

Master of Physical Education & Sports M.P.E.S
M.P.E.S. (1st Semester)

Part A: Theoretical Course				
Course Code	Title of the Papers	Internal Marks	External Marks	Total Marks
Core Course				
MPSCC- 101	Research Methodology in Physical Education and Sports	30	70	100
MPSCC- 102	Physiology of Exercise Anatomy & Physiology	30	70	100
MPSCC- 103	Health Education	30	70	100
MPSCC 104	Educational Technology in Physical Education and Sports	30	70	100
Part-B Practical Course				
MPSPC-101	Track and Field I: Sprints, Hurdles, (Any two Event)	30	70	100
MPSPC-102	Swimming/Gymnastics/Shooting (Any one)	30	70	100
MPPC-103	Yoga Performance in Asanas, Kriyas, Bandhas & Pranayama.	30	70	100
MPSPC-104	Racket Sports: Badminton/ Table Tennis/Squash/ Lawn Tennis. (Any one) Indigenous Sports: Kabaddi / Malkhambh/ Kho-Kho etc.(Any one)	30	70	100
TOTAL	240	560	800	

Semester - II

Part A: Theoretical Course					
Course Code	Title of the Papers	Internal Marks	External Marks	Total Marks	
Core Course					
MPSCC-201	Applied Statistics in Physical Education and Sports	30	70	100	
MPSCC-202	Biomechanics In Physical Education & Sports	30	70	100	
MPSCC-203	Sports Psychology in Physical Education and Sports	30	70	100	
MPSCC-204	Professional Preparation and Curriculum Design in Physical Education and Sports		30	70	100
Part-B Practical Course					
MPSPC-201	Track and Field II: (Throwing Events)	30	70	100	
MPSPC-202	Games Specialization - (Any One) (Individual skills, game situation, officiating, lead-up games in Kabaddi/ Kho-Kho/Badminton/ Table Tennis/ Tennis/ Squash/ Baseball/ Volleyball/Basketball/	30	70	100	

	Cricket/ football/ Handball/ Hockey/ Netball/ Softball, etc					
MPSPC-203	Teaching Lessons of Track and Field (5 Lessons)	30	70	100		
MPSPC-204	Teaching Lessons of Game Specializations (5 Lessons)	30	70	100		
TOTAL				240	560	800

Semester - III

Part A: Theoretical Course				
Course Code	Title of the Papers	Internal Marks	External Marks	Total Marks
Core Course				
MPSCC-301	Sports Management in Physical Education and Sports	30	70	100
MPSCC-302	Kinesiology in Physical Education and Sports	30	70	100
MPSCC-303	Tests, Measurement and Evaluation in Physical Education and Sports	30	70	100
MPSCC-304	Yoga Education	30	70	100

Part-B Practical Course					
MPSPC-301	Track and Field III: Middle/Long Distance ,steeplechase	30	70	100	
MPSPC-302	Team Games Specialization: Baseball/Cricket/ Football/Hockey/ Softball/Volleyball/Handball/basket ball/Netball etc (Any One)	30	70	100	
MPSPC-303	INTERNSHIP	30	70	100	
MPSPC-304	Officiating Lessons A) Officiating Lessons of Game Specializations (5 Lessons) B) Officiating Lessons of Track and Field (5 Lessons)	30	70	100	
TOTAL			240	560	800

Semester - IV

Part A: Theoretical Course				
Course Code	Title of the Papers	Internal Marks	External Marks	Total Marks
Core Course				
MPSCC-401	Scientific Principles of Sports Training in Physical Education and Sports	30	70	100
MPSCC-402	Sport Sociology	30	70	100

MPSCC-403	Sports Medicine	30	70	100
MPSCC-401	Dissertation		30	70
MPSCC-402	Organization and Administration			100
Part-B Practical Course				
MPSPC-401	Track and Field IV Officiating (Any Two Event) Middle/Long Distance Race, High Jump, Triple -Jump, Relay Race, and Hammer – throw, Shot Put.	30	70	100
MPPC-402	Games Specialization - IV Officiating (Any Two Games) (Individual skills, game situation, officiating, lead-up games in Kabaddi/ Kho-Kho/ Badminton/ Table Tennis/ Tennis/ Squash/ Baseball/ Volleyball/Basketball/ Cricket/ football/ Handball/ Hockey/ Netball/ Softball ,etc	30	70	100
MPSPC-403	PROJECT ORGANIZED Athletic (any	100	100

	one events) / Games Specialization (any one Game)					
MPSPC- 404	Class Room Teaching Lessons (5 Lessons)	30	70	100		
TOTAL				240	560	800
				960	2240	3200

M.P.E.S. (SEMESTER-1ST)
PAPER-I (RESEARCH METHODS IN PHYSICAL EDUCATION & SPORTS)

Max. Marks: 100

External Marks: 70

Internal Marks: 30

Time: 3 hours

Unit-

1 1. Introduction 1.1. Definition of Research. 1.2. Need and importance of Research in Physical Education and Sports. 1.3. Scope of Research in Physical Education and Sports 1.4. Types of Research-Basic, Applied and Action Research. 2. Research Problem 2.1. Meaning of the term. 2.2. Location and criteria of Selection of Problem. 2.3. Formulation of a Research Problem. 2.4. Limitations and Delimitaitons.

Unit-II

3. Survey of Related Literature 3.1. Need for surveying related literature. 3.2. Literature Sources. 3.3. Library Reading. 4. Historical Research 4.1. Meaning and definition of Historical Research. 4.2. Historical Sources. 4.3. Evaluation of Historical data.

Unit-III

5. Survey Studies. 5.1. Meaning of Survey. 5.2. Tool of Survey Research. 5.2.1. Questionnaire and Interview. 5.2.2. Meaning of Questionnaire and Interview. 10 5.2.3. Construction, Appearance and Development of Questionnaire. 5.2.4. Procedure of conducting interview. 5.2.5. Suggestions to enhance response. 6. Case Studies. 6.1. Meaning of Case Studies. 6.2. Objectives. 7. Normative Survey. 7.1. Meaning of Normative Survey. 7.2. Factors affecting Normative Survey.

Unit-IV

8. Philosophical Research. 8.1. Meaning of Philosophical Research. 8.2. Tool of Philosophical Research. 8.3. Steps in Critical Thinking. 9. Experiment Research 9.1. Meaning of Experiment Research. 9.2. Experimental Designs 9.2.1. Types of Designs. 9.2.2. Suitability of Designs. 10.

Research Proposal 10.1. Meaning and Significance of Research Proposal. 10.2. Preparation of Research Proposal. 11. Research Report 11.1. Meaning of Research Report. 11.2. Qualities of a good Research Report. 11.3. Part of a Research Report.

References:- 1. Thomas Jerry R. and Nelson, Jack K. Research Process in Physical Activity: Human Kinetics, Champaign, Illinois : 2001 2. Baumgartner, Ted A. and Clinton H. Strong conduction and Reading Research in Health and Human Performance. Brown and Benchmark, 1994. 3. Clarke, H.H. and Clarke. K. H Research Processes in Physical Education. 4. Englewood cliffs: N.J. Prentice Hall. 1984 5. Yoginder Prasad Sharma. Physical Education and Research Methodology: Reliance publishing House. New Delhi, 1997 6. Sharma, Sita Ram, Research Methodology in Physical education and sports: Book Enclave – Jaipur,1997. 7. Kamlesh, M.L. Methodology of research in Physical Education and sport : Metropolitan. New Delhi, 1986.

M.P.E.S. (SEMESTER-1ST)

PAPER-II PAPER-II (PHYSIOLOGY OF EXERCISE IN PHYSICAL EDUCATION AND SPORTS)

Max. Marks: 100
External Marks: 70
Internal Marks: 30
Time: 3 hours

UNIT-I

Other Physiological aspects of Exercise and Sports. 1.1. Concept of Physical Fitness and physical training, warming-up, conditioning and fatigue. 1.2. Physiological aspects of development of strength, endurance, skill, speed, agility and coordination.

UNIT-II

Sports and Nutrition: 1.1. Basic concept of a balanced diet. 1.2. Appropriate diet before, during and after athletic performance. 1.3. The effect of alcohol drugs and smoking on athletic performance. 2. Energy cost of various sports activity: 2.1. Definition of Energy cost, 2.2. Energy cost of various sports activities assessing them.

UNIT-III

Work and Environment: 1.1. Work capacity under different environment. Conditions (Hot, humid, cold & high altitude).

UNIT-IV

Obesity and Weight Control: 1.2. Definition of obesity. 1.3. Measurement of body fat by various methods (under water weight and skin fold measurement). 8 1.4. Body weight control 1.5. Positive and negative energy balance.

REFERENCE: 1. Guyton, Arthur C. Text Book of medical physiology. (Philadelphia: W.B. Saunders company, 1976). 2. Morehouse, L.E. and Miller, A.T. physiology of Exercise. (Saint Louis: The C.V. Mosby Company, 1976). 3. Karpovich, P.V. and Sinning, Wayne E. Physiology of muscular Activity (Philadelphia: W.B. Saunders Company, 1971). 7th Ed. 4. Bourne, Geoffrey H. The Structure and Function of Muscles: (London Academic Press 1973). 5. Astrand, P.O. and Rodahl, Karri. Text Book of work Physiology. (Tokyo McGraw Hill Kogakusha, Ltd. 1979). 6. Mathew, D.K. and Fox, E.L. Physiology Basis of Physical Education and Athletics (Philadelphia: W.B. Saunders Company, 1976). 9

M.P.E.S. (SEMESTER-1ST)
PAPER-III EDUCATION TECHNOLOGY IN PHY. EDUCATION AND SPORTS

Max. Marks: 100
External Marks: 70
Internal Marks: 30
Time: 3 hours

UNIT-I

- Concept of Class Management: Meaning & Principles
- Specific Principles (Strength of Class, Place and Time of Class, Uniform Class Formation, Safety Measures and Discipline
- Steps of Class Management
- Explanation of Different Teaching Methods for Presenting Material

UNIT-II

- Introduction, General and Specific Lesson Plan
- Principles of Lesson Plan
- Importance of Lesson Plan in Physical Education and Sports
- Meaning, Importance of Audio-Visual Aids.
- Steps of Audio-Visual Aids, Technology Devices in Physical Education and Sports (Adobe Premier, Underwater Camera, Various Measuring Tools, wind Gauges, Foul Indicators, Electronic Gadgets Adobe Photoshop, Microsoft Animation, Laser Beam, Technology, LCD Display) Power Point Presentation.

UNIT-III

- Introduction, Principles for Planning Facilities

- Types of Facilities
- Meaning and Types of Command
- Meaning, Need and Importance of Public Relation in Physical Education.
- Meaning, Objectives and Types of Budget
- Principles of Preparation of Budget

UNIT-IV

- The Need for Office for Physical Education Teacher, its Location and Set Up.
- Handling and Communication-Office Writing, Circulars, Notification and Invitation
- Writing Reports and display, Monitoring
- Concept, Need and Importance of Intramural and Extra Murals
- Types of Tournaments

Suggested Readings

1. Knap Clyde & E: Teaching Methods for Physical Education, MC Graw Hill book Co. Inc.
2. Tirunurayana, C&S Hariharan: Method in Physical Education (South India Press karalkudi India).
3. Kamlesh M.L. & Sangra, M.S.(1982)Methods in Physical Education, Parkash Brothers, Jullundur.
4. Two experienced Professors: Organization and Administration and Recreation in Physical Education, (1982) Prakash Brothers, Jullundhur.
5. Wakharkar D.C. (1967), Manual of Physical Education, Pearl Publicatons, Bombay.
6. Dhakraborty S.Sports Management Delhi Sports Publications, 1998.

M.P.E.S. (SEMESTER-1ST) PAPER-IV HEALTH EDUCATION

Max. Marks: 100

External Marks: 70

Internal Marks: 30

Time: 3 hours

UNIT-I

- Concept of Health: Meaning, Definition and its Different Dimensions
- Characteristics of Healthy Individual
- Concept of Health Education
- Meaning, Need & Importance
- Health Education its Relation with General Education
- Method and Medium of Health Education
- Health during Camp & Traveling
-

UNIT-II

- School Health Programme and Health Environment
- Academic Programme and Healthy Programme
- Health Insurance
- Factors Affecting Health and Wellness

UNIT-III

- First Aid and Safety Measures
- Prevention of Communicable, Diseases
- Nutrition Macro and Micro Nutrients

- Weight Management/Obesity Control

UNIT-IV

- Substance Abuse (Smoking, Tobacco, Chewing etc.)
- Health Organization and Administration Structure
- Health Organizations: World Health Organization (WHO) Red-Cross Society National Aids Control Organization (NACO), Mental and Emotional Health, Sex Education.

Suggested Readings

1. Daimple: Foundations of Health
2. Dehl: Healthful living, Mcgraw Hill
3. Physical Education and Health (Dr. A.K.Uppla, Dr. Gautam)
4. Physical and Health Education (Mr. V.D.Sharma & Granth Singh)

M.P.E.S. SEMESTER-1ST) PAPER-II (TECHNIQUES OF OFFICIATING & COACHING-I) (ELECTIVE)

Max. Marks: 100
External Marks: 70
Internal Marks: 30
Time: 3 hours

UNIT-I

- Concept of Officiating: Meaning, Importance and Principles
- Qualities and Duties of a Good Official
- Responsibilities of a Good Official
- Qualifications and Qualities of a Good Official. General Principles of Training Schedule
- Preparation of Training Schedule

UNIT-II

- Measurements, Marking, Equipments, Basic Fundamentals and Rules and Regulation of following Games
- a) Football (b) Basketball (c) Kabaddi (d) Badminton (e) Table Tennis
- Glossary of Football, Basketball, Kabaddi, Badminton and Table Tennis
- Outstanding Achievers, Trophies and Awards related with Football, Basketball, Kabaddi, Badminton and Table-Tennis
- Preparation of Score-Sheet of Football, Kabaddi, Badminton and Table Tennis.

UNIT-III

- Measurements, Marking, Equipments, Basic Techniques and Rules and Regulations of following:
- Track and Field Events of Athletics
- Preparation of Score-Sheet of Tract and Field Events.
- Lay out of Standard Track
- Glossary of Track and Field Events
- Achievers (outstanding) and Trophies and Awards Related with Track & Field Events.

UNIT-IV

- Principles and Methods of Selection of Players/Teams for Various Competitions.
- Fundamentals of Conditioning
- Methods of Conditioning & Training (Progressive Resistance)
- Exercise, Circuite Training, Fartlak, Interval, Weight Training.
- Warming up & Cooling Down
- Competition Strategy for Different Games.

Suggested Readings

1. Rules of games and Sports, YMCA, publishing house Madras.
2. John Bunn – The art of Officiating
3. Clalls – Athletic training

M.P.E.S. (SEMESTER-2ND)

PAPER-I (APPLIED STATISTICS IN PHYSICAL EDUCATION AND SPORTS)

Max. Marks: 100

External Marks: 70

Internal Marks: 30

Time: 3 hours

Unit-I

What is statistics? Definition and use in physical and sports. Research measure of central tendency – Mean, Median, Mode, Definition meaning, characteristics, uses and computation from ungrouped and grouped data. Percentiles and quartiles – Meaning, importance, computing percentile from grouped data. Measures of Variability – Range, Quartile deviation, standard deviation, Meaning, computation from grouped and ungrouped data. Use and characteristics of measures of Variability.

Unit-II

Normal Curve – Definition and Principles of normal curve, relation between binomial and normal curve, properties of normal curve, Skewness, Kurtosis, Standard Scale –Z, T, 6 sigma, 7 sigma. Statistics Inference: Reliability validity limits, factors affecting reliability, T, F and Z statistics, Null hypothesis, Type 1 and type II errors, Two and one tailed tests, significance level.

Unit-III

Sampling – Sample and stratified random sampling, standard error, sampling errors. Correlation Meaning, magnitude, computing Product Moment Method (Ungrouped and grouped data), rank difference method, level of significance for correlation coefficients.

UNIT_IV

One way and two way analysis of variance (introduction), LSD and Scheffer's test Research proposal and preparation of Research Report. Brief Introduction to Computer application

Reference: 1. Best, John W. Research in Education, New Delhi Prentice Hall of India (P) Ltd. 1963. 2. Clarke David H. and Clarke H. Harrison, research Process in Physical Education, recreation and Health, Englewood Cliffs, New Jersey Prentice Hall Inc. 1979. 3. Clarke H. Harrison, the Application of Measurement in Health and Physical Education New York, Prentice Hall Inc. 1979. 4. Good V. Carter and Scates Douglas E., Methods of research Application-Century, New York, 1954. 5. Maully George J., The science of Educational Research, New Delhi Eurasia Publishing House (P), 1963. 6. Robson M Brar T.S. and Uppal A.K. Thesis format, Gwalior, LNCPE, 1979.

M.P.E.S 2ND SEMESTER

PAPER-II BIOMECHANICS IN PHYSICAL EDUCATION & SPORTS

Max. Marks: 100

External Marks: 70

Internal Marks: 30

Time: 3 hours

UNIT-I

Introduction to Bio-mechanics

- Meaning and Concept of Biomechanics
- Importance of Biomechanics in Phy. Education & Sports.
- Approaches for Studying Movement.

Mechanical Concepts

- Concept of Motion & Its types
- Distance and Displacement, Speed, Velocity and Uniform Acceleration, Force and Momentum, Pressure, Mass and Weight, Gravity and Centre of Gravity, Work, Power, Energy.

UNIT-II

Body Balance and Stability Control

- Balance, Equilibrium and stability
- Controlling Balance in Static Positions
- Controlling Balance during Movements.
- Structural of Motor Action and Bio-mechanical Principles:
- Spin & its types
- Effect of Spin on speed of the ball on the surface
- Effect of Spin on speed of the ball in flight
- Magnus effect : its application in sports

UNIT-III

Newton's Law of Motion

- Law of Inertia – (Linear motion)
- Law of Moment of Inertia (Angular Motion)
- Law of Momentum (Linear Motion)
- Law of Angular Momentum (Angular Motion)
- Law of Action and Reaction (Linear Motion)
- Law of Action and Reaction (Angular Motion)
- **Aerodynamic drag forces**
- Skin Friction
- Profile Drag
- Effect of Stream line on drag
- Terminal Velocity

UNIT-IV

Forces and Movements

- Forces Action on a System
- Reaction Forces
- Friction Forces
- Centripetal and Centrifugal Forces
- Elastic Force
- Internal & External Forces
- Lever, Types of Lever and their Mechanical Advantage and Disadvantage with Special Reference to Physical Education and Sports
- Projectile of Motion:-Projecting for Horizontal and Vertical Distance

Suggested Readings

1. Gowitzke, BA and Milner M. 1998, Scientific Basis of human movement (3rd Edition)
2. Hay. J (1978) The Bio-Mechanics of Sports Techniques 2nd Edition Englewood Cliffs: Prentice Hall
3. Kriegerbaum & Bartheles, Biomechnis, Ny: Macmillan 1985.
4. Mood S.D. Beyond Biomechanics-New York – Taylor (1996)
5. Hall, S.J. Basic Biomechanics, London, Mosy 1991
6. Hay, J & Reid (1982) The Anatomical and Mechanical Basis of Human Motion.

M.P.E.S. (SEMESTER-2 ND)
PAPER-III II SPORTS PSYCHOLOGY IN PHYSICAL EDUCATION AND
SPORTS

Max. Marks: 100
External Marks: 70

Internal Marks: 30

Time: 3 hours

UNIT-I

1. Introduction of Sports Psychology: - Meaning of Sports Psychology - Scope of Sports Psychology - Development of Sports Psychology - Relationship of Sports Psychology with other Sports Sciences. 2. Importance of Sports Psychology for Physical Education and Coaches

UNIT-II

1. Cognitive Processes in Physical Activities: - Meaning of Cognition - Characteristics of cognitive processes in Sports 2 Sensation & Perception 3. Thinking 4. Imagination

UNIT-III

1 Memory, Mental activity of athlete, Mental activity and sports related goals. - Attention - Meaning - Dimension - Distractibility in Attention - Strategies to develop Attention 2. Motor Learning - Meaning of Motor Learning - Factors Affecting Motor Learning 6 - Motor development in various periods of childhood & adolescence.

UNIT-IV

1. Psychological aspects of Regulation - Meaning of Action Regulation. - Psychological Characteristics of Physical Activities - Action programme in different games and sports - Importance of action regulation 2. Personality - Meaning of personality - Personality traits of sports persons - Relationship of personality to sports performance - Personality differences among various sports group

REFERENCES

1. Alderman, R.B. Psychological Behaviour in Sports, (Philadelphia: London, Saunders Company, 1974).
2. But Susan Dorcas, Psychology of Spors (Network: Van Nastrand Reinhold Company) Edn. 2.
3. Cratty Brayant, J. Movement Behaviour and Motor Learning. (Philadelphia: Lea and Febiger, 1973)
4. Craty Bryant, j Psychology and Physical activity (New Jersey Englewood Cleffs, prentice Hall Inc. 1965)
5. Cratty Bryant, J. Psychological Proportion and Athletics Excellence, (New York: Movement publications Inc. 1978).
6. Gold Stejn and Joffery J. (Ed.) Sports Games and Play Social and Psychological view points (Lowerence Eribanm Associates, Publishers R.J. 1979).

M.P.E.S (SEMESTER-2ND)
PAPER-IV- PROFESSIONAL PREPARATION AND CURRICULUM DESIGN IN
PHYSICAL EDUCATION AND SPORTS (ELECTIVE)

Max. Marks: 100
External Marks: 70
Internal Marks: 30
Time: 3 hours

UNIT-I

- Concept of Physical Education – Meaning and Definition
- Foundations of Professional Preparation, Features of Indian Democracy with regard to Contribution of Physical Education & Sports
- Understanding of Foundations of Physical Education and Sports
- Meaning of Profession, Preparation, Curriculum and Design.
- Basis of Professional Preparation in Physical Education and Sports Sciences.

UNIT-II

- Forces and Factors Affecting Educational Policies and Programmes
- Function of the State Govt. in implementation of the Educational and Professional Preparation of Physical Education and Sports Programme.
- Professional Courses, Advancement Schemes of UGC and Professional Programmes,
- Role of Government and Institutes for Professional Preparation of in –Service
- Training Programmes in Physical Education & Sports Coaching.

UNIT-III

- In-Service Education of Professional Personnel Nature & Scope of Responsibility for in - Service Training Programme.
- Concept of Evaluation in Professional Preparation Programmes: Meaning, Importance, Process and its Applications.

UNIT-IV

- Concept of Curriculum Design and Development: Meaning, Need and Basic Principles.
- Factors Influences the Physical Education Curriculum Design.
- Conceptual Understanding of Physical Education Curriculum & Design.
- Historical Review of Professional Preparation in India, Japan & China.
- Concept of Curriculum Contents in Physical Education.
- Professional Preparation Curricular Programme.

Suggested Readings

1. Gupta Rakesh, Akhilesh, Santosh, Professional Preparation & Curriculum Design in Phy. Education.
2. Bhatia, K.K. and Narang, Principles of Education (Methods and Technique) Ludhiana Prakash Brothers Educational Publishers, 1991.
3. Bhatia, K.K.Kadian, KS Chanda, PC and Sharma (1990) Contemporary Problem of Indian Education, Jalandhar Praksh Brother Educational Publishers.
4. Graily, J.Byrant (1990) Career Potentials in Physical Activity New Jery, Prentice Hall in Englowood Cliffs USA.

M.P.E.S. SEMESTER 3RD

PAPER-I KINESIOLOGY IN PHYSICAL EDUCATION AND SPORTS

Max. Marks: 100

External Marks: 70

Internal Marks: 30

Time: 3 hours

UNIT-I

- Concept, Scope and Role of Kinesiology in Physical Education and Sports
- Anatomical Body Position
- Meaning and Factors Affecting the Range of Motion
- Characteristics of Skillful Performance
- Fundamental Movements of Joints and their Terminology
- Meaning of Planes, Aims and their Types
- Axis and Planes involved in Joints Movements
- Types of Muscular Contractions.

UNIT-II

- Structural Classification of Skelton Muscles
- Functional Classification of Skelton Muscles
- Slow & Fast Twitch Muscle Fibers
- Methods of Studying the Action of Muscles
- Tendon Action of two Joints Muscles
- Body Deformities and their Remedies (a) Kyphosis (b) Lordosis (c) Scolosis (d) Knock-knee (e) Flat-foot

UNIT-III

- Classification & Characteristics of Diarthrosis joints
- Structure & Ligamentous enforcement of shoulders Girdle and shoulder, Elbow and Ankle Joints
- The Attachment and Action of the Muscles of following Joints:
 - A) Shoulder Girdle and Shoulder:- Trapezius, Levator scapulae, Rhomboid, serratus anterior, Pactorlis minor and major, Deltoid, Supra spinatus, Teres major, Infra and Teres minor, Spinatus and Biceps.
 - B) Elbow Joint: Biceps Brachii, Pronator teres, Supinator, Triceps brachii, Brachialis, Pronator quadratus,
 - C) Ankle and Foot: - Gastrocnemius, Soleus, Tibialls Anterior and Posterior, Extensor Digitorum Longus, Extensor & Flexour Hallucis Longus,

UNIT-IV

- Structure & Ligamentous enforcement of Hip, Knee and Spinal Column joints, The Attachment and Action of the following muscles:
 - HIP Joint: Iliopseas, Pectineus, Rectusfemoris, Sartorius, Tensor fasciae latae, Glteus maximus, minimous and medius; Adductor Magnus, Longus and Brevis.
 - KNEE JOINT: Quadriceps-Rectus Femoris, Vastus Lateralis, Vastus Ingtermedius and vastus medialis, Hamstring Group-Biceps Femoris, Semimembranosus Semitendinosus, Sartorius, Gastrocnemius and Popliteus.
 - SPINAL COLUMN: Levator scapula; Rectus abdominis; Sternocleidomastoid; Obliquus Internus and externus abdominis.

Suggested Readings

1. Zatsiorsky V.M. (1998), Kinematic of Human Motion
2. Kelly DL (1971), Kinesiology, Fundamental of Motion
3. Lattiganus K.Others, Kinesiology () Scientific Basis of Human Motion
4. Jenson, C.R. & Schult, G.W., Applied Kinesiology: The Scientific study of human performance (2nd edition) (1977), New York MC Grahs.
5. Hawley, G. (1937), The Kinesiology of Corrective Exercise, Phildelphia Lea Anno Febiger,

M.P.E.S (SEMESTER-3RD)

PAPER-II- SPORTS MANAGEMENT IN PHYSICAL EDUCATION AND SPORTS

Max. Marks: 100

External Marks: 70

Internal Marks: 30

Time: 3 hours

UNIT-I

- Concept of Sports Management: Meaning, Definition and Importance
- Nature and Scope of Sports Management
- Aims and Objectives of Sports Management
- Guiding Principles of Sports Management
- Types of Management in Sports

UNIT-II

- Role of Manager in Physical Education and Sports
- Skills of Management :Technical Skill, Human Skills, Conceptual Skills, Personal Skill
- Qualities and Qualifications of Manager in Physical Education & Sports.
- Layout of Play Field and Out Door Sports Area, Care and Maintenance of Play Field.
- Need, Importance and Types of Sports Equipment
- Disposal of Sports Equipment

UNIT-III

- Concept of Supervision: Meaning, Need and Guiding Principles
- Qualities of a Good Supervisor
- Techniques of Supervision
- Aims and Objectives of Supervision
- Types of Facilities and their Maintenance

UNIT-IV

- Concept of Planning: Meaning, Definition, Need & Importance

- Principles of Planning Facility
- Steps Involved in Planning Process
- Role of Planning for Betterment in Physical Education & Sports
- Records & Registers: Meaning, Types, Importance and Maintenance
- Role of Physical Education Teacher in Maintaining Records and Register.

References

1. Kannp Clydo & E: Teaching Methods for Physical Education MC Graw Hill Book Co. Inc.
2. Tirunurayana, C&S Hariharjan: Method in Physical Education (South India Press Karalkudi India).
3. Kamlesh M.L. & Sangra, M.S. (1982): Methods in Physical Education Praksh Brothers, Jullundur.
4. Two experienced Professors: (1982) Organization and Administration and Recreation in Physical Education, Prakash Brothers, Jullundur.
5. Wakharkar D.C. (1967) Manual of Physical Education, Pearl Publications, Bombay,

M.P.E.S. (SEMESTER-3 RD)

PAPER-III (TESTS, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION AND SPORTS)

Max. Marks: 100
 External Marks: 70
 Internal Marks: 30
 Time: 3 hours

Unit-1

Measurement of Strength and Skill. 1.1. Kraus-Weber test and muscular fitness. 1.2. Instrument for measuring strength. 1.3. Roger's physical fitness index and suggested changes in the PFI Test. 1.4. Volleyball - Brady volleyball, Russel and Lange test. 1.5. Basketball - Johnson test, Knox test. 1.6. Soccer - McDonald test and Johnson test. 1.7. Badminton – Mille Volley test, Lockhart McPherson test. 1.8. Field Hockey Dribbling and Goal Shooting test, Mehrotra test battery in Hockey.

Unit-II

Measures of Posture and Anthropometry 2.1. Measure of Posture - IOWA Posture Test (Curelonh's) 2.2. Anthropometrics Measurements – 2.2.1. Girth Measurements – upper arm, fore arm, calf, chest. 2.2.2. Width Measurements – Biacromial chest, Illiocrystal, Bieficondylar (Femur and Humerus). Height Measurement – Stature and sitting height. 2.2.3. Somatotype – Scheldon's Technique an Inroduction.

Unit-III

Measurement of Social efficiency and Psychological Factors 3.1. Social Efficiency and Attitude Scales: 3.1.1. Cook socio-metric status index. 3.1.2. Edgerton Attitude Scale for high school

Freshman Boys. 3.1.3. McMohan Sportsmanship Questionnaire. 3.2. Psychological Factors: 3.2.1. Anxiety Scale-SCAI (Marten and Others) 3.2.2. Cattell's 16-PF Personality Questionnaire and Sybil B. G. 3.2.3. Self Motivation Inventory (SMF).

Unit-IV

4. Medical Examination 4.1. Testing personnel, Time and testing, Economy of testing, test records. 12 4.2. Preparation of report. 4.3. Construction of table groups. 4.4. Purpose of reporting justification and Particular phases of the Programme, worth of a change Methodology.

References:- 1. Barrow M. Harold and McGhee, Rosemary. A Practical approach to Measurement in Physical Education. (Philadelphia: Lea and Febiger, 1979). Edn. 3rd . 2. Bosco S. James and Gustafson F. William, Measurement and Evaluation in Physical Fitness and Sports. (New Jersey: Englewood Cliffs, Prentice hall, 1983). 3. Clarks, H. David and Clarke Hanison. H. Application of Measurement of Physical Education (Englewood Cliffs. Prentice Hall, Inc., 1987) Edn. 6. 4. Hubbard W. Alfred (Ed.) Research method in health Physical Education and Recreation 3rd revised Edn. (Washington: D.C. American Association of Health, Physical Education and Recreation. 5. Johnson L. Barry and Nelson K. Jack, Practical measurement for Evaluation in physical education, 1st Indian Reprint, (Delhi: Surjeet Publication, 1982) Edn. 3rd

M.P.E.S. SEMESTER 3RD

PAPER-IV YOGA EDUCATION

Max. Marks: 100
External Marks: 70
Internal Marks: 30
Time: 3 hours

UNIT-I

- Concept of Yoga: Meaning, Definition and Types of Yoga
- History and Development of Yoga in India
- Concept of Yoga in Modern World
- Effect of Yogic Exercise, Asanas, Kiryas and Pranayam on following Diseases: Asthma, Jaundice & Blood Pressure

UNIT-II

- Rules & Principles of Yoga
- Personal & Social Rules of Yoga (Yam & Niyam) Yogic Diet.
- Effect of Yogic Exercise, Asanas, Kiryas and Pranayam on the following : Diabetes, Low Back Pain, Arthritis, and Stress.

UNIT-III

- Astang Yog: Types and Steps
- Eight Paths of Yoga,

(i) Yam (ii) Niyam (iii) Asans (iv) Pranayam (v) Partihar (vi) Dhyan (vii) Dharma (viii) Samadhi (Internal & External System of Yoga and their Effect)

UNIY-IV

Yogic Methods

- Sat Karmas/Yogic Methods of Personal Hygiene/Six Methods of Purification or Cleaning Process and their Effects.

- (a) Neti: Sutra Neti, Jal Neti, Dugad Neti, Ghee Neti, Rubber Neti.
- (b) Dhوتي: Jal Dhوتي, Vastra Dhوتي, Dand Dhوتي, Kunnjal and Gajkarni
- (c) Basti: Susak Basti, Jal Basti
- (d) Nauli: Dakshin Nauli, Paschim Nauli, Madhya Nauli
- (e) Kapal Bhati
- (f) Taratak

References

1. Asana and Pranayam by Swami Kuvlayanand
2. Yoga for Health Happiness and peace by Yoga Acharya Prakash Dev.
3. Yoga Method of Re-integration by Alain Dawal
4. Yoga Personal hygiene by Shri Yogendra.
5. Yoga for everyman by demands Dubey.
6. Message and Medical Gymnastics by Marg vilace.
7. Water curve by Kellage
8. Message and remedials Gymnastics by trely.
9. Yog Shiksha/Yog Education by Dr. S.K. Mangal, Dr. Uma Mangal and SK Mana.

M.P.E.S. (SEMESTER-4 TH)

**PAPER-I SCIENTIFIC PRINCIPLE OF SPORTS TRAINING IN PHYSICAL
EDUCATION AND SPORTS**

Max. Marks: 100
External Marks: 70
Internal Marks: 30
Time: 3 hours

Unit-I

Introduction 1.1. Definition, aims and characteristics of sports training . 1.2. Principles of sports training specificity, overload, and reversibility. 1.3. Massed and distributed practice.

Unit-II

2. Training load and adaptation 2.1. Loading – Definition, internal and external load. 2.2. Components of load – Intensity of loading density of loading, duration and extent. 2.3. Progressive and fluctuation method of load. 2.4. Over load – Symptoms, causes and remedies.

Unit-III

3. Motor Fitness Variable 3.1. Physical Fitness Components – Definition, importance, classification and determining factors of speed, Endurance, Basic Endurance, Flexibility and Coordinative abilities. 3.2. Fitness and training. 3.3. Basic types of training – resistance training, circuit training, interval training, fartlek training, pressure training, plyometrics, pressure training.

Unit-IV

4. Technical and Tactical Training 4.1. Definition of techniques and tactics. 4.2. Aims of technical training. 4.3. Classification of technique. 4.4. Training tactics. 4.5. Principles of tactical preparation.

References:- 1. Hardayal, Singh, Science of sports Training, New Delhi : D.V.S. Publications, 1994 2. Dick, Frank , Science of Sports training, London : Henry Kimpton Publisher Ltd., 1980 3. Fox, Edward, Richard, Boners and merie foss. The Physiological basis for exercise and sport, U.S.A. : WCB, Brown and benchmark Publisher, 1993 4. Uppal, A.K. Principles of sports training friends, Publication: Delhi, 2001 5. Bompa, Tudor, Periodisation of strength, Veritas Publication, Canada : 1996 6. Paish, Wilf, Complete Manual of sports science, London : A and C Black Publisher Ltd., 1998. 7. Bompa, Tudor, O. periodization: Theory and methodology of training Champaign HumanKinetics Inc., 199

**M.P.E.S. (SEMESTER-4 TH)
PAPER-II SPORTS SOCIOLOGY**

Total Marks :100
Theory Marks :70
Sessional Marks :30

UNIT-I INTRODUCTION

Definition, Meaning, Nature, and scope of sports sociology. Sports as a social Phenomenon. Sociological analysis of sport and sport sociology as an academic discipline. Social factors (appearance, sociability, aspiration level and audience) and their influences on participation and performance in sports.

UNIT-II SPORT AND MICRO SOCIAL SYSTEMS.

Study of Sports groups. Group interaction, coMPEDtition& co-operation. Behavior characteristics, qualities and role of sports leaders. Sports and Culture.

UNIT-III SPORTS AND MACRO-SOCIAL SYSTEM

Relationship between sport and socializing institution (Family, School and educational System) Inter-relationship between and regulating instauration (Politics and economy). Sports and cultural institutions (religion and art). Socialization through games and sports.

UNIT-IV SPORTS AND CULTURE

Sports as a Social Institution. Sports as an element of Culture and a cultural product. Manipulative Socialization. Relationship between sport and culture.

UNIT-V SOCIAL FACTORS CONCERNING SPORT IN SOCIETY

Social stratification in sport and Sports as a stratification system. Discrimination and democratization in sport with special reference to socio-economic classes and women. Sports and aggression, violence in sports. Problem regarding professionalization and children in sports.

REFERENCE:-

1. Loy, John, W. Kenyan, Gerald S, & Mc Pherson, Barry D, “**Sports Culture and Society**” (Philadelphia Lea & Febiger, 1981).
2. Ball, Donald W. and Low John W “**Sport and Social order contribution to the sociology of sport**” (London, Addison wesely publishing co, Inc, 1975)
3. Loy John W. Mc Pherson, Barry D, and Kenyan Gerald, “**Sport and Social System**” (London, Addison wesely publishing company Inc, 1978)
4. Edward Larry “**Sociology of Sport**” (Ilihois: The Dorsey Press, 1973).

M.P.E.S. (SEMESTER-4TH)

Paper-III (Sports Medicine)

Max. Marks: 100

External Marks: 70

Internal Marks: 30

Time: 3 hours

Unit-I Introduction

Concept of Sports medicine, scope of sports medicine for Physical Educators and Coaches. Sports medicine in India. :Prevention of sports injuries, Role of Physical Educators and Coaches in prevention of sports injuries. Pre conditioning in jury prevention. Exercise and drives Static, Stretching exercise.Theapeutic exercise and their classification Special pre-conditioning exercise for knee,ankle,shoulders and thigh.

Unit-II Sports Injuries

Terminology and classification of common injuries, pathological changes in sprains, stain and contrusion.Regional injuries and their management, injuries of head, eye,ear,nose,back,shoulder,elbow,hand, abdomen, thigh, knee, leg and ankle. Rehabilitation procedure of sports injuries, Principles or rehabilitation of injuries, cryo therapy, Pressure bandage, hydrotherapy, electrotherapy, massage, therapeutic, massage.

Unit-III Physiology of exercise, short and long term effect of exercise on muscular tissues, Physiological Principles of development of strength, endurance, speed and flexibility. Heart role and exercise.Threshhold for training, effect on heart, the crediac reserve capacity. Blood pressure and exercise. Long ventilation during rest and exercise. Change in lig diffusion in muscular activity.

Unit-IV Socio-psychological factors to improve performance in sports, stress and sports competition. Socio-psychological stress and human performance in sports. The seley's theory of stress and its implication. The Psychology and Physiology of stress. Measurement of stress-Over training stress syndromes psycho-physiological training for stress and psycho-somatic fitness.Yoga therapy for psycho-physiological ailments. Yoga and psycho-physiological training of games and sports. Drug abuse and doping in sports and its effect on performance.

DISSERTATION (ELECTIVE)

Max. Marks: 100

External Marks: 70

Internal Marks: 30

ORGANZATION AND ADMINISTRATION IN PHYSICAL EUCATION

Max. Marks: 100

External Marks: 70

Internal Marks: 30

Unit – I: Organization and administration

- Meaning and importance of Organization and Administration in physical education
- Qualification and Responsibilities of Physical Education teacher and pupil leader
- Planning and their basic principles,
- Program planning: Meaning, Importance, Principles of program planning in physical education.
- Functions of Planning, organizing, staffing, directing, communicating, co-ordination, controlling, evaluating and innovating.

Unit- II: Office Management, Record, Register & Budget

- Office Management: Meaning, definition, functions and kinds of office management
- Records and Registers: Maintenance of attendance Register, stock register, cash register, physical efficiency record, Medical examination Record.
- Budget: Meaning, Importance of Budget making,
- Criteria of a good Budget, Sources of Income, Expenditure, Preparation of Budget.

Unit-III: Facilities, & Time-Table Management

- Facilities and equipment management: Types of facilities Infrastructure-indoor, out door.
- Care of school building, Gymnasium, swimming pool, Play fields, Play grounds
- Equipment: Need, importance, purchase, care and maintenance.
- Time Table Management: Meaning, Need, Importance and Factor affecting time table.

Unit-IV: Competition Organization

- Importance of Tournament,
- Types of Tournament and its organization structure - Knock-out Tournaments, League or Round Robin Tournaments, Combination Tournament and challenge Tournament.
- Organization structure of Athletic Meet
- Sports Event Intramurals & Extramural Tournament planning

References:

- Broyles, F. J. & Rober, H. D. (1979). *Administration of sports, Athletic programme: A Managerial Approach*. New York: Prentice hall Inc.
- Bucher, C. A. (1983). *Administration of Physical Education and Athletic programme*. St. Louis: The C.V. Mosby Co.
- Kozman, H.C. Cassidy, R. & Jackson, C. (1960). *Methods in Physical Education*. London: W.B. Saunders Co.
- Pandy, L.K. (1977). *Methods in Physical Education*. Delhi: Metropolitan Book Depo.
- Sharma, V.M. & Tiwari, R.H.: (1979). *Teaching Methods in Physical Education*. Amaravati: Shakti Publication.
- 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.

Practical Courses
M.P.E.S. (SEMESTER- 1ST AND 2ND)

Track and Field: Track and Field II: Officiating

Running Event

- Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks.
- Finishing Techniques: Run, Through, Forward lunging, Shoulder Shrug
- Ground Marking, Rules and Officiating

Hurdles:

- Fundamental Skills- Starting, Clearance and Landing Techniques.
- Types of Hurdles
- Ground Marking and Officiating.

Athletics: Jumping, Pole-vault Events

- Approach Run,
- Take off
- Clearance over the bar.
- Landing

Javelin & Discus throw

- Fundamental Skills- throwing Techniques.
- Types of throwing
- Ground Marking and Officiating.

Gymnastics: Floor Exercise

- Forward Roll, Backward Roll, Sideward Roll, different kinds of scales, Leg Split, Bridge, Dancing steps, Head stand, Jumps-leap, scissors leap.
- Vaulting Horse
- Approach Run, Take off from the beat board, Cat Vault, Squat Vault.

Swimming: Fundamental Skills

- Entry into the pool.
- Developing water balance and confidence
- Water fear removing drills.
- Floating-Mushroom and Jelly fish etc.
- Gliding with and without kickboard.
- Introduction of various strokes

- Body Position, Leg, Kick, Arm pull, Breathing and Co ordination.
- Start and turns of the concerned strokes.
- Introduction of Various Strokes.
- Water Treading and Simple Jumping.
- Starts and turns of concerned strokes.
- Rules of Competitive swimming-officials and their duties, pool specifications, seeding heats and finals, Rules of the races.

Shooting Fundamental Skills

- Basic stance, grip, Holding rifle/ Pistol, aiming target
- Safety issues related to rifle shooting
- Rules and their interpretations and duties of officials

Yoga:

- Surya Namaskara,
- Pranayams
- Corrective Asanas
- Kriyas
- Asanas
- Sitting
- Standing
- Laying Prone Position,
- Laying Spine Position

Indigenous sports:

Kabaddi: Fundamental Skills

- Skills in Raiding-Touching with hand, various kicks, crossing of baulk line, Crossing of Bonus line, luring the opponent to catch, Pursuing.
- Skills of Holding the Raider-Variou formations, Catching from particular position, Different catches, Luring the raider to take particular position so as to facilitate catching, catching formations and techniques.
- Additional skills in raiding-Bringing the antis in to particular position, Escaping from various holds, Techniques of escaping from chain formation, Combined formations in offence and defense.
- Ground Marking, Rules and Officiating

Kho Kho:

- General skills of the game-Running, chasing, Dodging, Faking etc.
- Skills in chasing-Correct Kho, Moving on the lanes, Pursuing the runner, Tapping the inactive runner, Tapping the runner on heels, Tapping on the pole, Diving, Judgement in giving Kho, Rectification of Foul.
- Skills in Running-Zig zag running, Single and double chain, Ring play, Rolling in the sides, Dodging while facing and on the back, fakes on the pole, fake legs, body arm etc, Combination of different skills.
- Ground Marking
- Rules and their interpretations and duties of officials.

Malkhambh and Light Apparatus:

- Lathi-Two counts exercises, Four Count exercises, eight count exercises, sixteen count exercises.

- Malkhamb-Salaami, Hold, Saadiudi, Bagaludi, Dashrangudi, Bagliudi, Veludi, Soydoro, Phirki, Padmasana, T.Balance, Pataka, Landing.
- Rope Malkhamb-Salaami, PadmasanaChadh, Katibandh1-2, Sadiadhi, Rikebpakkad, Rikebpagniadhi, Kamaradhi, Nakkikasadhi, Kamaradhi, Nakkikasadhi, Urubandhtedhi, Sadibagli, Do hatibagli, Kamarbandhbagli, nakkikasbagli, Dashrang, Hanuman pakad, Gurupakkad, various padmasana, Landing.

Badminton: Fundamental Skills

- Racket parts, Racket grips, Shuttle Grips.
- The basic stances.
- The basic strokes-Serves, Forehand-overhead and underarm, Backhand-overhead and underarm
- Drills and lead up games
- Types of games-Singles, doubles, including mixed doubles.
- Rules and their interpretations and duties of officials.

Table Tennis: Fundamental Skills

- The Grip-The Tennis Grip, Pen Holder Grip.
- Service-Forehand, Backhand, Side Spin, High Toss.
- Strokes-Push, Chop, Drive, Half Volley, Smash, Drop-shot, Balloon, Flick Shit, Loop Drive.
- Stance and Ready position and foot work.
- Rules and their interpretations and duties of officials.

Squash Fundamental Skills

- Service- Under hand and Over hand
- Service Reception
- Shot- Down the line, Cross Court
- Drop
- Half Volley
- Tactics – Defensive, attacking in game
- Rules and their interpretations and duties of officials.

Tennis: Fundamental Skills.

- Grips- Eastern Forehand grip and Backhand grip, Western grip, Continental grip, Chopper grip.
- Stance and Footwork.
- Basic Ground strokes-Forehand drive, Backhand drive.
- Basic service.
- Basic Volley.
- Over-head Volley.
- Chop
- Tactics – Defensive, attacking in game
- Rules and their interpretations and duties of officials.

Games Specialization

Kabaddi: Fundamental Skills

- Skills in Raiding-Touching with hand, various kicks, crossing of baulk line, Crossing of Bonus line, luring the opponent to catch, Pursuing.
- Skills of Holding the Raider-Variou formations, Catching from particular position, Different catches, Luring the raider to take particular position so as to facilitate catching, catching formations and techniques.

- Additional skills in raiding-Bringing the antis in to particular position, Escaping from various holds, Techniques of escaping from chain formation, Combined formations in offence and defense.
- Ground Marking, Rules and Officiating

Kho Kho:

- General skills of the game-Running, chasing, Dodging, Faking etc.
- Skills in chasing-Correct Kho, Moving on the lanes, Pursuing the runner, Tapping the inactive runner, Tapping the runner on heels, Tapping on the pole, Diving, Judgement in giving Kho, Rectification of Foul.
- Skills in Running-Zig zag running, Single and double chain, Ring play, Rolling in the sides, Dodging while facing and on the back, fakes on the pole, fake legs, body arm etc, Combination of different skills.
- Ground Marking
- Rules and their interpretations and duties of officials.

Badminton: Fundamental Skills

- Racket parts, Racket grips, Shuttle Grips.
- The basic stances.
- The basic strokes-Serves, Forehand-overhead and underarm, Backhand-overhead and underarm
- Drills and lead up games
- Types of games-Singles, doubles, including mixed doubles.
- Rules and their interpretations and duties of officials.

Table Tennis: Fundamental Skills

- The Grip-The Tennis Grip, Pen Holder Grip.
- Service-Forehand, Backhand, Side Spin, High Toss.
- Strokes-Push, Chop, Drive, Half Volley, Smash, Drop-shot, Balloon, Flick Shot, Loop Drive.
- Stance and Ready position and foot work.
- Rules and their interpretations and duties of officials.

Squash Fundamental Skills

- Service- Under hand and Over hand
- Service Reception
- Shot- Down the line, Cross Court
- Drop
- Half Volley
- Tactics – Defensive, attacking in game
- Rules and their interpretations and duties of officials.

Tennis: Fundamental Skills.

- Grips- Eastern Forehand grip and Backhand grip, Western grip, Continental grip, Chopper grip.
- Stance and Footwork.
- Basic Ground strokes-Forehand drive, Backhand drive.
- Basic service.
- Basic Volley.
- Over-head Volley.
- Chop
- Tactics – Defensive, attacking in game

- Rules and their interpretations and duties of officials.

Base Ball Fundamental Skills

- Player Stances – walking, extending walking, L stance, cat stance.
- Grip – standard grip, choke grip,
- Batting – swing and bunt.
- Pitching –
- Baseball : slider, fast pitch, curve ball, drop ball, rise ball, change up, knuckle ball, screw ball,
- Softball: windmill, sling shot,
- starting position: wind up, set.
- Fielding –
- Catching: basics to catch fly hits, rolling hits,
- Throwing: over arm, side arm.
- Base running –
- Base running: single, double, triple, home run,
- Sliding: bent leg slide, hook slide, head first slide.
- Rules and their interpretations and duties of officials.

Netball: Fundamental Skills

- Catching: one handed, two handed, with feet grounded, in flight.
- Throwing (different passes and their uses): one handed passes (shoulder, high shoulder, underarm, bounce, lob); two handed passes (push, overhead, bounce).
- Footwork: landing on one foot; landing on two feet; pivot; running pass.
- Shooting: one hand; two hands; forward step shot; backward step shot.
- Techniques of getting free: dodge and sprint; sudden sprint; sprint and stop; sprinting with change of speed.
- Defending: marking the player; marking the ball; blocking; inside the circle; outside the circle (that is, defending the circle edge against the pass in).
- Intercepting: pass; shot.
- The toss-up.
- Role of individual players
- Rules and their interpretations and duties of officials.

Cricket: Fundamental Skills

- Batting-Forward and backward defensive stroke
- Bowling-Simple bowling techniques
- Fielding-Defensive and offensive fielding
- Catching-High catching and Slip catching
- Stopping and throwing techniques
- Wicket keeping techniques

Football: Fundamental Skills

- Kicks-Inside kick, Instep kick, Outer instep kick, lofted kick
- Trapping-trapping rolling the ball, trapping bouncing ball with sole
- Dribbling-With instep, inside and outer instep of the foot.
- Heading-From standing, running and jumping.
- Throw in
- Feinting-With the lower limb and upper part of the body.
- Tackling-Simple tackling, Slide tackling.
- Goal Keeping-Collection of balls, Ball clearance-kicking, throwing and deflecting.

Hockey: Fundamental Skills

- Player stance & Grip

- Rolling the ball
- Dribbling
- Push
- Stopping
- Hit
- Flick
- Scoop
- Passing – Forward pass, square pass, triangular pass, diagonal pass, return pass,
- Reverse hit
- Dodging
- Goal keeping – Hand defence, foot defence
- Positional play in attack and defense.
- Rules and their interpretations and duties of officials.
- Rules and their interpretations and duties of officials.
- Ground Marking.

Softball Fundamental Skills

- Catching: one handed, two handed, with feet grounded, in flight.
- Throwing (different passes and their uses): one handed passes (shoulder, high shoulder, underarm, bounce, lob); two handed passes (push, overhead, bounce).
- Footwork: landing on one foot; landing on two feet; pivot; running pass.
- Shooting: one hand; two hands; forward step shot; backward step shot.
- Techniques of getting free: dodge and sprint; sudden sprint; sprint and stop; sprinting with change of speed.
- Defending: marking the player; marking the ball; blocking; inside the circle; outside the circle (that is, defending the circle edge against the pass in).
- Intercepting: pass; shot.
- The toss-up.
- Role of individual players
- Rules and their interpretations and duties of officials.

Volleyball: Fundamental Skills

- Players Stance-Receiving the ball and passing to the team mates,
- The Volley (Over head pass),
- The Dig(Under hand pass).
- Service-Under Arm Service, Side Arm Service, Tennis Service, Round Arm Service.
- Rules and their interpretations and duties of officials.

Hand Ball:

- Fundamental Skills-Catching, Throwing, Ball Control, Goal Throws-Jump Shot, Centre Shot, Dive Shot, Reverse Shot, Dribbling-High and Low, Attack and Counter Attack, Simple Counter Attack, Counter Attack from two wings and centre, Blocking, Goal keeping, Defense.
- Rules and their interpretations and duties of officials.

Basket ball: Fundamental Skills

- Player stance and ball handling
- Passing-Two Hand chest pass, Two hand Bounce Pass, One Hand Base ball pass, Side Arm Pass, Over Head pass, Hook Pass.
- Receiving-Two Hand receiving, One hand receiving, Receiving in stationary position, Receiving while jumping, Receiving while running.
- Dribbling-How to start dribble, How to drop dribble, High dribble, Low dribble, Reverse dribble, Rolling dribble.
- Shooting-Layup shot and its variations, one hand set shot, One hand jump shot, Hook shot, Free throw.

- Rebounding-Defensive rebound, Offensive rebound, Knock out, Rebound Organization.
- Individual Defensive-Guarding the man with the ball and without the ball.
- Pivoting.
- Rules and their interpretations and duties of the officials.

TEACHING LESSON OF TRACK & FIELD

- 05 Lesson (4 Internal 1 external).

TEACHING LESSON GAMES SPECIALIZATION

The Candidate has choice to select any one of the following games as the Specialization – II (Second best) in 2nd Semester.

- (kabaddi/ kho-kho/badminton/ table tennis/ tennis/ squash/ baseball/ volleyball/basketball/ cricket/ football/ handball/ hockey/ netball/ softball, etc) 05 Lesson (4 Internal 1 external)

M.P.E.S. (SEMESTER- 3RD AND 4TH)

Track and Field: Track and Field II: Officiating

Running Event

- Starting techniques: Standing start, Crouch start and its variations, Proper use of blocks.
- Finishing Techniques: Run, Through, Forward lunging, Shoulder Shrug
- Ground Marking, Rules and Officiating

Relays: Fundamental Skills

- Various patterns of Baton Exchange
- Understanding of Relay Zones
- Ground Marking
- Interpretation of Rules and Officiating.

Athletics: Jumping, Pole-vault Events

- Approach Run,
- Take off
- Clearance over the bar.
- Landing

Hammer & Shot put. Throw

- Fundamental Skills- throwing Techniques.
- Types of throwing
- Ground Marking and Officiating.

Team Games and Games of Specialization

Same as semester –I & II

INTERNSHIP 4 WEEK

PROJECT ORGANIZED

(MAXIMUM 4 STUDENT IN ONE ATHLETIC EVENT(SEMESTER I & III) OR ANY ONEGAME SEMESTER I- III)

- A) Athletic (any one events)
- B) Games Specialization(any one Game)

OFFICIATING LESSON OF TRACK & FIELD & GAMES SPECIALIZATION

- 05 Lesson each (4 Internal 1 external)

CLASS ROOM TEACHING PRACTICES:

- *Teaching practice lessons 5 lessons in class-room . (4 Internal 1 external)*
- Teaching lessons as per selected topics of B.P.ED level. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.