

**Bachelor of Physical Education and Sports  
(B.P.E.S.)**

**(Four Year Professional Degree Programme)**

**REGULATIONS, SCHEME**

**AND SYLLABUS**

**( Semester III, IV, V and VI )**



**Maharshi Dayanand Saraswati University,  
Ajmer (Rajasthan)**

## STRUCTURE OF B.P.E.S.

<b>SEMESTER III</b>	
<b>Course Code</b>	<b>Title of the papers</b>
<b>BPES DCC 301</b>	Health Education
<b>BPES DCC 302</b>	Officiating and Coaching
<b>BPES DCC 303</b>	Sports Training
<b>BPES PC 304 (Practical)</b>	<b>Racket Sports</b> (Badminton / Lawn Tennis / Table Tennis / Squash) <b>(Any one)</b> <b>Combative Sports</b> (Martial Arts/Judo/Boxing/Taekonda) <b>(Any one)</b>
<b>BPES SEC 305 (Elective)</b>	Sports Journalism <b>OR</b> Curriculum Design <b>(Any one)</b>
<b>SEMESTER IV</b>	
<b>Course Code</b>	<b>Title of the papers</b>
<b>BPES DCC 401</b>	Kinesiology and Bio-mechanics
<b>BPES DCC 402</b>	Sports Psychology and Sociology
<b>BPES DCC 403</b>	Methods in Physical Education
<b>BPES PC 404 (Practical)</b>	<b>Team Games / Game of Specialization</b> Basket Ball / Cricket / Football / Volleyball / Hockey / Soft Ball / Hand Ball / Kho-Kho / Kabaddi / Swimming / Gymnastics / Athletics / Yoga <b>(Any one)</b>
<b>BPES SEC 405 (Elective)</b>	Recreation and Adventure Sports <b>OR</b> Sports Talent Identification <b>(Any one)</b>

- **DCC (Discipline Centric Course), SEC (Skill Enhancement Course), DSE (Discipline Specific Effective Course), PC (Practical Course).**

<b>SEMESTER V</b>	
<b>Course Code</b>	<b>Title of the papers</b>
<b>BPES DSE 501</b>	Research Method and Statistics
<b>BPES DSE 502</b>	Organization and Administration in Physical Education
<b>BPES DSE 503</b>	Sports Nutrition and Weight Management
<b>BPES PC 504 (Practical)</b>	<b>Mass Demonstration Activities</b> Lezium / Dumbbells / Aerobics / Rhythmic / Wands / March Past <span style="float: right;"><b>(Any one)</b></span> <b>Indigenous Sports</b> (Kho-kho / Kabaddi / Malkhambh) <span style="float: right;"><b>(Any one)</b></span>
<b>BPES SEC 505 (Elective)</b>	Adapted Physical Education and Sports <u><b>OR</b></u> Value Education <span style="float: right;"><b>(Any one)</b></span>
<b>SEMESTER VI</b>	
<b>Course Code</b>	<b>Title of the papers</b>
<b>BPES DSE 601</b>	Test Measurement and Evaluation in Physical Education
<b>BPES DSE 602</b>	Sports Medicine and Physiotherapy
<b>BPES DSE 603</b>	Sports Technology and Innovation
<b>BPES PC 604 (Practical)</b>	<b>Coaching Ability Teaching Practice</b> Lesson Plans (10 Lesson Plans) (5 Internal + 5 External)
<b>BPES SEC 605 (Elective)</b>	Sports Kinanthropometry <u><b>OR</b></u> Sports Event Management <span style="float: right;"><b>(Any one)</b></span>

- **DCC (Discipline Centric Course), SEC (Skill Enhancement Course), DSE (Discipline Specific Effective Course), PC (Practical Course).**

## SCHEME OF EXAMINATION

Scheme of examination for end of semester examination applicable to all undergraduate courses (**Pass course**). The question paper of semester Examination for the **Disciplinary Centric Core Course (DCCC)**, **Discipline Specific Elective Course (DSE)**, and **Skill Enhancement Course (SEC)** will be of **70 marks** and it will be divided in two parts i.e. **Part A and Part-B**.

**Part-A** will consist of **10 compulsory questions**. There will be at least two questions from each unit and answer to each question shall be limited up to **50 words**. Each question will carry **2 marks**.

**Total 20 Marks.**

**Part-B** will consist of **10 questions**. At least two questions from each unit are set and student will have to answer **five questions**, selecting at least one question from each unit. The answer to each question shall be limited to **400 words**. Each question carries **10 Marks**. **Total 50 Marks**.

Total Marks of **Section A and B** will be **70 Marks**. There will be a

**Practical Course (PC)** in Each Semester which carries **50 Marks**

## SCHEME OF EXAMINATION

### SEMESTER III

Semester III					
Course Code	Title of the papers	Credits	CIA	ESE	Total Marks
BPES DCC 301	Health Education	4	30	70	100
BPES DCC 302	Officiating and Coaching	4	30	70	100
BPES DCC 303	Sports Training	4	30	70	100
BPES PC 304 (Practical)	<b>Racket Sports</b> (Badminton/Lawn Tennis/Table Tennis/ Squash) <b>(Any one)</b>	2	15	35	50
	<b>Combative Sports</b> (Martial Arts/Judo/Boxing/Taekonda) <b>(Any one)</b>	2			
BPES SEC 305 (Elective)	Sports Journalism <b>OR</b> Curriculum Design <b>(Any one)</b>	4	30	70	100
<b>TOTAL</b>		<b>20</b>	<b>135</b>	<b>315</b>	<b>450</b>

## SCHEME OF EXAMINATION

### SEMESTER IV

Semester IV					
Course Code	Title of the papers	Credits	CIA	ESE	Total Marks
BPES DCC 401	Kinesiology and Bio-mechanics	4	30	70	100
BPES DCC 402	Sports Psychology and Sociology	4	30	70	100
BPES DCC 403	Methods in Physical Education	4	30	70	100
BPES PC 404 (Practical)	Team Games / Game of Specialization – Basket Ball / Cricket / Football / Volleyball / Hockey / Soft Ball / Hand Ball / Kho-Kho / Kabaddi / Swimming / Gymnastics / Athletics / Yoga (Any one)	4	15	35	50
BPES SEC 405 (Elective)	Recreation and Adventure Sports <u>OR</u> Sports Talent Identification (Any one)	4	30	70	100
<b>TOTAL</b>		<b>20</b>	<b>135</b>	<b>315</b>	<b>450</b>

## SCHEME OF EXAMINATION

### SEMESTER V

Semester V					
Course Code	Title of the papers	Credits	CIA	ESE	Total Marks
BPES DSE 501	Research Method and Statistics	4	30	70	100
BPES DSE 502	Organization and Administration in Physical Education	4	30	70	100
BPES DSE 503	Sports Nutrition and Weight Management	4	30	70	100
BPES PC 504 (Practical)	<b>Mass Demonstration Activities</b> Lezim / Dumbells / Aerobics / Rhythmic / Wands / March Past <b>(Any one)</b> <b>Indigenous Sports</b> Kho-kho / Kabaddi / Malkhambh <b>(Any one)</b>	2  2	15	35	50
BPES SEC 505 (Elective)	Adapted Physical Education & Sports <b>OR</b> Value Education <b>(Any one)</b>	4	30	70	100
<b>TOTAL</b>		<b>20</b>	<b>135</b>	<b>315</b>	<b>450</b>

## SCHEME OF EXAMINATION

### SEMESTER VI

Semester VI					
Course Code	Title of the papers	Credits	CIA	ESE	Total Marks
BPES DSE 601	Test Measurement and Evaluation in Physical Education	4	30	70	100
BPES DSE 602	Sports Medicine and Physiotherapy	4	30	70	100
BPES DSE 603	Sports Technology and Innovation	4	30	70	100
BPES PC 604 (Practical)	Coaching Ability Teaching Practice Lesson Plans (10 Lesson Plans) (5 Internal + 5 External)	4	15	35	50
BPES SEC 605 (Elective)	Sports Kinanthropometry <u>OR</u> Sports Event Management (Any one)	4	30	70	100
<b>TOTAL</b>		<b>20</b>	<b>135</b>	<b>315</b>	<b>450</b>



**SYLLABUS**  
**BACHELOR OF PHYSICAL EDUCATION AND SPORTS**  
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**SEMESTER - III**

**BPES DCC 301 : HEALTH EDUCATION**

**UNIT I : Introduction to Health Education and Hygiene**

- Definition and Meaning of Health and Health Education.
- Importance of Health Education.
- Aims, Objectives and Principles of Health Education.
- Qualities of Good Health.
- Factors affecting Personal Hygiene, Personal Hygiene – Care of Skin, Mouth, Teeth, Nails, Clothing etc.
- Rest, Sleep and Exercises, Effect of Heredity and environment on Health

**UNIT II : Nutrition and Balanced Diet**

- Detail information of Nutritional components, Function of Nutritious food.
- Details of Micro and Macro Nutrients.
- Balanced Diet, Components of Balanced Diet
- Steps for maintaining Good Health Habits

**UNIT III : Health Education in School**

- School Health Education Programme, Role and Function of World Health Organization.
- Health Facilities in School, School Health Education, Health Instructions, School Health Service.
- Communicable Diseases and Non-Communicable Diseases, steps for preventing communicable diseases in school children.

- First Aid, Qualities and Duties of a First Aid Personal, Medicine for First Aid Box

### **Reference Books**

- Park J.E. & Park K. (2002). Textbook of Preventive and Social Medicine. Jabalpur: Banarasi Das Bhanot Publication.
- K. Tones, Y.K. Robinson's, S. Tilfor (2013). Health Education, Springer.
- UGC (2005). Textbook of Environmental Studies, University Press.
- A.C. Pandey (2013). "Ozone" Academic Excellence, New Delhi.
- L.B. Lave, E.P. Seskin (2013). Air Pollution and Human Health, Ref. Press, New York.
- P.K. Gupta (2001) Methods in Environmental Analysis, Water, Soil and Air, AGROBIOS

## **BPES DCC 302 : OFFICIATING AND COACHING**

### **UNIT I : Introduction of Officiating and Coaching**

- Concept of Officiating and Coaching.
- Importance and Principles of Officiating.
- Relation of Official and Coach with Management.
- Players and Spectators.
- Measures of improving the standards of Officiating and Coaching.

### **UNIT II : Coach as a Mentor**

- Duties of coach in general, Pre, During and Post-game.
- Philosophy, Methodology and Process of Coaching.
- Responsibilities of a Coach On and Off the field.
- Psychology of Competition and Coaching (Training).

### **Unit III : Duties of Officials**

- Duties of officials in general, Pre, During and Post-game.

- Philosophy, Methodology and Process of Officiating.
- Mechanics of Officiating – Position, Singles and Movement.
- Ethics of Officiating.

#### **Unit IV : Qualities and Qualifications of Coach and Official**

- Qualities and Qualification of Coach and Official.
- General rules of Games and Sports.
- Eligibility rules of Intercollegiate and Inter-university tournaments.
- Preparation of TA, DA bills.
- Integrity and Values of Sports.

#### **Reference Books**

- Bunn, J. W. (1968). The art of officiating sports. Englewood cliffs
- N. J. Prentice Hall. Bunn, J. W. (1972). Scientific principles of coaching.
- Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). The mechanics of athletics. London: University of London Press Ltd.
- Dyson, G. H. (1963). The mechanics of Athletics. London: University of London Press Ltd.
- Lawther, J.D. (1965). Psychology of coaching, New York: Pre. Hall.
- Singer, R. N. (1972). Coaching, athletic & psychology. New York: M.C. Graw Hill.

### **BPES DCC 303 : SPORTS TRAINING**

#### **UNIT I : Introduction to Sports Training**

- Aim, Objectives, Importance and characteristics of Sports Training
- Structure and Principles of Sports Training
- Types and Importance of Warming up and Cool down, its Advantage and Disadvantage
- Importance and Types of Motor Components

## **UNIT II : Components of Load**

- Concept of Training load; Types of Training load – External and Internal.
- Training Load and Adaptation Process.
- Factors of Training Load: Physical Exercise, Movement Quality, Load Intensity, Load Volumes, Density, Duration, Repetition etc.
- Principles of Progression of Load – Recovery – Adaptation – Symptoms of Over Load.

## **UNIT III : Means and Methods of Development of Motor Qualities**

- Means and Method Developing Strength.
- Means and Methods of Developing Speed – Forms of Speed.
- Means and Methods of Developing Endurance.
- Means and Methods of Developing Flexibility and Coordinative Abilities.

## **UNIT IV : Technique & Tactical Preparation, Planning and Periodization**

- Technique and Phases of Technical Training.
- Tactics and Tactical Ability.
- Planning: Micro, Meso, Macro Training Session.
- Periodization: Types of Periodization and Top Form.

## **Reference Books**

- Dick, W. F. (1980). Sports training principles. London: Lepus Books.
- Harre, D. (1982). Principles of sports training. Berlin: Sporulated.
- Jensen, R. C. & Fisher, A. G. (1979). Scientific basis of athletic conditioning. Philadelphia: Lea and Fibiger, 2<sup>nd</sup> Edition.
- Matvyew, L. P. (1981). Fundamental of sports training. Moscow: Progress Publishers.

- Singh, H. (1984). Sports training, general theory and methods. Patiala : NSNIS.
- Uppal, A. K., (1999).Sports Training. New Delhi: Friends Publication.

### **BPES PC 304 : RACKET SPORTS / COMBATIVE SPORTS**

**Practical Course (Any one from both Racket and Combative Sports)**

**Racket Sports (Badminton / Lawn Tennis / Table Tennis / Squash)**

**Combative Sports (Martial Arts / Judo / Boxing / Taekonda)**

### **BPES SEC 305 : SPORTS JOURNALISM**

#### **UNIT I : Sports Journalism**

- Introduction to Sports Journalism: Sports Journalist and Guiding Principles.
- Media Basics: Writing, Reporting, Editing, Mass Communication.
- Sports Law / Policy; Media Law, Ethics, Platforms.
- Sports Public Relation.

#### **UNIT II : Sports News Print/Multi-media Journalism**

- Journalistic and Technical Aspects of Print and Electronic Media.
- Critical Thinking in Sports Journalism.
- Sports Current Affairs and General Knowledge.

#### **UNIT III : Broad Cast Journalism**

- Introduction: Ideas, Script Writing, Interviews, Anchoring, Reporting.
- Different Platforms: Convergence across Media.
- Content Development, Delivery and Media Studies.
- T.V, Radio and other Media.

## **Reference Books**

- Andrews Phil (2013). “Sports Journalism: A practical introduction”. SAGE Publications Ltd; second edition. ISBN-13:978-1446253373.
- Chouhan Bhupindar Singh and Hitesh Chandra Rawal, Sports Journalism and Mass Media, Sports Publication, New Delhi, 2019.
- Motiz, Brian (2014). “Rooting for the story: Institutional sports Journalism in the digital age”. Syracuse University.
- Stofer, Kathryn T. et al., (October 2009). “Sports Journalism: An introduction to reporting and writing”. Rowman & Littlefield Publishers.
- Singh Hoshiyar, Sports Journalism and Mass media, Khel Sahitya Kendra, 1917.

**OR**

## **BPES SEC 305 : CURRICULUM DESIGN**

### **UNIT I : Modern Concept of the Curriculum**

- Need and Importance of Curriculum.
- Need and Importance of Curriculum Development.
- The Role of the Teacher in Curriculum Development.
- Factors Affecting Curriculum - Social Factors, Personnel Qualifications, Climatic Consideration, Equipment and Facilities, Time Suitability of Hours.
- National and Professional Policies, Research Finding

### **UNIT II : Basic Guideline for Curriculum Construction Contest (Selection and Expansion).**

- Focalization and Socialization.
- Individualization.
- Sequence and Operation.
- Steps in Curriculum Construction.

### **UNIT III : Curriculum-Old and New Concepts, Mechanics of Curriculum Planning.**

- Basic Principles of Curriculum Construction.
- Curriculum Design, Meaning, Importance and Factors Affecting Curriculum Design.
- Principles of Curriculum Design according to the needs of the Students and State and National Level Policies.
- Role of Teachers

### **UNIT IV : Under Graduate Preparation of Professional**

- Areas of Health Education, Physical Education and Recreation
- Curriculum Design - Experience of Education, Field and Laboratory. Teaching Practice.
- Professional Competencies to be developed - Facilities and Special Resources for Library, Laboratory and Other Facilities.

### **Reference Books**

- Barrow, H. M. (1983). *Man and movement: principles of physical education*. Philadelphia: Lea and Febiger.
- Bucher, C. A. (1986). *Foundation of physical education*: St. Louis: The C. V. Mosby & Company.
- Cassidy, R. (1986). *Curriculum development in physical education*. New York: Harper & Company.
- *Cowell, C.C. & Hazelton, H.W. (1965). Curriculum designs in physical education.*
- Englewood Cliffs: N.J. prentice Hall Inc.
- *Larson, L.A. (n.d.). Curriculum foundation in physical education. Englewood Cliffs: N.J. Prentice Hall Inc.*

## SEMESTER - IV

### **BPES DCC 401 : KINESIOLOGY AND BIOMECHANICS**

#### **UNIT I : Introduction to Kinesiology**

- Definition, Aims & Objectives of Kinesiology and Sports Biomechanics.
- Role of Kinesiology and Biomechanics in Sports.
- Brief History with Important Contributions of Aristotle, Leonard Da Vinci, Weber Brothers.
- Basic Concepts of Axes and Planes, Center of Gravity & Line of Gravity

#### **UNIT II : Joints and Movements (Upper Extremity and Lower Extremity)**

- Location and Action of Major Muscles acting at the following joints: (Shoulder, Elbow, Wrist, Hip, Knee & Ankle).
- Fundamental Movements of Human Body.
- Two-joint Muscles (Origin, Insertion and Function).
- All or None Law, Reciprocal Innervations.

#### **UNIT III : Application of Mechanical Concepts**

- Quantities in Biomechanics, Scalar and Vector Quantities, Motion, Type of Motion, Distance and Speed, Displacement and Velocity, Acceleration, Angular Distance and Angular Displacement, Angular Speed, Angular Velocity, Angular Acceleration, Inertia, Mass, Weight, Newton's Laws of Motion.
- Work, Power & Energy, Potential and Kinetic Energy.
- Force and its Characteristics, Internal and External Forces and Application of Force, Centripetal and Centrifugal Forces.



- Stability and Equilibrium (Nature, Types and Advantages), Factors Affecting Stability, Principles of Stability and Lever: Types and Implications in Sports, Mechanical Advantages of Levers

#### **UNIT IV : Projectile Motion, Kinesiological and Mechanical Analysis of Movements**

- Kinesiological Analysis of Fundamental Movements
- Motion, its importance in Sports with reference to Diving, Gymnastics, Jumping & Throwing
- Projectile Motion : Principles, Factors Affecting Projectile Motion and its Applications in Sports.
- Mechanical Analysis of Fundamental Movements: (Walking, Running, Jumping, Throwing, Catching, Landing)

#### **Reference Books**

- A.K. Lawrence Mamta MP Kinesiology (Friends Publication India 2004)
- Broer, M.R. Efficiency of Human Movement (Philadelphia: W.B. Saunders Co., 1966)
- Bunn, John W. Scientific Principles of Coaching (Engle wood cliffs: N. J. Prentice Hall Inc., 1966)
- Duvall, E.N. Kinesiology (Engle wood cliffs: N.J. Prentice Hall Inc., 1956)
- Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication In.2005)
- Uppal Rasch and Burke, Kinesiology and Applied Anatomy (Philadelphia: Lea and Fibger, 1967)
- Scott, M. G. Analysis of Human Motion, New York.

## **BPES DCC 402 : SPORTS PSYCHOLOGY & SOCIOLOGY**

### **UNIT I : Introduction to Psychology**

- Definition, Meaning and Branches of Psychology.
- Scope of Psychology in Physical Education and Sports.
- Importance of Psychology in Physical Education and Sports.
- Methods of Psychology in Physical Education and Sports.

### **UNIT II : Learning Processes, Personality and Motivation**

- Theories of Learning (Trial and Error Learning, Learning by Insight, Classical & Operant Conditioning)
- Laws of Learning (Law of Readiness, Law of Exercise, and Law of Effect), Transfer of Learning (Positive, Negative, Zero, Bilateral)
- Learning Curve (Positive, Negative, S-Curve) Memory (Sensory, Short-Term, Long-Term) and Forgetting in Learning.
- Personality, Motivation, Anxiety and Emotion in Physical Education and Sports.

### **UNIT III : Sports and Society**

- Meaning, Definition and Scope of Sociology in Physical Education and Sports.
- Social Acceptance of Physical Education and Sports. Sports as an Element of Society, Development of an Athletic Identity in the Society.
- Socialization through Games and Sports, Social Factors and Sociometric Techniques in Sports.
- Role of Family, Institution and Peer Group in Sports Socialization, Team cohesiveness and Leadership in Sports, Aggression and Violence in Sport, Effect of Crowd Behavior in Sports.

## **Reference Books**

- Ball, D. W. & Loy, J. W. (1975). Sport and social order; Contribution to the sociology of sport. London: Addison Wesley Publishing Co., Inc.
- Parmar, Vishnu (2019). Physical Education, RBSE, Ajmer, Raj.
- Blair, J. & Simpson, R. (1962). Educational psychology, New York: McMillan Co. Cratty, B. J. (1968). Psychology and physical activity. Eaglewood Cliffs. Prentice Hall.
- Kamlesh, M. L. (1998). Psychology in physical education and sport. New Delhi: Metropolitan Book Co.
- Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). Sports and social system. London: Addison Wesley Publishing Company Inc.
- Mathur, S.S., (1962). Educational psychology. Agra. Vinod Pustak Mandir. Skinner, C.E., (1984.). Education psychology. New Delhi: Prentice Hall of India.

## **BPES DCC 403 : METHODS IN PHYSICAL EDUCATION**

### **UNIT I : Introduction to Teaching**

- Meaning, Definition and Concept of Teaching.
- Learning and Teaching Methods.
- Importance of Varied Methods of Teaching in the Field of Physical Education and Sports.

### **UNIT II : Foundations of Teaching**

- Principles and Characteristics of Teaching.
- Styles of Teaching: Autocratic, Democratic and Laissez Faire.
- Levels of Teaching: Memory, Understanding and Reflective.
- Lerner's Characteristics: Academic, Social, Emotional & Cognitive.
- Professional Like Qualities (PLQs) of a Physical Education Teacher.

### **UNIT III : Pedagogy of Physical Education**

- Meaning, Definition and Subject Matter of Pedagogy.
- Teaching Procedures: Whole Method, Part-Whole Method, Whole-Part-Whole Method and Progressive Part Method.
- Methods of Teaching: Lecture method, Demonstration method, Command Method, Imitation Method, Project Method.

### **UNIT IV : Physical Education Curriculum**

- Models of Physical Education Approach : Skill Themes, Teaching Games for Understanding (TGfU).
- Personal and Social Responsibility.
- Cooperative Learning.
- Sport Education and Fitness Education.
- Standards proposed by National Standards for Physical Education (NASPE).
- Meaning, Concept and Types of Lesson Plans, Principles of Lesson Plan Preparation.

### **Reference Books**

- Dyson, B. & Casey, A. (2016). Cooperative Learning in Physical Education and Physical Activity: A practical introduction. London: Routledge.
- Parmar, Vishnu (2007). Encyclopedia of Fitness and Sports, Sports Publication, New Delhi.
- Griffin, L.L. & Butler, J.I. (2005). Teaching Games for Understanding: Theory, Research, and Practice. Champaign, IL: Human Kinetics.
- Siedentop, D. & Hastie, P.A. (2011). Complete Guide to Sport Education. Second Edition. Champaign, IL: Human Kinetics. Month wise Progression C

## **BPES PC 404 : TEAM GAMES / GAME OF SPECIALIZATION**

Practical Course

**Team Games (Game of Specialization) (Any one) –**

Basket Ball / Cricket / Football / Volleyball / Hockey / Soft Ball / Hand Ball / Kho-Kho / Kabaddi / Swimming / Gymnastics / Athletics / Yoga

## **BPES SEC 405 : RECREATION AND ADVENTURE SPORTS**

### **UNIT I : Introduction to Recreation**

- Meaning & Definition of Recreation, Need and Importance of Recreation.
- Concept in Sports Recreation.
- History and Trends of Recreational Activities in India.
- Camping, Types of Camping, Importance of Camping in Physical Education.

### **UNIT II : Branches and Types of Recreation**

- Branches: Aquatic Branch, Community Branch, Park Resources Branch, State Parks Branch, Therapeutic Branch.
- Types of Recreation – Indoors & Outdoor.
- Recreational Therapy: Introduction and its Benefits.
- Misconception Regarding Recreation Hiking, Trekking, River Crossing as Recreational Activity.

### **UNIT III : Adventure Sports**

- Introduction to Adventure Sport, Adventure Sports Management and Risk Management.
- Mountaineering and Rock Climbing their Equipment, Clothing & Techniques.
- Rafting, Scuba Diving their Equipment, Clothing & Techniques.
- Hang Gliding & Paragliding: Equipment, Clothing & Techniques.

## **Reference Books**

- Dheer, S. & Radhika Kamal, Organization and Administration of Physical Education, Friends Publication, New Delhi–1991.
- Two Experienced Professors, Organization, Administration and Recreation in Physical Education, Parkash brothers, Educational Publishers, Ludhiana 1986.
- "A Recreation". Professor Shri C.H. Dubey L.N.C.P.E. Gwalior.(M.P.)
- Mood Dale P., Judith E. Rink and Frank F. Musker, Sports and Recreational Activities McGraw-Hill Education; 15th edition, 2011
- Matt Berry, Adventure Sports Coaching, Routledge, 2015
- Matt Berry and Chris Hodgson, Adventure Education An Introduction, Routledge; 2011.

## **OR**

### **BPES SEC 405 : SPORTS TALENT IDENTIFICATION**

#### **UNIT I : Introduction**

- Need and Importance of Talent Identification.
- Aims and Objectives of Talent Identification.
- Principles of Identifying Talent.
- Sources of Talent and Role of Physical Education Professionals

#### **UNIT II : Phases of Talent Identification**

- Preliminary Phase.
- Basic Selection Phase.
- Profound Selection Phase.
- Talent Development and Selection.

#### **UNIT III : Evaluation of Talent**

- Physical and Physiological Assessment.
- Psychological Assessment.

- Anthropometrical Assessment.
- Kinesiological and Biomechanical Assessment.
- Prediction of Future Performance.
- Game Specific Skills

### **Reference Books**

- Adam L. Kellyjeam, Jean Cote, Mark Jeffreys, Jennifer Turnnidge, (2021) Birth Advantages and Relative Age Effects in Sport, Published by Routledge.
- Coyle Daniel, (2012) The little book of Talent, Bantam.
- Gill A Shley (2021), Foundation of Sports Coaching Applying Theory and Practice, Routledge.
- Joseph Baker, Stephen Copley, Jorg Schorer, (2020) Talent Identification and Development in Sport Published by Routledge.
- Mark Patington, (2019) “Sports Coaching” A theoretical and practical guide, Routledge.
- Baghurst Timothy, (2020). Coaching for Sports High Performance, Routledge.

**BPES DSE 501 : RESEARCH METHOD AND STATISTICS**

**UNIT I : Introduction to Research**

- Meaning, Definition and Types of Research.
- Characteristics of Good Research, Nature and Scope of Research in Sports.
- Classification of Research, Location and Identifying of Research Problem, Criteria for Selecting a Research Problem
- Understand Research Format, Chapters and Writing Synopsis

**UNIT II : Methods of Research**

- Descriptive Methods of Research: Survey and Case Study, Interview and Questionnaire.
- Historical Research: Steps in Historical Research, Sources of Primary and Secondary Data, Internal and External Criticism.
- Experimental Research – Meaning, Nature and Importance, Meaning of Variable, Types of Variables, Research Design.
- Purpose of Literature Review, Presenting the Research Hypothesis, Limitation, Delimitation and Significance of Studies

**UNIT III : Statistical Techniques used in Interpretation of Data**

- Meaning, Definition and Importance of Statistics in Sports.
- Quantitative and Qualitative Data, Tools and Techniques of Data Collecting, Population and Sample.
- Class Interval, Raw Data, Group and Ungroup Data, Construction of Table, Introduction to Graphic Techniques (Histogram, Bar Chart and Pie Diagram)
- Measure of Central Tendency, Calculation of Mean, Median & Mode, Normal Curve, Skewness and Kurtosis



#### **UNIT IV : Statistical Techniques used for Interpretation of Data**

- Measure of Dispersion (Standard Deviation, Mean Deviation, Quartile Deviation).
- Method of Calculation of Correlation.
- Types of t-test, Interpreting t, Relationship of t and r.
- Introducing ICT and Statistical Software.

#### **Reference Books**

- Ahlawat, R. P. (2016). Research Process in Physical Education & Sports Sciences. Friends Publication.
- Flick, U. (2017). Introducing Research Methodology. Sage Publications.
- Kahn, J. V. (2016). Research in Education (V10). Pearson Education Inc.
- Kamlesh, D. M. (2019). Methodology of Research in Physical Education and Sports. Sports Publication.
- Kothari, C. (2019). Research Methodology: Methods and Techniques. New Age International Publishers.
- Mishra, P. D. (2018). Research and Statistics in Physical Education. Sports Publication.

### **BPES DSE 502 : ORGANIZATION AND ADMINISTRATION IN PHYSICAL EDUCATION**

#### **UNIT I : Introduction to Organization & Administration in Physical Education**

- Meaning of Organization and Administration and its Importance in Physical Education.
- Qualification, Role and Responsibilities of Physical Education Teacher and Pupil Leader.

- Function of Organization and Administration in Physical Education and Sports.

## **UNIT II : Office Management Meaning and Definitions and Importance of Office Management.**

- Kinds of Office Management and its functions.
- Records and Registers: Maintenance of Attendance Register, Stock Register, Cash Register, Physical Efficiency Record, Medical Examination Record.

## **UNIT III : Facility Management**

- Meaning of Facilities and Equipment Management.
- Types of Facilities Infrastructure - Indoor and Outdoor.
- Considerations for Planning Sports Facilities.
- Health Aspects of Facilities Management.

## **UNIT IV : Class Management & Public Relation**

- Meaning, Importance of Class Management.
- Factors Affecting Class Management.
- Principles of Class Management.
- Meaning, Importance of Public Relation: Relationship with Media.

## **Reference Books**

- Broyles, F. J. & Rober, H. D. (1979). Administration of Sports, Athletic program: A Managerial Approach. New York: Prentice Hall Inc. Bucher,
- Parmar, Vishnu (2019). Sports and Yoga. Pink City Publisher, Jaipur.
- C.A. (1983). Administration of Physical Education and Athletic programme. St. Lolis: The C.V. Hosby Co.
- Thomas, J.P. (1967). Organization & Administration of Physical Education. Madras: Gyanodayal Press.

- Tirunarayanan, C. & Hariharan, S. (1969). Methods in Physical Education. Karaikudi: South India Press.
- Edward F. Voltmer, The Organization and Administration of Physical Education. (5<sup>th</sup> Edn.)

## **BPES DSE 503 : SPORTS NUTRITION & WEIGHT MANAGEMENT**

### **UNIT I : Basics of Nutrition**

- Understanding Nutrition, Diet and Health.
- Role of Nutrition in Health–Impact of Nutrition on Health & Fitness.
- Sustainable Diet and Nutrition–Nutrition as a Tool for Improving Health and Lifestyle and Nutrition Requirements (Required Dietary Allowance - RDA).

### **UNIT II : Nutrition in Weight Management**

- Energy/Calories in Weight Maintenance & Management.
- Macronutrients - Carbohydrates, Proteins & Fats and their role in Weight Management.
- Micronutrients – Vitamins & Minerals and their Impact on Weight Management.
- Balanced Nutrition – Achieving Diversity & Frequency in Diets.

### **UNIT III : Understanding Weight Management (Weight Loss & Weight Gain)**

- Types of Obesity
- Biochemistry & Physiology of Obesity.
- Nutritional Deficiencies while Losing Weight.

### **UNIT IV : Sustainable Diets**

- Quantified & Practical Nutrition.
- Protein as a tool in Weight Management.
- Fad Diets in Weight Management and Supplements for Weight Management.

## **Reference Books**

- Nicholas, Bjorn. (2015). Nutrition: Health, Weight Loss and Wellness: Your Guide to: Healthy Living and Healthy Create Space Independent Publishing Platform,
- Gary, Taubes. (2008). Good Calories, Bad Calories: Fats, Carbs, and the Controversial Science of Diet and Health. (Reprint edition)
- Anchor. Jason, Fung. (2016). The Obesity Code: Unlocking the Secrets of Weight Loss Greystone Books.
- Dan Benardot (2012). Advanced sports Nutrition, Second Edition, human kinetics.
- James L. Groff and Sareen S. Gropper, (2000). Advanced Nutrition and Human Metabolism, (3<sup>rd</sup> Edn). Wardsworth Thomson learning.
- Boyd - Eaton. S. et. al (1989). The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.

## **BPES PC 504 : MASS DEMONSTRATION ACTIVITIES / INDIGENOUS SPORTS**

### **Practical Course**

#### **Mass Demonstration Activities**

(Lezium/Dumbbells/Aerobics/Rhythmic/Wands/March Past **(Any One)**)

#### **Indigenous Sports**

(Kho-Kho / Kabaddi / Malkhambh **(Any One)**)

## **BPES SEC 505 : ADAPTED PHYSICAL EDUCATION & SPORTS**

### **UNIT I : Introduction to Adapted Physical Education and Sports**

- Meaning, Aim and Objectives of Adapted Physical Education and Sports.
- Brief Historical Review of Adapted Physical Education and Sports.

- Need and Importance of Adapted Physical Education and Sports.
- Role of Inclusive Education in Adapted Physical Education and Sports.

## **UNIT II : Classification of Differently Able and Application of Exercise and Sports**

- Changing Concept of Differently Able people.
- Physically Challenged, Mentally Challenged, Speech and Hearing Challenged and Visually Challenged.
- Other Differently Able Condition Problems Behavioural Problems, Adjustment Problem, Learning Disabilities, Emotional Problem.
- Social Problem - Social Determination, Social Rejection, Social Welfare Programmes for Differently Able.

## **UNIT III : Guiding Principles for Adapted Physical Education and Sports Programme**

- Guiding Principles for Adapted Physical Education and Sports Programme.
- Physical Education and Sports Programme for Differently Able.
- Co-Curricular Activities for Differently Able: Aquatic Activity Programmes for Differently Able.
- Rehabilitative Role & Importance of Recreation and Adventure Sports.

### **Reference Books**

- Anoop Jain, “Adapted Physical Education” Sports Publications, Ashok Vihar Delhi-52
- Arthur G. Miller & James, “Teaching Physical Activities to impaired youth” John Wilag & Sons Inc. Canada.
- Shekar KC, Adapted Physical Education (Khel Sahitya Kendra: New Delhi) 2005

- Uppal, A. K. (1990). Physical fitness: how to develop. New Delhi: Friends Publication.
- Verma, J. P. (2000). A text book on sports statistics. Gwalior: Venus Publications.

**OR**

## **BPES SEC 505 : VALUE EDUCATION**

### **UNIT I : Introduction of Value education**

- Need, Importance and Objectives of Value Education.
- Value Education - its Purpose and Significance in the present world
- Theories of Moral Values, Value System – The Role of Culture and Civilization.
- Holistic Living–Balancing the Outer and Inner–Body, Mind and Intellectual Level.
- Duties and Responsibilities of the Citizen, Commitment and Commitment to Values.

### **UNIT II : Value System and Guidelines**

- Salient Values for Life–Truth, Commitment, Honesty and Integrity, Forgiveness and Love, Empathy and Ability to Sacrifice, Care, Unity, and Inclusiveness, Self-esteem and Self Confidence, Punctuality.
- Value for Time, Task and Resource Management.
- Ethical and Moral Value, Values tend to Influence Attitudes and Behaviour and help to solve Common Human Problems.
- Social Value, Interpersonal and Intrapersonal relationship, Team Work, Positive and Creative Thinking.

### **UNIT III : Social Value and Citizenship**

- The role of Educational Institution on Value Building.

- Human Rights Violations, National Integration – Peace & Non-Violence
- Dr. A.P.J. Kalam’s Ten Points for Enlightened Citizenship – Social Values and Welfare of the Citizen
- Social Evils, Corruptions, Domestic Violence.

### **Reference Books**

- Chakravarthy, S.K. (1999) Values and ethics for Organizations: Theory and Practice, Oxford University Press, New Delhi.
- Das, M.S. & Gupta, V.K. (1995) Social Values among Young adults: A changing Scenario, M.D. Publications, New Delhi.
- Kaul, G.N. (1975) Values and Education in Independent Indian, Associated Publishers, Mumbai.
- M.G. Chitakra: (2003) Education and Human Values, A.P.H. Publishing Corporation, New Delhi.
- NCERT, 1992 Education in Values, New Delhi.
- Swami Budhananda (1983) How to Build Character A Primer: Ram krishna Mission, New Delhi.

**BPESE DSE 601 : TEST MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**

**UNIT I : Introduction to Test, Measurement & Evaluation**

- Meaning of Test, Measurement & Evaluation in Physical Education.
- Need & Importance of Test, Measurement & Evaluation in Physical Education.
- Principles of Evaluation.

**UNIT II : Criteria, Classification and Administration of test**

- Criteria of Good Tests and Scientific Authenticity (Reliability, Objectivity, Validity and Availability of Norms).
- Type and classification of Tests.
- Administration of test: advance preparation, duties during testing, duties after testing.

**UNIT III : Physical Fitness Tests**

- AAHPER Youth Fitness test.
- National Physical Fitness Test.
- Indiana Motor Fitness Test.
- JCR Test.
- U.S Army Physical Fitness Test.

**UNIT IV : Sports Skill Tests**

- Lockhart and McPherson Badminton Test.
- Johnson Basketball Test.
- McDonald Soccer Test.
- S.A.I. Volleyball Test.
- S.A.I. Hockey Test.



## **Reference Books**

- Kansal, D.K., (2018) Test Evaluation Accreditation Measurements and Standards (TEAMS) KK Publications, New Delhi.
- Lacy, A. C., & Williams, S. M. (2018). Measurement and Evaluation in Physical Education and Exercise Science. Routledge.
- Bishop, P. A. (2017). Measurement and Evaluation in Physical Activity Applications: Exercise Science, Physical Education, Coaching, Athletic Training & Health. Taylor & Francis.
- Baumgartner, T.A., & Jackson, A.S. (1975). Measurement for Evaluation Physical Education and Exercise Science. United States of America: Wm C Brown publishers.
- Bhatt, A. H. (2010). Test and measurement in physical education. Darya Ganj, New Delhi: Sports Publication.
- Mehrens, W. A., & Lehmann, I. J. (1984). Measurement and evaluation in education and psychology. United States of America: CBS College Publishing.

## **BPES DSE 602 : SPORTS MEDICINE AND PHYSIOTHERAPY**

### **UNIT I : Introduction to Sports Medicine**

- Definition, aims and objectives of Sports Medicine.
- Scope of Sports Medicine.
- Need and Importance of Sports Medicine.
- History of Sports Medicine in India and Abroad.

### **UNIT II : Injuries in Sports**

- Classification of Injuries, Causes and Prevention of Sports Injuries.
- Skin and Muscles Injuries (blisters, corns, abrasions, bruises, burns, cuts and lacerations, muscles strain and ruptures).
- Tendons Ligaments, Cartilage, Bursa and Bone Injuries.

- Common Site-specific Injuries in Sports.
- Common Regional Injuries and their management (Head & Neck, Face, Thorax, Abdomen, Pelvis, Upper Limbs and Lower Limbs (shoulder, elbow, Wrist, hip, knee and Ankle joints).

### **UNIT III : Introduction to Physiotherapy and Therapeutic Exercises and Modalities**

- Importance of Physiotherapy; Types of Massage
- Definition and Meaning of Therapeutic Exercise, Classification, Effects and uses of Therapeutic Exercises.
- Hydrotherapy (Hot and Cold Packs, Whirlpool, Contrast bath), Thermotherapy
- Electrotherapy (Infrared rays – Ultraviolet rays – Short Wave Diathermy – Ultrasonic Therapy, IFT)

### **UNIT IV : Doping in Sports**

- Ergogenic aids in Sports.
- National and International Anti-doping organization and their role.
- Classification and types of drugs banned by WADA and NADA, Side effects of drugs.
- Blood doping, Types of Blood Doping.

### **Reference Books**

- Armstrong and Tucker, Injuries in sports (London: Staples press, 1964).
- Christine, M. D., (1999). Physiology of sports and exercise. USA: Human Kinetics.
- Conley, M. (2000). Bioenergetics of exercise training. In T.R. Baechle, & R.W. Earle, (Eds.), Essentials of Strength Training and Conditioning (pp. 73-90). Champaign, IL: Human Kinetics.

- David, R. M. (2005). Drugs in sports, (4th Ed).Routledge Taylor and Francis Group.
- Hunter, M. D. (1979). A dictionary for physical educators. In H. M. Borrow & R. McGee, (Eds.), A Practical approach to measurement in Physical Education (pp. 573- 74). Philadelphia: Lea & Febiger.
- Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New Delhi, 2003.
- Khanna, G. L., (1990). Exercise physiology & sports medicine. Delhi: Lucky Enterprises.
- Mathew, D. K. & Fox, E. L, (1971).Physiological basis of physical education and athletics.

## **BPES DSE 603 : SPORTS TECHNOLOGY AND INNOVATION**

### **UNIT I : Sports Technology**

- Meaning and Definition.
- Importance of Technology in Sports.
- General Principles and Purpose of Instrumentation in Sports.
- Technological Impacts on Sports.

### **UNIT II : Science of Sports Materials**

- Adhesives - Nano glue; Nano moulding technology, Nano turf.
- Foot wear production.
- Factors, constraints and applications in sports.
- Foams - Polyurethane, Polystyrene, Styrofoam, closed cell and open-cell foams, Neoprene, Foam; Smart Materials: Shape Memory Alloy (SMA), Thermo chromic film, High-density modeling foam.

### **UNIT III : Surfaces of Playfields**

- Modern surfaces for playfields, construction and installation of sports surfaces.

- Types of materials: synthetic, wood, polyurethane. Artificial turf.
- Modern technology in the construction of indoor and outdoor facilities.
- Use of computer and software in Match Analysis and Coaching.

#### **UNIT IV : Modern Sports Equipment**

- Playing Equipment: Balls: Types, Materials and Advantages, Bat / Stick / Racquets: Types, Materials and Advantages.
- Clothing and shoes: Types, Materials and Advantages; Sports equipment with nano technology, Advantages.
- Measuring equipment: Running, Throwing and Jumping Events.
- Protective equipment: Types, Materials and Advantages.

#### **Reference Books:**

- Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) “Selection of Engineering Materials” UK: Butterworth Heiremann.
- Finn, R.A. and Trojan P.K. (1999) “Engineering Materials and their Applications” UK: Jaico Publisher.
- John Mongilo, (2001), “Nano Technology 101 “New York: Green wood publishing group.
- Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jalandhar, Sterling Publishers Pvt. Ltd.), 1982
- Kozman, Cassidy and Jackson. (1952) Methods in Physical Education (W.B. Saunders Company, Philadelphia and London),

### **BPES PC 604 : COACHING ABILITY TEACHING PRACTICE**

#### **LESSON PLANS (10 LESSON PLANS)**

Practical Course : 5 Internal + 5 External lesson plans from Team Games / Racket Sports / Indigenous Games.

## **BPES SEC 605 : SPORTS KINANTHROPOMETRY**

### **Unit I : Introduction to Kinanthropometry**

- Meaning and definition of Kinanthropometry.
- Aim and objectives of Kinanthropometry.
- Characteristics and Principles of kinanthropometry.
- Application of kinanthropometry in the field of Sports.

### **Unit II : Anthropometric Instruments and Measurements**

- Anthropometric Instruments: Tools and General Techniques.
- Anthropometric Measurements and Procedures, Skinfold Thickness.
- Measurements and Procedures.
- Gross Body Measurements and Procedures - Length of Body Parts, Diameters of Body Parts, Circumferences of Body Parts.

### **Unit III : Body Composition**

- Body composition and its role in sports participation.
- Body Composition: various Methods (direct and indirect technique) to estimate of Human Body Composition, Body mass index and its importance in sports.

### **Unit IV : Physique and it Components**

- Role of Physique in Sports, Physique in Different Sports Activities, Different component of somatotype, its importance & scope in sports, Classification of Somatotype, Health & Carter Method of somatotype

### **Reference Books**

- Francisco Esparza-Ros, Raquel Vaquero - Cristobal and Michael Marfell-Jones (2019). International Standards for Anthropometric Assessment, International Society for the Advancement of Kinanthropometry.

- H.S. Sodhi and L.S. Sidhu (1984). Physique and Selection of Sportsmen. Punjab Publishing House. J.E.L.
- Carter (2002). The Heath-Carter Anthropometric Somatotype - Instruction Manual.
- McArdle, W.D., Katch, F.I., and Katch, V.L. (2010). Exercise Physiology: Energy, nutrition, and human performance (7th Edn).
- Lippincot Williams & Wilkins. Baltimore, MD, USA. Norton, K. & Olds, T. (1996). Anthropometrica. Sydney: University of New South Wales Press, Australia.
- Sodhi, H.S. (1991). Sports Anthropometry (A Kinanthropometric Approach). Mohali: ANOVA Publications.

**OR**

## **BPES SEC 605 : SPORTS EVENT MANAGEMENT**

### **UNIT I : Introduction**

- Understanding Sport Facilities/Planning, Importance of Sports Event Management.
- Different types of sports events, sports event and sport tourism.
- Event Planning Sequence, Opening and Closing ceremony.
- Event manager and role of management staffs and different committee.

### **UNIT II : Budgeting, Sponsorship and Marketing**

- Sports event budget, Planning and preparation of budget, Event Cost Estimate.
- Sponsorship and advertisement of the event.
- Marketing strategies and Event Marketing.
- Media role and promotion, Media partner.

### **UNIT III : Event Management and Negligence**

- Sports Venue Location and Selection of Facilities.
- Event and Game Day Management, Risk Management and Negligence, Analysis of Strength and Weakness of Risk Factors of Event.
- Services and Logistics, Pre-Event and Post Event Evaluation of Managing Staffs.
- Crowd Management

#### **Reference Books**

- Bucher, C.H. (1983) Administration of Physical Education and Athletic Programmes, The C.V. Mosby Company, London.
- Zeigler, E.M. and Dewie, G.W. (1983) Management Competency Development in Sports and Physical Education, Lea and Febiger, Philadelphia.
- Allen, L.A.(1958) Management and Organization, Mc-Graw Hill Book Company, Inc., London.
- Huges, W.L. et. al. (1962) Administrative of Physical Education, The Ronald Press, Company, New York.
- Larry Horine, (1991) Administration of Physical Education and Sports, Wm.C. Brown Publishers (IInd Edition).
- Rober L. Mathis & John H. Jackson (2000) Human Resource Management (Ninth Edition) South Western College Publishing.