PRINCIPLES AND FOUNDATIONS OF PHYSICAL EDUCATION

UNIT-I

- a. Physical Education.
- b. Definitions, Meaning and Importance of Physical Education.
- c. Misconceptions about Physical Education.
- d. Aims and objectives of Physical Education.
- e. Physical Education as an Art, and Science, Academic discipline and multidisciplinary science.
- f. Physical Education in ancient India-Vedic period, Epic Period and Buddhist periods.
- g. Physical Education in the city states of Greece.

UNIT-II

- a. Survey of Modern Physical Education in India-Pre and Post independence periods.
- b. Physical Education and Sports Training Institutions in India.
- c. Indian Olympic Associations.
- d. Schemes for promotion of Physical Education and Sports;
- e. Sports Authority of India, Arjuna Awards, and Dronacharya Awards.
- f. National Sports Scholarships, National Associations and State Councils of Sports.

UNIT-III

- a. Modern Olympic Games
- b. Start of Olympics.
- c. Objectives of Olympics.
- d. Olympics motto and Flag.
- e. Opening and closing ceremonies.
- f. Olympic charter.
- g. Olympic commissions and their functions

UNIT-IV

- I. BIOLOGICAL FOUNDATIONS
 - a. Heredity, environment and its importance,
 - b. Stages of growth and development
 - c. Principles governing physical and motor growth and development.
- II. PSYCHOLOGICAL, SOCIOLOGICAL, PHILOSOPHICAL AND PHYSIOLOGICAL FOUNDATIONS
 - a. Importance and implication of psychological elements in Physical Education.
 - b. Idealism and Physical Education.
 - c. Pragmatism and Physical Education.
 - d. Naturalism and Physical Education.
 - e. Physical Education & Sports as a need of the society.

Suggested Reading List

- Bucher, Charles A. “Foundations of Physical Education” St. Louis: The C.V. Mosby Company 1986.
- Khan, Eray Ahmed: “History of Physical Education in India” PATNA; Scientific boo Co.
- Leonard, Fred Eugen and G.B. Affleck. “Guide to the History of Physical Education”, Philadelphia: Lea and Febiger 1962.
- Mazumdar, D.C. “Encyclopedia of Indian Physical Culture”, Baroda: Good Companions, 1950.
- Rajagopalan, K.A. “Brief History of Physical Education in India”, Delhi, Army Publishers- 1962.
- Rice, Emett. A., J.L. Hutchinson, and M Lee “A Brief History of Physical Education”, New York, the Ronald Press Company 1960.
- Sharma, Jackson R, “Introduction to Physical Education” New York; A. S. Barnes and Company, 1964.

SEMESTER – I
PAPER 2

BPE102: ANATOMY AND PHYSIOLOGY

UNIT-I

- a. Concept of Anatomy and Physiology
- b. Meaning and concept of Anatomy and Physiology.
- c. Need and Importance of anatomy for the students of Physical Education.
- d. Definition of Cell, tissues, organ and system.
- e. Microscopic structure of cell.
- f. **Tissues:** classification, structure and function of various types of tissues.
- g. **Bones:** Composition, Microscopic structure of bones, function of bones, general features of scapula, radius, ulna, humerus, hip bone, femur, Tibia, Typical Rib and Typical Vertebra, Brief introduction about the skull bones.
- h. **Joints:** Definitions and classification of joints: Anatomical structure of synovial joints. Terminology of movement around a joint.

UNIT-II

- a. Muscles
- b. Structural and functional classification of muscles.
- c. Microscopic structure of muscles skeletal, cardiac and smooth; and their significance.
- d. General characteristics (Properties) of muscles (Elasticity, contractibility and Irritability).

UNIT-III

Cardiovascular System and Excretory System

Cardiovascular system, blood, lymph and Excretory systems:

- 1. The cardio vascular system;**
 - a. Pumping action of the heart and its regulation.
 - b. Pressure, its maintenance and regulation.
 - c. Blood flow and its regulation according to needs.
 - d. The cardiac output and its regulation.
- 2. Blood:**
 - a. Composition and functions of blood.
 - b. Clotting of blood.
- 3. The Excretory Systems:**
 - a. Excretion of water from body.
 - b. Function of kidney, skin and G.T. Tract

UNIT-IV

- 1. Respiratory system;**
 - a. Mechanism of respiration.
 - b. Pulmonary ventilation and its regulation.
 - c. Second wind, Oxygen debt.
- 2. Gastro intestinal system;**
 - a. Gastro intestinal movements,
 - b. Secretion and function of the digestive juices.
 - c. Functions of Liver.
 - d. Absorption of food.

- e. Metabolism and Temperature Regulation
- f. General metabolism.
- g. Elementary idea about metabolism of proteins, Carbohydrates and fats.

3. Nervous system:

- a. Functions and important part of the nervous system, spinal cord, medulla oblongata, cerebrum etc.
- b. Physiological mechanism governing posture and equilibrium.

4. Sensory system:

- a. General sensation like coetaneous and kinesthetic sensation.
- b. Special sensations.

5. Endocrine System:

- a. Secretion of endocrine glands and their role in growth & development and regulation of body functions,
- b. Pituitary, Thyroid, Para thyroid, Adrenal Glands

Suggested Reading List

- **Human Anatomy & Physiology** by Elaine N. Marieb and Katja Hoehn, 2018.
- **Gray's Anatomy: The Anatomical Basis of Clinical Practice** by Susan Standring, 2020.
- **Principles of Anatomy and Physiology** by Gerard J. Tortora and Bryan H. Derrickson, 2017.
- **Ross & Wilson Anatomy and Physiology in Health and Illness** by Anne Waugh and Allison Grant, 2018.
- **Textbook of Medical Physiology** by Guyton and Hall, 2020.
- **Essentials of Human Anatomy & Physiology** by Elaine N. Marieb, 2017.
- **Clinically Oriented Anatomy** by Keith L. Moore, Arthur F. Dalley, and Anne M.R. Agur, 2017.

SEMESTER – I
PAPER 3

BPE103: YOGA EDUCATION

UNIT-I

- a. Meaning and Definition of Yoga
- b. Aim and Objectives of Yoga
- c. Need and importance of Yoga in physical education and sports
- d. Yoga in early Upanishads
- e. The yoga sutras: General consideration

UNIT-II

- a. Foundation of Yoga
- b. The Astanga yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi
- c. Yoga in the bhagavadgita – Karma yoga, Raja yoga, Jana yoga, Bhakti yoga, Hata yoga

UNIT-III

- a. Asana, Pranayama, Bandhas, Mudras and Kriyas their effects
- b. Types of Bandhas and Mudras
- c. Types of Kriyas
- d. Asana and Pranayama with special reference to physical education and sports
- e. Effects of Asana and Pranayama on various system of the body
- f. Influences of relaxative, meditative posture on various system of the body

UNIT-IV

- a. Yoga Education
- b. Differences between yogic practices and physical exercise
- c. Yoga Education centres in India and abroad
- d. Basic, applied and action research in yoga
- e. Instruction and method of teaching yoga
- f. Competitions in yogasanas

Suggested Reading List

- "Light on Yoga" - B.K.S. Iyengar, 1966.
- "Yoga Sutras of Patanjali" - Sri Swami Satchidananda, 1978.
- "The Heart of Yoga: Developing a Personal Practice" - T.K.V. Desikachar, 1995.
- "Hatha Yoga Pradipika" - Swami Swatmarama, 15th century (translated version).
- "Asana Pranayama Mudra Bandha" - Swami Satyananda Saraswati, 1969.
- "Bhagavad Gita: A New Translation" - Stephen Mitchell, 2000.
- "Raja Yoga" - Swami Vivekananda, 1896.
- "Yoga in the Upanishads" - Various (translated by Swami Prabhavananda), 1957.
- "Yoga Education for Children" - Swami Satyananda Saraswati, 1980.
- "Yoga Anatomy" - Leslie Kaminoff and Amy Matthews, 2007.

SEMESTER – I
PAPER 4

BPE104: SPORTS TRAINING

UNIT-I

1. Sports Training.

- Definition of terms conditioning, Training & Coaching.
- Aim, tasks and characteristic of Sports Training.

2. Principles of Sports Training & Training Load.

- Training Load:
- Importance Features of Load, i.e. Intensity, Density, Duration and Frequency.
- Adaptation Process and Conditions of Adaptation.
- Overload- Causes and Symptoms – tackling of over load.

UNIT-II

Training For Motor Components

- A. **Strength:** - Forms of strength, characteristics of strength, Principles of strength, strength training means and methods, strength training for children and women.
- B. **Endurance:** - Forms of endurance, characteristics of endurance, Principles of endurance, endurance training means and methods.
- C. **Speed:** - Forms of speed, characteristics of speed, Principles of speed, basics of speed, speed training means and methods.
- D. **Flexibility:** - Forms of flexibility, characteristics of flexibility, Principles of flexibility, basics of flexibility, flexibility training means and methods.
- E. **Coordination Abilities:** - characteristics of Coordination, Principles of Coordination, basics of Coordination, Coordination training means and methods.

UNIT-III

Technique, Tactics and Strategy

Technique:

- a. Definition of Skill and Style.
- b. Characteristics of Technique.
- c. Factor affecting Technique.
- d. Phases of skill acquisition.
- e. Methods of Technical Training.
- f. Causes and correction of faults.

Tactics and Strategy: -

- a. Definition of tactics and strategy.
- b. Basic tactical concept-offensive, Defensive and high performance.
- c. Methods of tactical Training.
- d. Control of tactical Training.

UNIT-IV

Planning And Competition

A. Planning and Organization of training;

- a. Importance of Planning.

- b. Principles of Planning.
- c. Systems of Planning.
- d. Periodisation and its Types.
- e. Contents for various periods of training.

B. Competition – Planning and Preparation;

- a. Importance of competitions,
- b. Competition Frequency,
- c. Main and Build-up competition.
- d. Direct Preparation for an important competition
- e. Talent identification and development

Suggested Reading List

- **Periodization: Theory and Methodology of Training** by Tudor O. Bompa, Carlo Buzzichelli (2019)
- **Essentials of Strength Training and Conditioning** by National Strength and Conditioning Association (NSCA), G. Gregory Haff, N. Travis Triplett (2015)
- **Science and Practice of Strength Training** by Vladimir Zatsiorsky, William Kraemer (2020)
- **Endurance Sports Nutrition** by Suzanne Girard Eberle (2013)
- **High-Performance Training for Sports** by David Joyce, Daniel Lewindon (2014)
- **Training for Speed, Agility, and Quickness** by Lee E. Brown, Vance A. Ferrigno (2014)
- **Sports Training Principles** by Frank W. Dick (2007)
- **Motor Learning and Performance** by Richard Schmidt, Timothy Lee (2019)
- **The Science of Fitness: Power, Performance, and Endurance** by Greg LeMond, Mark Hom (2015)
- **Athletic Development: The Art & Science of Functional Sports Conditioning** by Vern Gambetta (2007)

PRACTICAL

SEMESTER – I **Paper 5**

BPE105: ATHLETICS

A. Track Events - Sprints, Hurdles and Relays

- Sprint- Running Technique, Fixing the blocks in straight & curve, Proper use of blocks Starting Techniques: Crouch start types (Bunch/Bullet, Medium & Elongated) & Standing start Finishing
- Techniques: Run through, Forward lunging & Shoulder shrug
- Hurdles Technique - Starting, Clearance and Landing Techniques.
- Relays: Various patterns of Baton Exchange - Visual and Non-visual, Up swing and Down Swing & Understanding of Relay Zones
- Middle- and Long-distance races – Technique and Training

B. Jumping Events - Long Jump, High Jump and Triple Jump

- High Jump - Straddle Roll & Flop Technique, Approach, Take-off, Technique In the air, Clearance over the bar & Landing
- Triple Jump – Hop, Step and Jump Technique, Approach, Take-off & Landing
- Long jump – Hang & Hitch kick (Cycling) techniques, Approach, Take- off, Technique in the Air & Landing

C. Throwing Events - Shot Put, Discus Throw Javelin throw and Hammer Throw

- Shot Put – Glide & Rotatory techniques, Grip, Stance, Technique, Power stance, Release and Reverse (Follow through)
- Javelin throw – Grip, Carry, Approach, Cross steps, Release and Follow through
- Discus Throw - Standing and Rotatory techniques, Grip, Stance, Rotation Technique, Power Stance, Release and Reverse (Follow through)
- Hammer Throw - Grip, Swings, Rotation foot work, Release and Follow through

D. Rules, Officiating and Marking

- Ground / Sector Marking, Interpretation of Rules, Duties of Officials and Officiating of the events in the syllabi.

SEMESTER – I
Paper 6

BPE106: FOOTBALL

- Kicks- Inside kick, Instep kick, Outer instep kick, Lofted kick, Chipping, Volley, Half Volley
- rapping- Trapping rolling the ball, Trapping bouncing ball with sole
- Dribbling- With instep and outer instep of the foot.
- Heading- From standing, running and jumping.
- Feinting- With the lower limb and upper part of the body.
- Tackling- Simple tackling, Slide tackling.
- Throw-in- Standing and Sliding
- Goal Keeping- Collection of balls, Ball clearance, throwing and deflecting.
- Ground marking, Rules and their interpretations and Duties of officials

Paper 7
BPE107: Yoga

- Surya Namaskara- 10 counts,12 counts,16 counts
- Asanas- Sitting- Vajrasana, Padmasana, Matsyasana, Ardha Matsyendrasana, Suptavajrasana, Simhasana, Shirasasana.
- Standing- Tadasana, Trikonasana, Parivrutta trikonasana.
- Prone Position- Bhujangasana, Dhanurasana, Shalabhasana.
- Supine Position- Sarvangasana, Sethubandha, Halasana.
- Pranayams- Anuloma – Viloma, Basthrika, Bhramari,Kalabhati.
- Corrective Asanas- Tadasana, Dandasana, Bhujangasana, Sarvangasana.
- Kriyas- Nethi, Jalanethi, Nouli, Trataka.
- Mudras- Dhyana mudra, Chinmaya mudra, Namaste mudra, Nasika mudra
- Dhyana & its types
- Competition format, Rules and their interpretations and Duties of officials.

Paper 8

BPE108: Mass Demonstration Activities: Drill and Marching/ Mass P.T/ Wands/ Dumbbells/ Lezium/Minor Games/Aerobics.

- Drill and Marching: March past, Ceremonial Parade, Flag Hosting, Flag Honor
- Mass P.T Exercise: Standing series – 12 Exercises, Sitting series - 8 Exercises
- Wand: Two Counts, Four Counts, Eight Counts, Sixteen Counts Exercises.
- Dumbbells: 08 Exercises.

SEMESTER-II
PAPER 1

BPE109: SPORTS NUTRITION AND WEIGHT MANAGEMENT

UNIT-I

Introduction to Sports Nutrition

- a. Meaning and Definition of Sports Nutrition
- b. Basic Nutrition guidelines
- c. Role of nutrition in sports
- d. Factor to consider for developing nutrition plan

UNIT-II

Nutrients: Ingestion to Energy Metabolism

- a. Carbohydrates, Protein, Fat – Meaning, classification and its function
- b. Role of carbohydrates, Fat and protein during exercise
- c. Vitamins, Minerals, Water – Meaning, classification and its function
- d. Role of hydration during exercise, water balance,
- e. Nutrition – daily caloric requirement and expenditure.

UNIT-III

Nutrition and Weight Management

- a. Meaning of weight management Concept of weight management in modern era Factor affecting weight management and values of weight management.
- b. Obesity – Definition, meaning and types of obesity,
- c. Health Risks Associated with Obesity, Obesity - Causes and Solutions for Overcoming Obesity.
- d. Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spot reduction, Dieting versus exercise for weight control, Common Myths about Weight Loss

UNIT-IV

Steps in Planning of Weight Management

- a. Nutrition – Daily calorie intake and expenditure, Determination of desirable body weight
- b. Meaning of Balanced diet, Balanced diet for Indian School Children,
- c. Maintaining a Healthy Lifestyle
- d. Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss

Suggested Reading List

- **"Sports Nutrition: From Lab to Kitchen"** by Asker Jeukendrup, 2010
- **"Advanced Sports Nutrition"** by Dan Benardot, 2011
- **"Nancy Clark's Sports Nutrition Guidebook"** by Nancy Clark, 2013
- **"Sports Nutrition for Endurance Athletes"** by Monique Ryan, 2012
- **"Nutrition and Metabolism in Sports, Exercise and Health"** by Jie Kang, 2013
- **"Sports and Exercise Nutrition"** by William D. McArdle, Frank I. Katch, and Victor L. Katch, 2018.
- **"Practical Applications in Sports Nutrition"** by Heather Hedrick Fink, Lisa A. Burgoon, and Alan E. Mikesky, 2013.

SEMESTER – II
PAPER 2

BPE110: EDUCATIONAL TECHNOLOGY AND METHODS OF TEACHING IN PHYSICAL EDUCATION

UNIT-I

- a. Education and Education Technology- Meaning and Definitions.
- b. Meaning of the terms “Teaching” and “Method”.
- c. Types of Education- Formal and Informal.
- d. Principles and advantage of term teaching.
- e. Importance of Devices and Methods of Teaching.
- f. Factors influencing methods: Nature of subjects, Nature of students, Availability of time and Materials, Situations and Scientific principles.

UNIT-II

Teaching Technique

- a. Teaching Methods- Verbal, Lecture, Explanation, Command, Demonstration, Whole, Part, Whole-Part-whole, Progressive, Observation, Imitation, Dramatization, project method etc;
- b. Command Method- Meaning, Types and its uses in different situations.
- c. Teaching Procedure – Whole method, whole-part-whole method, part-whole method.
- d. Presentation Technique – Personal and technical preparation, Steps in presentation.
- e. Class room teaching- Technique, Method and Principles of class room teaching.
- f. Class management - General and specific factors for class management.

UNIT- III

Teaching Aids and Classification of Students

- a. Teaching Aids - Meaning, Importance, Types and its criteria for selecting teaching aids.
- b. Practical and Class room teaching aids – Fitness aids, Cones, Belts, Medicine balls, Audio Visual aids, Chalk board, Charts, Model, Slide projector, Motion picture, Power point, Smart board etc.
- c. Difference between Teaching Methods and Teaching Aids.
- d. Classification of Students: Need for classification in Physical Education and sports. Factors influencing classification.
- e. McCloy’s Classification and Neilson and Cozen's classification indices.

UNIT-IV

Lesson Planning and Teaching Innovations

- a. Micro Teaching - Meaning, Types and steps of micro teaching
- b. Simulation Teaching - Meaning, Types and steps of simulation teaching
- c. Lesson Planning - Meaning, Need, Aim, Objectives and principles of lesson of lesson plan
- d. Types of lesson plans - General, Particular and Class room lesson plan
- e. Aim and objectives of different parts of lesson plan
- f. Preparation of General, Particular and Class room lesson plan

Suggested Reading List

- **Educational Technology: A Practical Textbook for Students, Teachers, Professionals and Trainers** by Dr. Aruna Koneru, 2019
- **Essentials of Educational Technology and Management** by Mangal S.K., 2009
- **The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom** by Stephen D. Brookfield, 2015
- **Teaching Methods: A Handbook for Teachers of Multi-grade Classes** by Angela W. Little, 2006
- **Micro Teaching: A Practical Guide** by S.K. Mangal and Uma Mangal, 2013
- **Educational Psychology** by Anita Woolfolk, 2016
- **Lesson Planning for Effective Learning** by Jim Scrivener, 2005
- **Teaching Aids: A Source Book** by N. R. Saxena, 2004
- **Methods and Techniques of Teaching** by J.C. Aggarwal, 2009
- **Classroom Management: Creating a Successful K-12 Learning Community** by Paul Burden, 2016

SEMESTER - II
PAPER 3

BPE111: SPORTS MEDICINE, PHYSIOTHERAPY AND REHABILITATION

UNIT -I

Sports Medicine

- a. Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance.
- b. Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches.
- c. Need and Importance of the study of sports injuries in the field of Physical Education
- d. Prevention of injuries in sports – Common sports injuries – Diagnosis –First Aid - Treatment - Laceration – Blisters – Contusion - Strain – Sprain – Fracture – Dislocation and Cramps – Bandages – Types of Bandages – trapping and supports.

UNIT -II

Physiotherapy

- a. Definition – Guiding principles of physiotherapy, Importance of physiotherapy,
- b. Introduction and demonstration of treatments - Electrotherapy – infrared rays – Ultraviolet rays – Short wave diathermy – ultrasonic rays.

UNIT -III

Hydrotherapy

- a. Introduction and demonstration of treatments of Cry therapy, Thermo therapy, Contrast Bath, Whirlpool Bath – Steam Bath – Sauna Bath – Hot Water Fomentation
- b. Massage: History of Massage – Classification of Manipulation (Swedish System) physiological Effect of Massage.

UNIT -IV

Therapeutic Exercise

- a. Definition and Scope – Principles of Therapeutic Exercise – Classification Effects and uses of Therapeutic exercise – passive Movements (Relaxed Forced and passive - stretching) – active movements (concentric Eccentric and static) application of the therapeutic exercise: Free Mobility Exercise – Shoulder, Elbow – Wrist and Finger Joints, Hips, Knee, ankle and Foot joints – Trunk. Head and Neck exercises.

Suggested Reading List:

- **Sports Medicine: Principles of Primary Care** by Dr. Richard B. Birrer (2004).
- **Principles of Athletic Training: A Competency-Based Approach** by William E. Prentice (2016).
- **Essentials of Sports Medicine** by Michael W. Ryan (2014).
- **Physical Rehabilitation** by Susan B. O'Sullivan, Thomas J. Schmitz, George D. Fulk (2014).
- **Clinical Sports Medicine** by Peter Brukner, Karim Khan (2017).
- **Therapeutic Exercise: Foundations and Techniques** by Carolyn Kisner, Lynn Allen Colby (2017).
- **Hydrotherapy: Principles and Practice** by Margaret Reid Campion (1996).

- **Electrotherapy Explained: Principles and Practice** by Val Robertson, Alex Ward, John Low, Ann Reed (2006).
- **Introduction to Massage Therapy** by Mary Beth Braun, Stephanie J. Simonson (2007).
- **Therapeutic Modalities in Rehabilitation** by William E. Prentice (2017).

SEMESTER - II
PAPER 4

BPE112: OFFICIATING AND COACHING

UNIT- I

Introduction of coaching

- a. Meaning of Teaching, Training, and Coaching
- b. Brief introduction/ Concept and Importance of coaching
- c. Job of a coach. Philosophy and Ethics of coaching
- d. Qualities and qualifications of a coach.
- e. Principles of coaching
- f. Relation of coach with Management, Players, Parents and Spectators

UNIT – II

Coach as a Mentor

- a. Duties of coach in general, pre, during and post-game.
- b. Responsibilities of a coach on and off the field
- c. Selection and placement of players: Try-outs, Mastery over skills, Game Qualities, Zeal Desire to excel, Position of players and Teamwork
- d. Feedback and its importance
- e. Psychology of competition and coaching
- f. Measures of improving the standards of coaching

UNIT – III

Introduction of Officiating

- a. Meaning and importance of Officiating, Concept of Officiating
- b. Officiating as an art, Basic philosophy and Ethics of officiating
- c. Qualities and qualifications of an official
- d. General principles of officiating
- e. Officials' rapport with players, management and spectators
- f. Duties of officials, in general, pre, during and post-game

UNIT – IV

System of officiating and Eligibility rules

- a. System of officiating-Diagonal system, Trail and Lead System, Parallel system.
- b. Mechanics of officiating – Movement, Position, Signals and control etc.
- c. Measures/ Suggestions to improve the standard of officiating.
- d. Eligibility rules of Schools, intercollegiate and inter-university
- e. Tournaments, preparation of reports and TA, DA bills

Suggested Reading List:

- **"Successful Coaching"** by Rainer Martens (2004) - Principles and communication in coaching.
- **"Coaching for Performance"** by John Whitmore (2017) - Philosophy and practical strategies in coaching.
- **"The Coach's Guide for Women Professors"** by Rena Seltzer (2015) - Ethics and responsibilities in coaching.

- **"Coaching: The Art and Science"** by Brent S. Rushall and David Pyke (1990) - Qualities and principles of coaching.
- **"Psychology in Coaching"** by Stephen J. Bull (1991) - Competition psychology and feedback.
- **"Officiating and Coaching in Sports"** by Dr. Rakesh Gupta (2016) - Introduction to officiating concepts.
- **"Sport Officiating: Recruitment, Development, and Retention"** by Lori Livingston and Tom Rainey (2008) - Responsibilities and relationships of officials.
- **"Science of Sports Officiating"** by Robert Horine (2002) - Mechanics and systems of officiating.
- **"Sports Officiating: A Legal Guide"** by Alan S. Goldberger (2007) - Legal aspects and eligibility rules.
- **"Sports Coaching Efficacy"** by Dieter Hackfort and Gershon Tenenbaum (2006) - Improving coaching and officiating standards.

PRACTICAL

SEMESTER – II **PAPER 5**

BPE113: BASKETBALL

- Grip; Player stance- Triple threat stance and Ball handling exercises
- Passing (Two hand/one hand)- Chest pass, Bounce Pass, Overhead pass, Underhand pass, Hook Pass, Behind the back pass, Baseball pass, Side arm pass and passing in running.
- Receiving-Two Hand receiving, one hand receiving, receiving in stationary position, receiving while jumping, receiving while running.
- Dribbling- How to start dribble, how to stop dribble, High / Low dribble with variations
- Shooting- Layup shot and its variations, one hand set shot, one hand jump shot, Free throw, Hook shot, Tip-in shot.
- Stopping- Stride/Scoot, Pivoting and Faking /Feinting footwork.
- Rebounding- Defensive rebound, Offensive rebound, Box out, Rebound Organization.
- Individual Defensive- Guarding the man with the ball and without the ball.
- Offensive drills, Fast break drills, Team Defence/Offense, Team Tactics
- Court marking, Rules and their interpretations and Duties of officials

SEMESTER – II
PAPER 6

BPE114:

Volleyball

- Players Stance, Receiving and passing
- The Volley (Overhead pass), The Dig (Underhand pass), Service Reception
- Service- Under Arm Service, Tennis Service, Side Arm Spin Service, Round Arm Service, High spin service, Asian serve / American serve (floating)
- Setting the ball- Set for attack, Back set, Jump set
- Smash/Spike- Straight smash, Body turns smash, Wrist outward smash, Wrist inward smash
- Block- Single block, Double block, Three-man block
- Rolls- Overhead pass & back rolling, One hand underhand pass with side rolling, Forward dive
- Attack Combination, Défense Systems, Libero play.
- Court marking, Rules and their interpretations and Duties of officials

SEMESTER – II
PAPER 7

BPE115: BADMINTON

- The basic stances, Racket parts, Racket grips- Fore hand, Back hand, Shuttle Grips.
- The basic serves- High service, Low service (short service), Flick service, Drive service
- The basic strokes/smash - Forehand-overhead/ underarm, Backhand-overhead/ underarm. Drop shot- Fore-hand/Back-hand, Drive, Net shot
- Foot-work, Drills and lead up games
- Types of games-Singles, Doubles and Mixed doubles.
- Court marking, Rules and their interpretations and Duties of officials.

SEMESTER – II
PAPER 8

BPE116: SWIMMING

- Floating and breathing techniques.
- Glide and streamline positions.
- Freestyle, Backstroke.
- Drills for basic skills.
- Breaststroke and Butterfly.
- Stroke improvement drills.
- Turning techniques (Open turn, Flip turn).
- Starts and finishes.
- Advanced stroke drills.
- Interval and endurance training.
- Relay techniques and strategies.
- Lifesaving strokes.
- Rescue procedures and first aid.
- Safety protocols for various water bodies.
- Practical rescue application.
- Competitive swimming rules.
- Mock competitions and time trials.
- Race strategies and pacing.
- Mental preparation and visualization.

SEMESTER - III
PAPER 1

BPE117: HEALTH EDUCATION AND ENVIRONMENTAL STUDIES

UNIT-I

Health Education

- a. Concept, Definition of Health, Health Education,
- b. Dimensions, Spectrum and Determinants of Health
- c. Aim, objective and Principles of Health Education
- d. Health Instruction, Health Supervision and Guidance

UNIT-II

Health Problems in India

- a. Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population. Personal Hygiene for schools
- b. Objective of school health service, Role of health education in schools
- c. Care of skin, Nails, Eye health services, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care.
- d. Communicable and Non-Communicable Diseases

UNIT-III

Environmental Science

- a. Definition, Scope, Need and Importance of environmental studies.
- b. Concept of environmental education, Historical background of environmental education
- c. Celebration of various days in relation with environment.
- d. Plastic recycling & prohibition of plastic bag / cover
- e. Environmental Hygiene for schools
- f. Role of school in environmental conservation and sustainable development.

UNIT-IV

Natural Resources and related environmental issues

- a. Water resources, food resources and Land resources
- b. Effects and control measures of: Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution.
- c. Supervision and management of Air Pollution, Water Pollution, Soil Pollution, Noise Pollution in Physical Education and Sports.
- d. Management of environment and Govt. policies, Role of pollution control board.
- e. Care, Maintenance and usages of natural recourses during sports programs.

Suggested Reading List:

- **"Textbook of Community Health for Degree Students"** by V. Subhash Chandra (2018)
- **"A Textbook of Environmental Studies"** by Erach Bharucha (2005)
- **"School Health Education"** by David J. Anspaugh and Gene Ezell (2007)
- **"Principles of Health Education and Promotion"** by Randall R. Cottrell (2017)

- "Public Health and Preventive Medicine" by Maxcy-Rosenau-Last (2007)
- "Essentials of Environmental Health" by Robert H. Friis (2018)
- "Introduction to Environmental Science" by Y. Anjaneyulu (2004)
- "Environmental Pollution Control Engineering" by C.S. Rao (2006)
- "A Textbook of Environmental Science" by Arvind Kumar (2010)
- "Environmental Science and Engineering" by J. Glynn Henry and Gary W. Heinke (2018)

SEMESTER - III
PAPER 2

BPE118: TEST MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

UNIT-I

Introduction to Test & Measurement & Evaluation

- a. Meaning of Test & Measurement & Evaluation in Physical Education
- b. Need & Importance of Test & Measurement & Evaluation in Physical Education
- c. Principles of Evaluation

UNIT-II

Criteria, Classification and Administration of test

- a. Criteria of good Test - scientific authenticity (Reliability, Objectivity, Validity and availability of Norms)
- b. Type and classification of Test
- c. Administration of test, Advance preparation – Duties during testing – Duties after testing.

UNIT -III

Physical Fitness Tests

- a. AAHPER Youth Fitness Test
- b. National Physical Fitness Test
- c. Indiana Motor Fitness Test
- d. JCR test
- e. U.S Army Physical Fitness Test

UNIT -IV

Sports Skill Tests

- a. Lockhart and McPherson Badminton test
- b. Johnson Basketball test
- c. McDonald Soccer test
- d. S.A.I Volleyball test
- e. S.A.I Hockey test

Suggested Reading List

- **"Measurement and Evaluation in Physical Education and Exercise Science"** by Alan C. Lacy, 2015.
- **"Principles of Evaluation and Research in Physical Education"** by Prakash G. Godbole, 2011.
- **"Measurement and Evaluation in Physical Education"** by Dr. M.L. Kamlesh, 2009.
- **"Essentials of Physical Education"** by P. Rajan, 2005.
- **"Test, Measurement and Evaluation in Physical Education"** by A.K. Uppal, 2004.
- **"Physical Fitness: A Way of Life"** by Debbie Lawrence, 2013.

- **"Introduction to Physical Education, Exercise Science, and Sport Studies"** by Angela Lumpkin, 2016.
- **"Measurement and Evaluation in Human Performance"** by James R. Morrow Jr., Dale P. Mood, and James G. Disch, 2015.
- **"Fitness for Life"** by Charles B. Corbin and Ruth Lindsey, 2013.
- **"AAHPERD Youth Fitness Test Manual"** by American Alliance for Health, Physical Education, Recreation, and Dance, 1980 (updated versions available).

SEMESTER - III
PAPER 3

BPE119: SPORTS MANAGEMENT IN PHYSICAL EDUCATION

UNIT-I

Introduction to Sports Management

- a. Nature and Concept of Sports Management.
- b. Progressive concept of Sports management.
- c. The purpose and scope of Sports Management.
- d. Essential skills of Sports Management.
- e. Qualities and competencies required for the Sports Manager.
- f. Event Management in physical education and sports.

UNIT-II

Leadership Development

- a. Meaning and Definition of leadership
- b. Leadership style and method.
- c. Elements of leadership.
- d. Forms of Leadership – Autocratic, Laissez-faire, Democratic & Benevolent Dictator
- e. Qualities of administrative leader.
- f. Preparation of administrative leader.
- g. Leadership and Organizational performance.

UNIT -III

Sports Management in Educational Institutions

- a. Sports Management in Schools, Colleges and Universities.
- b. Factors affecting planning
- c. Planning a school or college sports programme.
- d. Directing of school or college sports programme.
- e. Controlling a school, college and university sports programme - Developing performance standard, establishing a reporting system, Evaluation, reward/punishment system

UNIT -IV

Budget Preparation

- a. Financial management in Physical Education & sports in schools, Colleges and Universities.
- b. Budget – Importance, Criteria of good budget,
- c. Steps of Budget making
- d. Principles of budgeting

Suggested Reading List

- **"Sports Management: Principles and Applications"** by Russell Hoye et al. (2018)
- **"Managing Sport Facilities"** by Gil Fried and Timothy D. DeSchriver (2019)
- **"Sport Management: Principles and Practices"** by Robert N. Lussier and David C. Kimball (2018)
- **"Leadership in Sport"** by Ian O'Boyle et al. (2015)

- **"Leadership: Theory and Practice"** by Peter G. Northouse (2021)
- **"Sports Leadership: A Concise Reference Guide"** by Laura J. Burton and Sarah Leberman (2017)
- **"Managing Sports Organizations: Responsibility for Performance"** by Daniel Covell et al. (2021)
- **"Sport Management Education: Global Perspectives and Implications for Practice"** by Mike Rayner et al. (2020)
- **"Financial Management in the Sport Industry"** by Matthew T. Brown et al. (2016)
- **"Budgeting for Managers"** by Sid Kemp and Eric Dunbar (2003)

SEMESTER - III
PAPER 4

BPE120: RESEARCH AND STATISTICS IN PHYSICAL EDUCATION

UNIT-I

Introduction to Research

- a. Definition of Research
- b. Need and importance of Research in Physical Education and Sports.
- c. Scope of Research in Physical Education & Sports.
- d. Classification of Research

UNIT-II

Action Research

- a. Meaning, Definition and Need for action research
- b. Action Research Report: A group project is to be undertaken by a small batch of students under the supervision of a teacher, wherein it is expected to survey school facilities of physical education, health assessment programmed evaluation, fitness status of the students, staff and other stakeholders etc. and submit the report to the institution.

UNIT-III

Basic Statistics

- a. Statistics: Meaning, Definition, Nature and Importance
- b. Class Intervals: Raw Score, Continuous and Discrete Series, Class Distribution, Construction of Tables
- c. Graphical Presentation of Class Distribution: Histogram, Frequency Polygon, Frequency Curve. Pie-Diagram.

UNIT- IV

Statistical Models in Physical Education and Sports

- a. Measures of Central Tendency: Mean, Median and Mode-Meaning, Importance, Advantages Disadvantages and Calculation from grouped and ungrouped data
- b. Measures of Variability: Meaning, importance, computing from grouped and ungrouped data
- c. Meaning, importance, computing from grouped and ungrouped data
- d. Standard scores and their interpretation.

Suggested Reading List

- **Research Methods in Physical Education and Sports** by Jerry R. Thomas, Jack K. Nelson, Stephen J. Silverman, 2015.
- **Research Methods in Physical Activity** by Jerry R. Thomas, Jack K. Nelson, Stephen J. Silverman, 2015.
- **Research Methods in Physical Education and Youth Sport** by Kathleen Armour, Doune Macdonald, 2012.
- **Statistics in Kinesiology** by William J. Vincent, Joseph P. Weir, 2012.
- **Introduction to Research in Education** by Donald Ary, Lucy Cheser Jacobs, Christine K. Sorensen, 2010.

- "Action Research in Education" by Mary McAteer, 2013.
- "Fundamentals of Statistics in Kinesiology" by James R. Morrow Jr., Matthew T. Walker, David C. Bauer, 2014.
- "Introduction to the Philosophy of Physical Education and Sport" by Robert G. Osterhoudt, 2008.
- "Quantitative Research in Education: A Primer" by Wayne K. Hoy, 2009.
- "Statistical Methods for Sports and Physical Education" by J.P. Verma, 2011.

PRACTICAL

SEMESTER – III **PAPER 5**

BPE121: HOCKEY

- Grip, Body position, Ball position, Action, Follow through
- Passing - Parallel pass, through pass, Diagonal pass, Return pass
- Rolling the ball - Straight rolling
- Dribbling - Straight dribbling, with walk, jog and run.
- Stopping - Straight stopping and Reverse stick stopping.
- Hit - Straight hit, Turn around hit, Reverse hit, Wrong foot hit.
- Flick, drag flick, Dodging, Jab tackling, Lunging and tackling, Reverse tackling
- Scoop - Straight scoop, Reverse scoop
- Goal keeping - Position, Movement, Hand defence, Foot defence
- Positional play in attack and defence.
- Ground marking, Rules and their interpretations and Duties of officials

SEMESTER – III **PAPER 6**

BPE122: KHO-KHO

- Sitting in the square- Parallel toe / Shuffling or bullet toe method
- Giving Kho: - Proximal and Distal foot, Advance Kho, Giving „Kho“ with a fake.
- General skills of the game- Running, Chasing, Dodging, Faking etc.
- Skills in chasing: - Moving on the cross lane, Pursuing the runner, Direct, Indirect and Surprise attack, Tapping- Heel, Shoulder and on the pole, Diving, Judgment Kho, Rectification of Foul.
- Skills in Running- Single and double chain, Variations in ring games, dodging while facing and on the back, Pole turning, Pole diving, Pole Avoiding, Attack after pole turning, Fakes on the pole, Fakes- Body, Arm, Legs etc, Counter action for ring game, Combination of different skills.
- Court marking, Rules and their interpretations and Duties of official.

SEMESTER – III
PAPER 7

BPE123: HANDBALL

- Rules and regulations of Handball
- Basic terminologies and positions
- Passing (Chest pass, Bounce pass, Overhead pass)
- Catching
- Dribbling
- Shooting techniques
- Defensive stance and blocking
- Stealing the ball
- Movement without the ball
- Creating space
- Basic attacking strategies
- Zone and man-to-man defence, Defensive formations, Fast breaks
- Counter-attacks
- Set plays
- Communication on the court, Role of each player, Team drills
- Developing game plans, Analyzing opponents, Adjusting strategies during the game
- Organizing practice matches
- Applying skills and strategies learned

SEMESTER – III
PAPER 8

BPE124: TEACHING LESSON PLAN

- Teaching lesson plan final exam in class room situation. On theory subject related topic.

SEMESTER - IV

PAPER 1 **BPE125: SPORTS PSYCHOLOGY**

UNIT-I

- A. MEANING AND NATURE OF PSYCHOLOGY:**
 - a. Sources of Psychology.
 - b. Definition of Psychology.
 - c. Branches of Psychology.

- B. MEANING AND NATURE OF SPORTS PSYCHOLOGY:**
 - a. Relationship of Sports Psychology with other Sports Sciences.
 - b. Importance of Sports Psychology for Physical Education Teachers and Coaches.

UNIT-II

- A. MOTOR LEARNING:**
 - a. Meaning of Motor Learning.
 - b. Factor affecting motor development in various periods of childhood and adolescence.

- B. PERSONALITY:**
 - a. Meaning of Personality,
 - b. Personality traits of sports person,
 - c. Relationship of Personality to sport performance,
 - d. Personality differences among various sports groups.

UNIT-III

- A. MOTIVATION:**
 - a. Meaning of motive, Need, and Drive.
 - b. Role of Motives,
 - c. Meaning of Motivation,
 - d. Types of Motivation,
 - e. Relationship between extrinsic and intrinsic motivation.

- B. EMOTIONS:**
 - a. Meaning of different types of emotions.
 - b. Influence of emotions, (and failure)
 - c. Anxiety, Fear, Frustration, Conflict and its effect on Sports Performance.

UNIT-IV

- A. PSYCHOLOGICAL ASPECTS OF COMPETITION:**
 - a. Defining Competition,
 - b. Determinants of competitive behaviour,
 - c. Psychological characteristics of Pre-competitions, Competition and Post competition, selected psycho-regulative techniques for Relaxation and Activation.

B. SOCIOLOGY OF SPORTS:

- a. Meaning, Nature, Scope and Importance of Sports for Physical Education Teachers & Coaches.
- b. Audience and their effect on sports performance.
- c. Sports and Aggression, Violence in Sports.

Suggested Reading List

- **"Foundations of Sport and Exercise Psychology"** by Robert S. Weinberg and Daniel Gould, 2018.
- **"Introduction to Psychology"** by James W. Kalat, 2016.
- **"Sport Psychology: Concepts and Applications"** by Richard H. Cox, 2011.
- **"Motor Learning and Performance: From Principles to Application"** by Richard A. Schmidt and Timothy D. Lee, 2019.
- **"Personality and Individual Differences in Sport"** by Bert Carron, 2004.
- **"Motivation in Physical Activity and Sport"** by Glyn C. Roberts, 2012.
- **"The Psychology of Emotions in Sport"** by Yuri Hanin, 2000.
- **"The Sport Psychologist's Handbook: A Guide for Sport-Specific Performance Enhancement"** edited by Joaquin Dosil, 2006.
- **"Sport Sociology"** by Peter Craig and Ross Haywood, 2013.
- **"Applied Sport Psychology: Personal Growth to Peak Performance"** by Jean M. Williams and Vikki Krane, 2015.

SEMESTER - IV
PAPER 2

BPE126: KINESIOLOGY AND BIOMECHANICS

UNIT-I

- a. Definitions, Meaning, Nature, and Scope of Kinesiology
- b. Aims and Objectives of Kinesiology,
- c. Role of Kinesiology in Physical Education & Sports,
- d. Definition & Brief explanation of the following terms and their applications to the human body. a. Axis and Planes
- e. Centre of Gravity,
- f. Line of Gravity,
- g. Base,
- h. Starting Positions.

UNIT-II

Anatomical Concepts

- A. Classification of Joints and Muscles, Terminology of fundamental movements.
- B. Types of Muscle- contraction (Isometric and Isotonic-Concentric, Eccentrics)
- C. Muscle's Angle of Pull,
- D. Two Joint Muscles,
- E. Reversal of Muscle's customary function.
- F. Strength of muscle contraction in terms of motor units.
- G. All or None Law,
- H. Reciprocal innervations and Inhibition Group action of muscles and Muscular coordination.
- I. Upper Extremity
 - a. Major Characteristics, Location and action of Major Joints i.e. Shoulder, Hip, Knee, Elbow, Fore Arm and Wrist Joint.
 - b. Location and actions of Majors Muscles at these joints.

UNIT-III

Mechanical Concepts

- A. Concept of mechanical basis of kinesiology to Physical Education and Sports,
- B. Definitions and brief explanations of the following basic terms:
 - a. Mass
 - b. Weight
 - c. Force
 - d. Motion
 - e. Equilibrium
 - f. Friction
 - g. Speed
 - h. Velocity
 - i. Momentum

UNIT-IV

Kinesiological Fundamentals of Mechanics

- A. Simple Mechanics found in the Musculo-Skeletal system (Leverage and its application to human body).
- B. Laws of motions and their application to sports activities.
- C. Forces:
 - a. Moving one's own body.
 - b. Giving impetus to External objects.
 - c. Receiving impetus
- D. Equilibrium in sports and Role of Equilibrium in Sports Performance.

Suggested Reading List

- **Kinesiology: The Mechanics and Pathomechanics of Human Movement** by Carol A. Oatis, 3rd Edition (2016).
- **Fundamentals of Biomechanics** by Duane Knudson, 2nd Edition (2007).
- **Clinical Kinesiology and Anatomy** by Lynn S. Lippert, 6th Edition (2017).
- **Kinesiology: Scientific Basis of Human Motion** by Nancy Hamilton, 12th Edition (2007).
- **Musculoskeletal Anatomy Coloring Book** by Joseph E. Muscolino, 2nd Edition (2014).
- **Principles of Anatomy and Physiology** by Gerard J. Tortora and Bryan Derrickson, 15th Edition (2017).
- **Kinesiology of the Musculoskeletal System: Foundations for Rehabilitation** by Donald A. Neumann, 3rd Edition (2016).
- **Biomechanics of Sport and Exercise** by Peter McGinnis, 3rd Edition (2013).
- **Anatomy of Movement** by Blandine Calais-Germain, 1st Edition (1993).
- **The Physiology of Training for High Performance** by Duncan MacDougall and Digby Sale, 1st Edition (2014).

SEMESTER - IV
PAPER 3

BPE127: COMPUTER APPLICATIONS IN PHYSICAL EDUCATION

UNIT -I

Introduction to Computer

- a. Meaning, need and importance of information and communication technology (ICT).
- b. Application of Computers in Physical Education
- c. Components of computer, input and output device
- d. Application software used in Physical Education and sports

UNIT -II

Office Word and Office Excel

- a. Introduction to Office Word and Office excel
- b. Saving and opening a document, creating formulas and opening spreadsheet in office excel,
- c. Formatting Editing features, Drawing table, page setup, paragraph alignment, spelling and Grammar checks printing option.
- d. Format and editing features adjusting columns width and row height understanding charts in Offices excel.
- e. Inserting page number, graph, footnote and notes.

UNIT -III

MS Power Point

- a. Introduction to MS Power Point
- b. Creating, saving and opening a ppt. file
- c. format and editing features slide show, design, inserting slide number d. picture, graph, table
- d. Preparation of Power point presentations

UNIT -IV

Internet

- a. Need and importance of internet in physical education and sports
- b. Internet browsing
- c. E-mail
- d. Social media
- e. Sports website

Suggested Reading List

- **Computers in Physical Education** by Dr. P. Nagaraju (2014)
- **ICT in Physical Education** by S.R. Bhatia (2016)
- **Introduction to Information Technology** by ITL Education Solutions Limited (2020)
- **Microsoft Office 365: In Practice, 2019 Edition** by Randy Nordell and Annette Easton (2019)
- **Microsoft Office Word 2016 Step by Step** by Joan Lambert (2015)

- "Microsoft Excel 2019 Step by Step" by Curtis Frye (2018)
- "Advanced MS Office 2016" by Elaine Marmel (2016)
- "Microsoft PowerPoint 2016 Step by Step" by Joan Lambert (2015)
- "Internet Technology and Web Design" by Ramesh Bangia (2007)
- "The Internet Book: Everything You Need to Know About Computer Networking and How the Internet Works" by Douglas E. Comer (2018)

SEMESTER – IV
PAPER 4

BPE128: THEORY OF SPORTS AND GAMES

UNIT-I

Introduction

- a. General Introduction of specialized games and sports–
 - Athletics,
 - Badminton
 - Basketball
 - Cricket
 - Football
 - Gymnastic
 - Hockey
 - Handball
 - Kabaddi
 - Kho-Kho
 - Tennis
 - Volleyball
 - Yoga
 - Swimming
- b. Each game or sports to be dealt under the following heads
- c. History and development of the Game and Sports
- d. Ground preparation, dimensions and marking
- e. Standard equipment and their specifications Ethics of sports and sportsmanship

UNIT-II

Scientific Principles of Coaching: (Particular Sports and Game Specific)

- a. Motion – Types of motion and Displacement, Speed, Velocity, Acceleration, Distance and Newton's Law of motions.
- b. Force – Friction, Centripetal and Centrifugal force, Principles of force. Equilibrium and its types
- c. Lever and its types
- d. Sports Training – Aims, Principles and characteristics.
- e. Training load – Components, Principles of load, Over Load (causes and symptoms).

UNIT -III

Physical fitness components: (particular sports and game specific) a. a. Speed and its types.

- a. Strength and its types.
- b. Endurance and its types.
- c. Flexibility and its types.
- d. Coordinative ability and its types.
- e. Training methods: - Development of components of physical fitness and motor fitness.
- f. Through following training methods (continuous method, interval method, circuit method, Fartlek /speed play and weight training).

UNIT-IV

Conditioning Exercises and Warming Up

- a. Concept of Conditioning and warming up.
- b. Role of weight training in games and sports.
- c. Teaching of fundamental skill & their mastery (technique, tactic and different phases of skill acquisition).
- d. Recreational and lead up games.
- e. Strategy – Offence and defence, Principles of offence and defence.

Suggested Reading List

- **Essentials of Sports and Exercise Nutrition** by W. Larry Kenney, Jack H. Wilmore, and David L. Costill (2018).
- **Sports Training Principles** by Frank W. Dick (2014).
- **Introduction to Physical Education, Fitness, and Sport** by Daryl Siedentop (2011).
- **Foundations of Sport and Exercise Psychology** by Robert Weinberg and Daniel Gould (2018).
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- **Science and Practice of Strength Training** by Vladimir M. Zatsiorsky and William J. Kraemer (2020).
- **Advanced Fitness Assessment and Exercise Prescription** by Vivian H. Heyward and Ann L. Gibson (2014).
- **Complete Conditioning for Football** by Pat Ivey and Josh Stoner (2012).
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- **Badminton: Steps to Success** by Tony Grice (2008).

PRACTICAL

SEMESTER – IV

PAPER 5

BPE129: KABADDI

- Raiding Skills:- Cant, Entry, Footwork, Attack, Retreat; Hand touches; Leg touches:- Toe touch
- Foot touch, Squat leg thrust; Various kicks:- Back kick, Side kick, Running kick, Curve kick.
- Crossing of baulk line, Crossing of Bonus line, Luring the opponent to catch, Pursuing.
- Additional skills in raiding:- Bringing the antis in to particular position, Escaping from various holds, Techniques of escaping from chain formation.
- Defensive Skills:- Holding Skills: Wrist hold, Ankle hold, Dive and Ankle Hold, Knee hold, Thigh hold, Waist hold, Blocking- Chest block; Chain Hold.
- Various defensive formations: - Catching from particular position, Different catches, Luring the raider to take particular position so as to facilitate catching, Catching formations and techniques.
- Combined formations, Tactics and Strategies in offence and defence.
- Court marking, Rules and their interpretations and Duties of officials.

SEMESTER – IV

PAPER 6

BPE130: CRICKET

- Batting- Forward (front foot) and backward (back foot) defensive stroke, Drives
- Bowling- Simple bowling techniques, Fast bowling, Spin bowling
- Fielding- Orthodox fielding and Long Barrier (defensive), Pick up and throw and Chase and Return / throwing techniques (offensive).
- Catching- High catch and Low catch
- Wicket keeping techniques- Stance, Position, Collection of Ball
- Ground measurements, Rules and their interpretations and Duties of officials

SEMESTER – IV
PAPER 7

BPE131: GENERAL LESSON PLAN

- Indian Clubs.
- Dumbbell Drill
- Calisthenics
- Aerobics
- Lezim Drill
- Marching

SEMESTER – IV
PAPER 8

BPE132: SPECIALIZATION COACHING LESSON PLAN

- a. Athletics
- b. Badminton
- c. Volleyball
- d. Kabaddi
- e. Kho – Kho
- f. Cricket
- g. Football
- h. Hockey
- i. Basketball
- j. Handball
- k. Yoga
- l. Archery
- m. Swimming