DEPARTMENT OF PHYSICAL EDUCATION
ALIGARH MUSLIM UNIVERSITY, ALIGARH

Semester System

Syllabus of M.P.Ed. Course
for the session 2013–2014

(Semester-I, II, III & IV)

(TWO YEAR) DEGREE COURSE
(Departmental Test Course)
Title of Paper: RESEARCH METHODS AND STATISTICS-I

Objectives:
- Provide understanding of research, approach to research and theoretical framework.
- Learn about sources for researches.
- Scientific skills and knowledge to dealing with ethical issues and complexity of problems.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Duration: 2 Hrs.

Paper Code: PEM-7005

UNIT-I

1.1 Introduction:
1.1.1 Meaning and Definition of Research.
1.1.2 Nature and Characteristics of Research.
1.1.3 Needs of research in Physical Education.
1.1.4 Classification of Research – Basic and Applied.
1.1.5 Major steps in Research.

1.2 Developing the Problem:
1.2.1 Identifying the Research Problem
   (i) Locating the Research Problem
   (ii) Criteria of Selecting the Research Problem

UNIT-II

2.1 Survey of Related Literature:
2.1.4 Need for Surveying Related Literature
2.1.5 Purpose for Surveying Related Literature
2.1.6 Kinds of Related Literature
2.1.7 Literature Sources – Primary and Secondary
2.1.8 Steps in Literature Search.

UNIT-III

3.1 Design
3.1.1 Experimental Designs.
3.1.2 Primary and Secondary sources of Data
3.1.3 Sampling, types and size of sampling.
3.1.4 Research Report.

Ethical Issues in Research
3.1.5 Areas of Scientific Dishonesty
3.1.6 Ethical Issues regarding Copyright
3.1.7 Responsibilities of Researchers
3.1.8 Working Ethics with Faculty
3.1.9 Protecting Human Participants

Books Recommended:
2. Bose N.M., Research Methodology (Sher Niwas Publication, Jaipur (India) 2005).
7. Fern F. Adward, Advanced focus group research (Saye Publication, New Delhi, 2001).
8. Silverman David, Doing qualitative research (Saye Publications, New Delhi, 2000).
Title of Paper: **KINANTHROPOMETRY – I**

**Objectives:** To develop reflective and critical thinking regarding the role of body proportion, body composition and age related changes with reference to sport performance and their measurements.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Max. Marks</th>
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<th>Sessional</th>
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<tr>
<td>04</td>
<td>100</td>
<td>75</td>
<td>25</td>
<td>2 Hrs.</td>
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**UNIT-1**

**Introduction and Application of Kinanthropometry**
1.1 Musculo-skeletal Anatomy in Kinanthropometry.
1.2 Indices and Customization of Kinanthropometry
1.3 Anthropometric Instruments: Tools and General Techniques.
1.4 Techniques for Assessing Body Composition.

**UNIT-II**

**Growth, Development, and Maturity**
2.1 The Kinanthropometric Profile.
2.2 Concepts of Chronological & Skeletal Ages.
2.3 Prediction of Adult Height; and Peak Height Velocity
2.4 Application of Anthropometry to Health & Body Composition.

**UNIT-III**

**Concepts in Physique Development**
3.1 Selected Clinical Conditions Affecting Physique.
3.2 Relationship of Physical Activity to Growth and Maturation
3.3 Physique in Different Sports Activities.
3.4 Contemporary Issues in Kinanthropometry.

**REFERENCES:**

**Some useful websites:**
http://www.pecentral.org/
http://home.hia.no/~stephens/exphys.htm
http://www.tahperd.sfasu.edu/links3.html
http://www.sportsci.org/
http://www.gssiweb.com/
DEPARTMENT OF PHYSICAL EDUCATION  
SYLLABUS (SESSION: 2013-14)  
MASTER OF PHYSICAL EDUCATION (M.P.Ed.)  

Semester: 1st  

Title of the Paper: TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION-I  

Objectives:  
- Highlight the application of test, measurement and evaluation in physical education.  
- To develop practical competency in conducting motor ability and physical fitness test.  
- To develop practical competency in conducting sport skills test.  

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Duration: 2 Hrs.  
Paper Code: PEM-7007  

UNIT-I  
1.1 Historical Review of Test and Measurement.  
1.2 Meaning of Test, Measurement and Evaluation and its Functions.  
1.3 Importance of Test, Measurement and Evaluation in the field of Physical Education.  
1.4 Principles of Test, Measurement an Evaluation in Physical Education.  

UNIT-II  
Test and Measurement of Organic Functions, Motor Abilities and Motor Fitness Test:  
2.1 Meaning, Definition and classification of Test.  
2.2 Health Relates Tests: Cooper’s 12 minutes continuous run/walk test, Turtle pulse ratio test, Harvard step test.  
2.3 Physical Fitness Test: National physical efficiency test, AAHPER D Fitness test.  
2.4 Motor Fitness and Motor Ability Tests: JCR Test, Indiana Motor Fitness test, Barrow General Motor ability test, Scott Motor ability test.  

UNIT-III  
Sports Skill Test:  
3.1 Volley ball:- Brady Volleyball test, Russel large volleyball test.  
3.2 Basketball:- Johnson Basketball ability test, Knox Basketball ability test.  
3.3 Soccer:- McDonald soccer ability test, SAI football skill test.  
3.4 Field Hockey:- Smithal French field hockey test, SAI Hockey skill testing.  
3.5 Badminton:- Miller Volley test, Lock-hart & McPherson Badminton test.  

Books Recommended:  
Title of the Paper: **SCIENTIFIC PRINCIPLES OF SPORTS TRAINING-I**

**Objectives:** To expand the knowledge base and also extend its implacability in field.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Duration: 2 Hrs.  
Paper Code: PEM-7008

**UNIT-I**

**Introduction:**
1.1 Meaning and definition of Sports Training, Coaching and Conditioning.  
1.2 Aim, Tasks and characteristics of Sports Training.  
1.4 Principles of Sports Training.

**UNIT-II**

**Training load and Motor Abilities:**
2.1 Training load: Components of training load, Super compensation; adaptation process; Laws of adaptation of load. Overload: Causes and symptoms, Methods of tackling overload.  
2.2 Strength: Definition and Importance, factors determining strength, classification of strength.  
2.3 Methods of Improving Strength.  
2.4 Endurance: Definition and Importance, factors determining Endurance, classification of Endurance.  
2.5 Methods for Improving Endurance.

**UNIT-III**

**Motor Abilities and their Development:**
2.1 Speed: Definition and Importance, factors determining Speed. Forms of Speed.  
2.2 Methods for Improving Speed.  
2.3 Flexibility: Definition and Importance, factors determining Flexibility, classification of Flexibility.  
2.4 Methods for improving flexibility.  
2.5 Coordinative Abilities: Definition and Importance, factors determining Coordinative Abilities, classification of Coordinative Abilities.  
2.6 Methods for Improving Coordinative Abilities.

**Books Recommended:**
Title of Paper: RESEARCH METHOD AND STATICS-II

Objectives:
- To expand knowledge base and extend its implacability in the Research.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Duration: 2 Hrs.

UNIT-I
1.1 Need of Statistics in Physical Education.
1.2 Nature of Data and its types.
1.3 Graphical representation of Data: Guidelines for constructing the graph. Line Diagram, Pie Diagram and Bar Diagram, Frequency Polygon, Frequency Curve, Histogram, Ogive.
1.4 Measures of Central Tendency: Mean, Median, Mode, Percentiles, Deciles & Quartiles.
1.5 Measures of Dispersion: Range, Mean Deviation, Quartile deviation, Standard Deviation, Coefficient of Variation.

UNIT-II
2.1 Normal Distribution: Characteristics of Normal Curve, Skewness & Kurtosis, Uses of Normal Distribution.
2.2 Developing norms in the form of grading. Percentile Scale, T-Scale, Z scale, 6 Sigma, 7 Sigma.
2.3 Testing of Hypothesis – Region of Acceptance & Region of Rejection, Null & alternative Hypothesis, Level of Significance, Type I & Type II errors, One tail & Two tail test.

UNIT-III
3.1 t test, z-test
3.2 Analysis of variance & Post hoc test
3.3 Correlation Co-efficient
3.4 Partial correlation
3.5 Chi square
3.6 Multiple Correlation

Books Recommended:
6. Gupta B.V.: Methodology of research in physical education and sports, Managing Director, Netaji Subhash Market, New Delhi, (1994).
Title of Paper: **KINANTHROPOMETRY – II**

**Objectives:** To develop reflective and critical thinking regarding the role and nature of somatic growth, body composition and body types with reference to sport performance and methods of measurements.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Duration: 2 Hrs.  
Paper Code: PEM-8006

**UNIT-1**

**Somatic Growth and Development of Physique.**

1.1 Definition and Context; Understanding Human Variability and Types of Studies.
1.2 Principles and Methods of Measurement and Observation in Kinanthropometry.
1.3 Postnatal Growth: Scammon’s Curve
1.4 General Regulation of Growth & Maturation

**UNIT-2**

**Models of Body Composition.**

2.1 Ratios & Proportions in Kinanthropometry.
2.2 Levels and Multi Component Models of Body Composition.
2.3 Changes in Body Density and Total Body Water during Growth.
2.4 Concept of Chemical Maturity.
2.4 Growth in Fat-free Mass, Fat Mass, & Percent Fat.

**UNIT-3**

**Development of Physique**

3.1 Concept of Somatotype
3.2 Methods in the Assessment of Physique
3.3 Somatotyping Children & Adolescents
3.4 Changes in Somatotype during Growth.

**References:**

9) Williams & Wilkins.

**Some useful websites:**

http://www.pecentral.org/  
http://home.hia.no/~stephens/exphys.htm  
http://www.tahperd.sfasu.edu/links3.html  
http://www.sportsci.org/  
http://www.gssiweb.com/
Title of the Paper: **TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION-II**

Objectives:
- Developing technical skills in constructing various type tests and establishing scientific authenticity.
- Developing technical skill related to physical and psychological measurements.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Duration: 2 Hrs.  
Paper Code:PEM-8007

**UNIT-I**

Selection and Construction of Tests:
1.1 Criteria of Test Selection-Scientific Authenticity, (Reliability, Validity, objectivity, norms)  
Administrative Feasibility and Educational application. Classification of Tests-Standardised and teacher made tests (objective and subjective tests).
1.2 Construction of Tests-knowledge tests (Written tests) and skill tests.
1.3 Suggestions for administering tests. Medical Examination, Testing Personal. Time and testing, Economy of testing. Test records, preparation of reports, construction of table groups, purpose of reporting, justification of particular phases of the programme, worth of a change in methodology.

**UNIT-II**

Posture:
2.1 Measures of Postures, Anthropometry Social Efficiency and Psychological Factors.
2.2 Measures of Postures-IOWA Postures Test (Cureton’s).
2.3 Anthropometric Measurements:
   (i) Girth Measurement-Upper arm, forearm, calf, chest.
   (ii) Width Measurement-Biccromial chest illiocrestal, Biepicondylar (Femur and Humerus).  
   Height Measurement-Stature and Sitting height.

**UNIT-III**

Psycho-Physical Measurement:
3.1 Somatotype-Sheldon’s technique-an-introduction  
   (i) Social Efficiency  
   (ii) Socio-metric techniques: Introduction  
3.2 Psychological Factors:
   (i) Anxiety Scale-Speil-berger’s Competitive State-Anxiety Scales.  
   (ii) Eysenck Personality Inventory (H.J. Eysenck and Sybil B.G. Eysenck).

Books Recommended:
Title of the Paper: **SCIENTIFIC PRINCIPLES OF SPORTS TRAINING-II**

**Objectives:** To expand the knowledge base and also extend its implacability in field.

**Credits:** 04  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Duration:** 2 Hrs.

Paper Code: PEM-8008

**UNIT-I**

**Technique and Tactics:**
1.1 Definition of technique, skill and style, characteristics of technique.  
1.2 Phases of skill acquisition, characteristics and implications in various phases.  
1.3 Methods of techniques training.  
1.4 Strategy and Tactics: Definition, aim and importance, difference between strategy and tactics.  
1.5 Classification of tactics.  
1.6 Attack: Classification & Principles of Attack.  
1.7 Defense: Classification & Principles of Defense.

**UNIT-II**

**Periodisation:**
2.1 Meaning and aim of periodisation, Top form (Peaking) and its determining factors.  
2.2 Types of periodisation: Single, Double and Multiple periodisation.  
2.3 Aims and contents of various periods: Preparatory period, competition period, Transitional period.  
2.4 Competition: Definition, meaning and importance.  
2.5 Classification of competition: Build-up, Major, Main competitions.  
2.6 Special preparation for competition.

**UNIT-III**

**Planning:**
2.1 Meaning, definition and importance of planning.  
2.2 Types of Plan: Long term and short term plans.  
2.3 Principles of Planning.  
2.4 Steps in formulation of yearly plan.  
2.5 Selection process, criteria of selection, steps of selection.

**Books Recommended:**
Title of Paper : **EXERCISE PHYSIOLOGY-I**

Objectives:
- To expand the knowledge base in the field.

**Credits: 04**  
**Max. Marks: 100**  
**Semester Exam: 75**  
**Sessional: 25**  
**Duration: 2 Hrs.**  
**Paper Code: PEM-9005**

**UNIT-I**

**Exercise Physiology:**
1.1 Exercise Physiology and its role in the field of physical Education and Sport.
1.2 Conditioning & Training with their physiological implications.
1.3 De-training, Re-training and maintenance of training effects.
1.4 Biochemical Changes.
1.5 Cardio respiratory changes.
1.6 Exercise and training for health and fitness.

**UNIT-II**

**Nervous Control of Muscular Activity:**
2.1 Neurons and motor unit
2.2 Bio-electric potentials
2.3 Neuro-muscular junction and transmission of nerve impulse across it.
2.4 Proprioception and Kinesthetic sense – tone, posture and equilibrium.
2.5 Molecular Structure of muscle fiber and sliding filament theory.
2.6 Fast twitch and slow twitch muscle fibers.

**UNIT-III**

**Exercise and Training in Females:**
3.1 Body size and Body composition
   - Body Weight
   - Body fat
   - Possible Body structure Difference
   - Age and Body size difference
3.2 Strength
   - Strength Differences
   - Effect of Weight training
3.3 Physiological changes following training.
3.4 Gynecological considerations
   - Mensuration
   - Pregnancy
3.5 Guidelines for female participation in Sports.

**Books Recommended:**
Title of the Paper: **SPORTS MEDICINE-I**

**Objectives:**
- Enrich the understanding of injuries in sport, its prevention and management.
- Develop the skills and understanding of corrective exercises and modalities to ensure fastest recovery.

**UNIT-I**

**Introduction:**
1.1 Concept of Sports Medicine, its aim and objectives, need & scope of sports medicine in Physical Education.
1.2 Classification of Sports injuries, prevention and prophylaxis of sports injuries, Assessment of Sports Injuries.
1.3 Common skin problems, sun damage during sports completions hypothermia, contact dermatitis pediculosis, scabies, its facts.

**UNIT-II**

**Sports Medicine (Problems and Management):**
2.1 Low back problems and management; Stretching and strengthening exercise for back problems.
2.2 Advantages and Disadvantages of exercises before, during and after pregnancy.
2.3 Psychological aspects of Sports Injuries.

**UNIT-III**

**Therapeutic Modalities and Procedure of individual Modalities:**
3.1 Hydro collateral Packs (Hot and Cold) Hydrotherapy (Whirlpool).
3.2 Diathermy, Ultrasound, Electrical muscle stimulation, combination of ultrasound and Electrical muscle stimulation.
3.3 Cry therapy and Compression, Cryokinetics, cold spray, contrast bath, Paraffin bath.
3.4 Ultra violet rays diapulse and laser therapy.

**Books Recommended:**
Title of the Paper: **SPORTS PSYCHOLOGY-I**

Objectives:
- To expand the knowledge base and also extend its implacability in field.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Duration: 2 Hrs.
Paper Code: PEM-9007

**UNIT-I**

1.1 Meaning, nature and scope of Sports Psychology.
1.2 Development of Sports Psychology in India & the World.
1.3 Importance of Sports Psychology to Physical Education teachers and coaches.
1.4 Psychological Principles and their application in sports.

**UNIT-II**

Psychological Considerations of Young Athletes:
2.1 Psychological peculainties of Adolescents.
2.2 Inter-play of heredity and environment.
2.3 Role of family School and Society in participation of children in sports.
2.4 Psychological problems of young athletes.
2.5 Methods in Sports Psychology.
- Experimental Method, Questionnaire method, interview.
- Methods, case study method.

**UNIT-III**

Cognitive Process in Sports:
3.1 Meaning and mechanism of cognitive process.
3.2 Factors influencing cognitive process in sports.
3.3 Role of sensation and perception.
3.4 Importance of attention, concentration, thinking anticipation and memory.

Books Recommended:
5. K.K. Verma, Tandons Sports Psychology for Physical Education.
Title of Paper: SPORTS BIOMECHANICS-I

Objectives:
- Understanding of Biomechanics and its application.
- Overview and learn about mechanical concepts and its application.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Duration: 2 Hrs.
Paper Code: PEM-9008

UNIT-I

1.1 Introduction of Biomechanics:
   a) Definition, Explanation, need and importance of Sports Biomechanics.
   b) Contribution of Sports Biomechanics in the filed of Sports Achievement.

1.2 Newton’s Laws of Motion:
   (a) Law of Inertia – Its Principles and Application.
   (b) Law of Acceleration – Its Principles and Application.
   (c) Law of Reaction – Its Principles and Application.

UNIT-II

2.1 Lever:
   (a) Classification of Levers, Lever Arms.
   (b) Principles of lever, Mechanical advantage.
   (c) Mechanical ratio.
   (d) Movement of point on lever, Human body levers.
   (e) Concept of theoretical and actual mechanical advantage.

2.2 Force:
   (a) Definition and Explanation.
   (b) Effects of Forces.
   (c) Properties of Force.
   (d) Internal and External Forces.
   (e) Centripetal and Centrifugal Forces.

UNIT-III

3.1 Friction:
   (a) Definition and Explanation
   (b) Type of Friction: Static and Kinetic
   (c) Coefficient of Static and Kinetic Friction.
   (d) Gravitational Force

3.2 Fluid Dynamics:
   (a) Air and water Resistance
   (b) Buoyancy Force and Flotation
   (c) Introduction of Drag
   (d) Introduction of Magnus Effect

Books Recommended:
Title of Paper: **EXERCISE PHYSIOLOGY-II**

Objectives:
- To expand the knowledge base and also extend its implacability in field.

**Credits: 04**
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Duration: 2 Hrs.

Paper Code: PEM-X005

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### UNIT-I

**Bio-energetic and measurement of energy cost**

1.1 ATP: its structure, source and functions.
1.2 Aerobic and anaerobic systems during rest and exercise.
1.3 Replenishment of energy stores.
1.4 Recovery of lactic acid from blood and muscle.
1.5 Recovery Oxygen.
1.6 Measurement of energy cost of exercise.

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### UNIT-II

**Nutrition and exercise performance**

2.1 General nutrients of the diet and their proportion in it.
2.2 Food Requirement of athletes engaged in different sports activities.
2.3 Appropriate Diet Before, During and After Sports Activities.
2.4 Ergogenic aids.
2.5 Exercise prescription.
2.6 Obesity and weight control.

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### UNIT-III

**Exercise and Environment:**

3.1 Effects of high altitude on physical performance.
3.2 Altitude acclimatization.
3.3 Exercise in Heat and Heat Disorders.
   - Exercise in Heat
   - Heat Disorders in Athletics and Other Sports.
3.4 Prevention of Heat Disorders
   - Salt and water replacement
   - Acclimatization to Heat
3.5 Exercise and Temperature Regulation in hot and cold climate.

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**Books Recommended:**

Title of the Paper: SPORTS MEDICINE-II

Objectives:

- To extend situation based learning experience related to:-
  - Sports rehabilitation
  - Sports injuries and First-Aid
  - Legal issues in doping
  - To develop practical skills and understanding of massage for rehabilitative purposes.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Duration: 2 Hrs.
Paper Code: PEM-X006

UNIT-I

Rehabilitation-Meaning, Goals, Factors affecting its programme:
1.1 Principles of Rehabilitation in Sports.
1.2 Means and methods of rehabilitation in Sports.
1.3 Testing methods of Progress in injured Sports Persons.
1.4 Rehabilitation Programme.
1.5 Application of Proprioceptive Neuromuscular Facilitation (PNF).

UNIT-II

Emergency care and Athletic first Aid:
2.1 First-Aid Principles.
2.2 Diagnosis of injuries, signs and symptoms of dangerous illness/injuries.
2.3 Means and Methods for transportation of a injured player.
2.4 First Aid
   (i) Loss of consciousness
   (ii) Drawing
   (iii) Bleeding from a wounds, Nosebleeds
2.5 Athletic Bandages and Massage-its classification, indication and contra indication, General Principle of massage.

UNIT-III

Legal liability of injuries and Doping:
3.1 Supervision of injured Sports Persons.
3.2 Instruction, First Aid, Medical Assistance.
3.3 Reporting form of student status.
3.4 Meaning, classification of doping, its side effects.
3.5 Legal liability of Coach regarding doping.

Books Recommended:
Title of the Paper: **SPORTS PSYCHOLOGY-II**

Objectives:
- To expand the knowledge base and also extend its implacability in field.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Duration: 2 Hrs.

**UNIT-I**

Psychological Aspects of Motor Learning:
1.1 Motor learning definition and phases of learning physical skills.
1.2 Laws of learning.
1.3 Factors affecting motor learning.
1.4 Plateau: Causes and remedies.
1.5 Motivation: Meaning, classification, role of motivation in sports, Factors affecting achievement motivation, Motivation techniques.
1.6 Goal setting: Importance, Types of goals, process of goal setting.

**UNIT-II**

Personality and Sports Performance:
2.1 Definition, types and important personality traits.
2.2 Concept of Athletic Personality.
2.3 Personality traits of elite athletes.
2.4 Sports participation and personality development.

Emotional Process and Sports Performance:
2.5 Definition and types of emotion, Role of Emotion in Sports.
2.6 Emotional arousal and Sports Performance.
2.7 Yerkes Dodson law.
2.8 Psychologica manifestations of prestart states: Competitive readiness, pre-start fever, pre-start apathy.

**UNIT-III**

Psychological Aspects of Sports Performance:
3.1 Determinant factors of competitive behaviour.
3.2 Anxiety, Fear, frustration, Aggression, Conflict and their effects on performance.
3.3 Psychological stress and its management: Causes and symptoms, Psychoregulatory techniques.
3.4 Effects of Audience on Sports performance, Audience behaviour, Types of Audience.

**Books Recommended:**
Title of Paper: SPORTS BIOMECHANICS-II

Objectives:

- Basic concept of Biomechanics and Sports Biomechanics.
- Overview the mechanical (Kinematic) descriptions.
- Learn about principles and Biomechanics on projectile motion.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Duration: 2 Hrs.

UNIT-I

1.1 Concept of Biomechanical Analysis:
   1.1.1 Qualitative and Quantitative Analysis
   1.1.2 Overview of Kinematics and Kinetic Analysis of Human motion.
   1.1.3 Introduction to the Deduction and Inductive type of Mechanical Analysis.

1.2 Introduction to Mechanical Analysis:
   1.2.1 Introduction to Photographic Analysis System (data acquisition and data reduction).
   1.2.2 Introduction to Electronic Analysis System (data acquisition and data reduction).

UNIT-II

2.1 Introduction to Mechanical Analysis:
   2.1.1 Components of Linear Displacement.
   2.1.2 Measurements of Linear Displacement.
   2.1.3 Components of Angular Motion (Definition of Radian, Finding the conversion factor between Degree and Radians).

2.2 Kinematics Analysis:
   2.2.1 Analysis of Linear speed.
   2.2.2 Analysis of Linear velocity – Average and Instantaneous.
   2.2.3 Analysis of Linear Acceleration – Average and Instantaneous.

UNIT-III

3.1 Projectile:
   3.1.1 Definition and Explanation of Projectile and free falling bodies.
   3.1.2 Analysis of vertical projection.
   3.1.3 Calculation of Time of Flight and Height
   3.1.4 Analysis of Horizontal Projection / Trajectory.
   3.1.5 Calculation of Time of Flight, Maximum Height and Range of Flight.

3.2 Projectile from different surfaces:
   3.2.1 Calculation of Time of Flight.
   3.2.2 Calculation of Range of Flight.
   3.2.3 Calculation of Maximum Height.

Books Recommended:
SYLLABUS

Practical: Proficiency in Games & Sports

DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2013-14)
MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester-1st

Title of the Paper: Training and Application of Advance Skill in Hockey

Objectives: To provide progression from low ability level to advance skills with the ultimate goal of developing good hockey players.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-7071

UNIT-I

Basic Skills Development:
1.1 Hitting: Straight hit, Wrong foot hit.
1.2 Stopping: Straight, Reverse, Left side, Right side.
1.3 Pushing: Straight push, Wrong foot push, Reverse push.
1.4 Scooping: Straight Scoop, Push Scoop.

UNIT-II

Advance skills Development:
2.1 Dribbling
2.2 Tackling
2.3 Dodging
2.4 Shooting

UNIT-III

Functional Training Programme:
3.1 Goal-Keeper
3.2 Full backs
3.3 Half Backs
3.4 Forwards

Books Recommended:
Title of the Paper: **Training and Application of Advance Skills in Football**

**Objectives:** To provide progression from low ability level to advance skills with the ultimate goal of developing good football players.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Paper Code: PEM-7072

**UNIT-I**

1.1 (a) Various types of passes.  
(b) Various types of reception.  
1.2 Revision of Volley and Dribbling.  
1.3 Revision of receive Dodging (Straight, Zigzag, Turning, Dodging, Feining)

**UNIT-II**

2.1 Heeding  
(a) Diving Heeding  
(b) Deflection Heeding  
2.2 Receive  
(a) Chest receive and Deflection  
(b) Head Receive

**UNIT-III**

3.1 Tactics of Attack  
3.2 Tactics of Defence

**Books Recommended:**

6) http://www.fifa.com
Title of the Paper: **Training and Application of Advance Skill in Judo**

**Objectives:** To provide progression from low ability level to advance skills with the ultimate goal of developing good judo players.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Paper Code: PEM-7073

**UNIT-I**

1.1 Ukemis and Kuzushi  
1.2 Te Waza  
1.3 Koshi Waza  
1.4 Ma Sutami Waza  
1.5 Yoko Sutami Waza

**UNIT-II**

2.1 Kara gatame  
2.2 Tata Shio gatame  
2.3 Yoko Shio gatame  
2.4 Kata Gatame

**UNIT-III**

3.1 Waki gatame  
3.2 Juji gatame  
3.3 Ude gatame  
3.4 Hiza gatame

**Books Recommended:**

DEPARTMENT OF PHYSICAL EDUCATION  
SYLLABUS (SESSION: 2013-14)  
MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

**Semester-I**

**Title of the Paper:** Training and Application of Advance Skill in Track and Field

**Objectives:** To develop mastery of skills and enhance the teaching ability of the students.

**Credits:** 4  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Paper Code:** PEM-7074

**UNIT-I**

**Running-Event:**
- 1.1 Analysis of sprits techniques.  
- 1.2 Analysis of different phases of running events.  
- 1.3 Mechanical principles and their approach.

**UNIT-II**

**Jumping Events:**
- 2.1 Analysis of Jumping techniques and their Mechanical principles.  
- 2.2 Advance drills for jumps.  
- 2.3 Techniques of Hop-Step-Jump, Specific exercise.

**UNIT-III**

**Throws:**
- 3.1 Analysis of throws techniques.  
- 3.2 Analysis of General and specific phases of throws events.  
- 3.3 Mechanical principles and throws approach.

**Books Recommended:**

2) Thani V.: Encyclopaedia of Track & Field (with Latest Rules), Khel Sahitya Kendra-4264/3, Ansari Road, Darya Ganj, New Delhi (2003).
Title of the Paper: Training and Application of Advance Skill in Basketball

Objectives: To develop mastery of skills and playing ability of basketball along with enhancement in the teaching ability of the students.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-7075

UNIT-I

Dribbling and Shooting:
1.1 Between the leg dribble
1.2 Reverse dribble
1.3 Free throw
1.4 Lay up shot and hook short

UNIT-II

2.1 Offensive rebounding (step and cut).
2.2 Defensive rebounding bouncing cut.
2.3 Playing defense with your feet
   (a) Shuffle step
   (b) Drop step
2.4 Denying the ball and cut

UNIT-III

3.1 Zone defense (2-2-1, 2-1-2)
3.2 Man-to-Man defense
3.3 Pointers
3.4 Denying the man and cut

Books Recommended:
Title of the Paper: Training and Application of Advance Skill in Badminton

Objectives: To provide progression from low ability level to advance skills with the ultimate goal of developing good badminton players.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-7076

UNIT-I

Service and Net shots:
1.1 Forehand-Low, High, Flick and Drive
1.2 Backhand-Low, High, Flick and Drive
1.3 Forehand-Straight and Cross
1.4 Backhand-Straight and Cross

UNIT-II

Lob and Clear
2.1 Forehand Lob-Straight and cross court
2.2 Backhand Lob-Straight and cross court
2.3 Forehand Clear-Straight and cross
2.4 Backhand Clear-Straight and cross

UNIT-III

Smash
3.1 Cross court
3.2 Down the Line
3.3 Body Line Smash

Books Recommended:
2) Deret, Talbot. (1989) Top Coach Badminton, Queen Anne Press, McDonald & Co(Publisher) Ltd., 66-73, Shoe lone Halborn London EC 4P 4AB.
DEPARTMENT OF PHYSICAL EDUCATION  
SYLLABUS (SESSION: 2013-14)  
MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester-I

Title of the Paper: Training and Application of Advance Skill in Cricket

Objectives: To provide progression from low ability level to advance skills with the ultimate goal of developing good cricket players.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Paper Code: PEM-7077

UNIT-I  
Development of Specific Motor Abilities:  
1.1 Speed Endurance  
1.2 Explosive Strength  
1.3 Speed  
1.4 Co-ordinative Abilities

UNIT-II  
Development of Advance Skills in Batting:  
2.1 Off-Drive  
2.2 On-Drive  
2.3 Cross-Bat Strokes  
2.4 Half-Cock Stroke

UNIT-III  
Development of Advanced skills in Fielding and Bowling:  
3.1 Defence Oriented fielding  
3.2 Attack Oriented fielding  
3.3 Spin Bowling  
3.4 Medium and Fast Bowling

Books Recommended:  
DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2013-14)
MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester-I

Title of the Paper: Training and Application of Advance Skill in Yoga

Objectives: To provide progression from low ability level to advance skills with the ultimate goal of developing skills in Yoga.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-7078

UNIT-I

Asanas:
1.1 Meditative Asanas: Sidhasanas, Padmasanas, Vajarasana, Swastikasana.
1.2 Relaxative Asanas: Savasana, Makarasana.

UNIT-II

Cultural Asanas:
2.1 Halasana, Bhujangasana, Ardha, Matsyendrasana, Pachiottasana, Utkatasana, Mayurasana, Trikonasana, Padahastasana, Sirhasana, Sarvangasana, Gomukhasana, Suranaskar, Dhanurasana, Ardha matayendrasana, Supta Vijrasana, Shakrasana, Salabhasana, Kukutasanas

UNIT-III

Bandhas Mudras
3.1 Mula Bandha
3.2 Uddiyana Bandha
3.3 Jalandhra Bandha
3.4 Viprita Karni Mudra
3.5 Maha Mudra
3.6 Yoga Mudra
3.7 Tadagi Mudra
3.8 Pasini Mudra

Books Recommended:
Title of Paper: Officiating in Hockey

Objectives: To provide practical approach to understand and application of rules.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-8071

UNIT-I
Fitness Programme for Umpires:
1.1 Physical Fitness.
1.2 Mental Fitness.
1.3 Proximity.
1.4 Model fitness programme for Umpires.
1.5 Important rules and their interpretation.

UNIT-II
Co-operation with Co-Umpire:
2.1 Ground Inspection
2.2 Pre-match discussion
2.3 Inspection of players dress and equipment.
2.4 Area of control.
2.5 After the game.

UNIT-III
Communication with Players:
3.1 Communication Via the whistle.
3.2 Communication Via the signals.
3.3 Communication Via the colour cards.
3.4 Positioning: General, Practical and concentration.

Books Recommended:
1) F.I.H., Rules of Hockey, The International Hockey Federation. Avenue des Arts 1 Bte 5 B-1210 Brussels, Belgium.
DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2013-14)
MASTER OF PHYSICAL EDUCATION (M.P.Ed.)

Semester: II\textsuperscript{nd}

Title of the Paper: \textbf{Officiating in Football}

\textbf{Objectives:} To provide practical approach to understand and application of rules.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-8072

\textbf{UNIT-I}

1.1 Rule and interpretation
   (a) Law 1-4
   (b) Law 5-6

1.2 Rule and Interpretation
   (a) Law 7-8
   (b) Law 9-10

\textbf{UNIT-II}

2.1 Rule and interpretation
   (a) Law 11
   (b) Law 12

2.2 Rule and Interpretation
   (a) Law 13-15
   (b) Law 16-17

\textbf{UNIT-III}

3.1 Procedures to determine the Winter of a match.
   The technical Area
   The Fourth official

3.2 Referee signals
   Assistant Referee Signals

\textbf{Books Recommended:}
Title of Paper: **Officiating in Judo**

**Objectives:** To provide practical approach to understand and application of rules.

**Credits:** 04  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Paper Code:** PEM-8073

### UNIT-I

**Article 1 to 10**
- 1.1 Article 1 - 2  
- 1.2 Article 3 - 4  
- 1.3 Article 5 - 6  
- 1.4 Article 7 - 8  
- 1.5 Article 9 - 10

### UNIT-II

**Article 11 to 20**
- 2.1 Article 11 - 12  
- 2.2 Article 13 - 14  
- 2.3 Article 15 - 16  
- 2.4 Article 17 - 18  
- 2.5 Article 19 - 20

### UNIT-III

**Article 21 to 30**
- 3.1 Article 21 - 22  
- 3.2 Article 23 - 24  
- 3.3 Article 25 - 26  
- 3.4 Article 27 - 28  
- 3.5 Article 29 - 30

**Books Recommended:**

Title of Paper: Officiating in Track and Field

Objectives: To orient the students in the rules and regulations of Track & Field along with developing there officiating abilities in the activity.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-8074

UNIT-I
1.1 Rules and Interpretation:
(a) Sprints
(b) Distance Running or Long Distance
(c) Steeple Chase
(d) Field Events

UNIT-II
2.1 Officiating for Track Events
(a) Judges for Tracks
(b) Judges for Fields
(c) Positioning of officials

UNIT-III
3.1 Layout and Standard and Non-Standard Track
(a) Tracks Marking
(b) Field Marking
(c) Marathons

Books Recommended:
2) Thani V.: Encyclopaedia of Track & Field (with Latest Rules), Khel Sahitya Kendra-4264/3, Ansari Road, Darya Ganj, New Delhi (2003).
Title of Paper: **Officiating in Basketball**

**Objectives:** To orient the students in the rules and regulations of Basketball along with developing their officiating abilities in the activity.

**Credits:** 04  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Paper Code:** PEM-8075

**UNIT-I**

1.1 Court and Equipment  
1.2 Court with its dimensions.  
1.3 Ball  
1.4 Back board and Basket  
1.5 Technical equipment  
1.6 Player dress

**UNIT-II**

2.1 Signals  
2.2 Rules from 1 to 15  
2.3 Rules from 16 to 30

**UNIT-III**

3.1 Rules from 31 to 45  
3.2 Rules from 46 to 68  
3.3 Terms used in Basketball

**Books Recommended:**

Title of Paper: **Officiating in Badminton**

**Objectives:** To provide practical approach to understand and application of rules.

**Credits:** 04  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Paper Code:** PEM-8076

**UNIT-I**

**Rule and Interpretation:**

1.1 Laws 1 - 5  
1.2 Laws 6 - 10

**UNIT-II**

**Rule and Interpretation:**

2.1 Laws 11 - 14  
2.2 Laws 15 - 19

**UNIT-III**

**Officiating:**

3.1 Communication Via Signals, Verbal.  
3.2 Warning  
3.3 Penalisation

**Books Recommended:**

2) Deret, Talbot. (1989) Top Coach Badminton, Queen Anne Press, McDonald & Co. (Publisher) Ltd. 66-73 Shoe lone Halborn London EC4P 4AB.  
Title of Paper: **Officiating in Cricket**

**Objectives:** To provide practical approach to understand and application of rules.

**Credits:** 04  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Paper Code:** PEM-8077

**UNIT-I**

Rules and their Interpretation:
1.1 Rules of Batting and their Interpretation.  
1.2 Rules of Bowling and their interpretation.  
1.3 Rules of Fielding and their interpretation.

**UNIT-II**

Co-operation with Third Umpire and Referees:
2.1 Ground Inspection.  
2.2 Pre-Match Discussion.  
2.3 Inspection of Players Dress and Equipment.  
2.4 Area of Control.  
2.5 After the Game.

**UNIT-III**

Duties of the Officials:
3.1 Duties of Umpires.  
3.2 Duties of Referees.  
3.3 Duties of Scorers.  
3.4 Communication of Umpires to Players and other officials.  
3.5 Positioning of Umpires.

**Books Recommended:**
Title of Paper: **Officiating in Yoga**

**Objectives:** To provide practical approach to understand and application of rules.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Paper Code: PEM-8078

**UNIT-I**

**Officiating and Coaching:**
1.1 Essentials of Yoga Practice.  
1.2 Time, Place, Dress, Seat, Sequence of Yoga Practice.  
1.3 Yoga and other Exercises.  
1.4 Caution and limitation of yoga.

**UNIT-II**

**Officiating in Yoga:**
2.1 Difference between Asana and exercise.  
2.2 Rights and Duties of Judges and Chef Judge.  
2.3 Procedure of Evaluation in competition.  
2.4 Materials and equipments.

**UNIT-III**

**Yogic Relaxation Technique:**
3.1 Relaxation Asanas.  
3.2 Pronayama.  
3.3 Dhyana.  
3.4 Meditation.  
3.5 Transcendental Meditation of Mahesh Yogic.

**Books Recommended:**
Title of Paper: **Techno-Tactical Development in Football**

**Objectives:** Provide practical understanding and application of different functional, technical and tactical move in Football.

**Credits:** 04  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Paper Code:** PEM-9072

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### UNIT-I

**Functional Training Programme:**
1.1 Goal Keeper  
1.2 Defenders  
1.3 Half’s  
1.4 Forwards

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### UNIT-II

**Set Plays:**
2.1 Corner  
2.2 Indirect Free Kick  
2.3 Direct Free Kick  
2.4 Penalty Kick

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### UNIT-III

**System of Play:**
3.1 4-2-4 System  
3.2 4-3-4 System  
3.3 4-3-3 System

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### Books Recommended:
5) http:/www.fifa.com
DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2013-2014)
MASTER OF PHYSICAL EDUCATION (M.P.ED.)

Semester: IIIrd

Title of Paper: Techno-Tactical Development in Track & Field

Objectives: Provide practical understanding and application of different functional, technical and tactical move in Track & Field.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-9074

UNIT-I

Tactical concept in Endurances Events:
1.1 Middle distance and Walking
1.2 Tactics of pacing, passing, kicking and its Management

UNIT-II

2.1 Tactics and Strategies for long distance and Marathon.
2.2 Pace-making.
2.3 Race to the finish management.

UNIT-III

3.1 Zone, Type of Zones.
3.2 Tactics of zones in different individual and team Relay Race.
3.3 Lesson planning & class management in Track & Field.

Books Recommended:
2) Thani V.: Encyclopaedia of Track & Field (with Latest Rules), Khel Sahitya Kendra, 4264/3, Ansari Road, Darya Ganj, New Delhi (2003).
Title of Paper: **Techno-Tactical Development in Basketball**

**Objectives:** Provide practical understanding and application of different functional, technical and tactical moves in Basketball.

**Credits:** 04  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Paper Code:** PEM-9075

**UNIT-I**

Dribbling:
1.1 Dribbling drills.  
1.2 Reverse dribbling.  
1.3 Low and High dribbling.  
1.4 Shorting.

**UNIT-II**

2.1 Passing and Catching  
2.2 Faking  
2.3 Pivoting  
2.4 Stopping  
2.5 Rebounding

**UNIT-III**

System of Play:  
3.1 Man to man defense.  
3.2 Zone defense.  
3.3 Various offensive systems of play.

**Books Recommended:**

Title of Paper: **Techno-Tactical Development in Badminton**

**Objectives:** Provide practical understanding and application of different functional, technical and tactical move in Badminton.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Paper Code: PEM-9076

**UNIT-I**

Functional Training Programme:
1.1 Drive Shots  
1.2 Smash  
1.3 Lobs

**UNIT-II**

Perfection of Plays:
2.1 Defense Stroke  
2.2 Offensive Stroke

**UNIT-III**

System of Play:
3.1 Track & Back  
3.2 Rotation  
3.3 Side by Side

**Books Recommended:**
DEPARTMENT OF PHYSICAL EDUCATION
SYLLABUS (SESSION: 2013-2014)
MASTER OF PHYSICAL EDUCATION (M.P.ED.)

Semester: III<sup>rd</sup>

Title of Paper: **Techno-Tactical Development in Cricket**

**Objectives:** Provide practical understanding and application of different functional, technical and tactical move in Cricket.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-9077

**UNIT-I**

Functional Training Programme:
1.1 Batsman
1.2 Bowlers
1.3 Fielders

**UNIT-II**

Perfection of Plays:
2.1 Defensive Batting
2.2 Defensive and Aggressive Fielding.
2.3 Defensive and Aggressive Bowling.

**UNIT-III**

System of Play:
3.1 Traditional Field placement and its improvised form.
3.2 Traditional and improvised Batting Skills.
3.3 Traditional and improvised Bowling Skill.

**Books Recommended:**
Title of Paper: Lesson Planning and Class Management in Football

Objectives: To provide practical understanding, teaching various skills of football to novice and skilled players.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25

Paper Code: PEM-X072

UNIT-I

Teaching Fundamentals Skills:
1.1 Push Pass
1.2 Receive
1.3 Training
1.4 Kicks

UNIT-II

Teaching Advance Skills:
2.1 Side Volley
2.2 Back Volley
2.3 In swing
2.4 On swing

UNIT-III

Tactics:
3.1 Defense to direct Free Kicks
3.2 Defense to indirect Free Kick

Books Recommended:
2) Widdows R: The Hand Book of Football Techniques and Tactics.
5) http://www.fifa.com
Title of Paper: **Lesson Planning and Class Management in Track & Field**

**Objectives:** To provide practical understanding of teaching techniques and develop class management skills in Track & Field.

Credits: 04  
Max. Marks: 100  
Semester Exam: 75  
Sessional: 25  
Paper Code: PEM-X074

**UNIT-I**
1.1 Concept & principles of teaching in Track & Field event.  
1.2 Sprints and Middle  
1.3 Throws and Jumps.

**UNIT-II**
2.1 Teaching Advance skill:  
2.2 Running  
2.3 Jumping  
2.4 Throws

**UNIT-III**
3.1 Fundamental Lesson Plan and their class Management in Track & Field.

**Books Recommended:**
2) Thani V.: Encyclopaedia of Track & Filed (with Latest Rules), Khel Sahitya Kendra-4264/3, Ansari Road, Darya Ganj, New Delhi (2003).  
Title of Paper: Lesson Planning and Class Management in Basketball

Objectives: To provide practical understanding of teaching techniques and develop class management skills in basketball.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-X075

UNIT-I
Teaching Fundamental Skills
1.1 Objectives.
1.2 Class formations.
1.3 Demonstrations.
1.4 Skills Practice.
1.5 Rectifications of errors.
1.6 Equipment distribution and collection.

UNIT-II
Teaching Advance Skills:
2.1 Objectives
2.2 Demonstration
2.3 Skill practice
2.4 Rectification of errors
2.5 Lead-up games

UNIT-III
Lesson Plan
3.1 Sample Lesson Plan

Books Recommended:
Title of Paper: Lesson Planning and Class Management in Badminton

Objectives: To provide practical understanding, teaching various skills of Badminton to novice and skilled players.

Credits: 04
Max. Marks: 100
Semester Exam: 75
Sessional: 25
Paper Code: PEM-X076

UNIT-I
Teaching Fundamental Skills:
1.1 Service-Low & High
1.2 Drive Shots
1.3 Clear

UNIT-II
Teaching Advance Skills:
2.1 Backhand Service
2.2 Lob
2.3 Offensive Drop

UNIT-III
Tactics:
3.1 Offensive Singles
3.2 Offensive Doubles
3.3 Mixed Doubles

Books Recommended:
2) Deret, Talbot. (1989) Top Coach Badminton, Queen Anne Press, McDonald & Co(Publisher) Ltd., 66-73 Shoe lone Halborn London EC 4P 4AB.
Title of Paper: **Lesson Planning and Class Management in Cricket**

**Objectives:** To provide practical understanding, teaching various skills of Cricket to novice and skilled players.

**Credits:** 04  
**Max. Marks:** 100  
**Semester Exam:** 75  
**Sessional:** 25  
**Paper Code:** PEM-X077

**UNIT-I**

**Teaching Fundamental Skills:**
1.1 Stance, grip and coverage of wickets.  
1.2 Back lift.  
1.3 Push.  
1.4 Run-up in bowling.  
1.5 Follow through in bowling.  
1.6 Approach to the ball in Fielding.  
1.7 Throwing and follow-through in fielding.

**UNIT-II**

**Teaching Advance Skills:**
2.1 Back-foot cover Drive  
2.2 Flick  
2.3 Sweep  
2.4 Yorker  
2.5 Top-spin  
2.6 Reverse Throw  
2.7 Slip fielding

**UNIT-III**

**Training Methodology:**
3.1 Fielding:  
3.1.1 Close-in Fielders  
3.1.2 Boundary-line Fielders  
3.2 Batting:  
3.2.1 Individual Defensive Batting  
3.2.2 Running Between the Wickets  
3.2.3 Individual Aggressive Batting  
3.3 Bowling:  
3.3.1 Spin Bowlers  
3.3.2 Medium Pacers  
3.3.3 Fast Bowlers

**Books Recommended:**