TITLE: (PEB-4001) - Measurement and Evaluation in Physical Education

Credits: 04
Max. Marks: 100
Sessional Marks: 10
Mid Term Exam:30
Exam. Marks: 60
Paper Code: PEB-4001
Duration: 2:00 Hours

Unit-I

Introduction to Test & Measurement & Evaluation
1.1 Meaning of Test, Measurement & Evaluation in Physical Education
1.2 Need & Importance of Test, Measurement & Evaluation in Physical Education
1.3 Criteria of Test, scientific authenticity (reliability, objectivity, validity and availability of norms)
1.4 Type and classification of Test

Unit- II

Construction and Administration of Test
2.1 Test Administration
2.2 Construction of Physical Fitness / Efficiency Test
2.3 General types of sports skill test items
2.4 Construction of sports skill test

Unit- III

Physical Fitness Tests
3.1 AAHPER youth fitness test & U.S Army Physical Fitness Test
3.2 Tuttle Pulse Ratio Test
3.3 Newton Motor Ability Test
3.4 Phillips JCR Test

Unit- IV

Sports Skill Tests
4.1 Lockhart and McPherson badminton test
4.2 Johnson basketball test
4.3 McDonald soccer test
4.4 Brady’s Volley ball Skill Test & S.A.I Hockey test

References:
UNIT – I

Introduction to Kinesiology and Sports Biomechanics

1.1 Meaning and Definition of Kinesiology and Sports Biomechanics
1.2 Importance of Kinesiology and Sports Biomechanics to Physical Education Teacher, Athletes and Sports Coaches.
1.3 Terminology of Fundamental Movements
1.4 Fundamental concepts of following terms –
   1.4.1 Axes and Planes
   1.4.2 Centre of Gravity
   1.4.3 Equilibrium
   1.4.4 Line of Gravity

UNIT – II

Mechanical Concepts of Force

2.1 Meaning, definition, types and its application to sports activities
2.2 Lever - Meaning, definition, types and its application to human body.
2.3 Newton’s Laws of Motion – Meaning, definition and its application to sports activities.
2.4 Projectile – Factors influencing projectile trajectory

UNIT – III

Kinetic/Kinematics Concept for Analysis Human Motion

3.1 Form of Motion
   3.1.1 Linear Motion
   3.1.2 Angular Motion
   3.1.3 General Motion
   3.1.4 Mechanical System
3.2 Standard reference terminology
   3.2.1 Anatomical reference position
   3.2.2 Anatomical reference plane
   3.2.3 Anatomical reference axis
3.3 Basic Concept related to kinetics
   3.3.1 Inertia
   3.3.2 Mass
   3.3.3 Force
   3.3.4 Centre of Gravity
   3.3.5 Pressure
   3.3.6 Density
   3.3.7 Torque
   3.3.8 Impulse
Unit –IV

Qualitative Analysis

4.1 Qualitative Analysis of Human Movement
   4.1.1 Kinematics
   4.2.2 Kinetics

4.2 Tool of measuring Kinematics quantities
   4.2.1 Cinematography
   4.2.2 Videography

REFERENCES:

DEPARTMENT OF PHYSICAL EDUCATION  
SYLLABUS (SESSION: 2016-2017)  
BACHELOR OF PHYSICAL EDUCATION (B.P.ED.)  
Semester-IV\textsuperscript{th}  

TITLE: (PEB-4003) - Research and Statistics in Physical Education

Credits: 04  
Max. Marks: 100  
Sessional Marks: 10  
Mid Term Exam:30  
Exam. Marks: 60  
Paper Code: PEB-4003  
Duration: 2:00 Hours

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**Objectives:** At the end of this course, the student will be able to-
\hline
1) Demonstrate an understanding about the basic components of research and statistics used in physical education  
2) Differentiate and compare the elements of qualitative and quantitative research methods  
3) Identify and distinguish the essential elements of quality research  
4) Apply the research skills in conducting systematic qualitative and quantitative investigations  
5) Develop a research based approach in physical education  
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Unit-I

1.1 Meaning and definition of research  
1.2 Need and importance of research in Physical Education  
1.3 Scope of research in Physical Education  
1.4 Research ethics principles, and informed consent of research  
1.5 Paradigms of research and comparison between qualitative and quantitative research

Unit-II

2.1 Advantages and disadvantages of qualitative methods; Understanding the scenario to use qualitative method  
2.2 Techniques of qualitative research (observation, focus group, depth interview, protocol analysis, projective technique)  
2.3 Quantitative research: concepts and types of variables, types of scales; characteristics, application, advantages and disadvantages of quantitative research  
2.4 Introduction of literature sources, Need for literature review (critical and allied reviews), Hypothesis (null and research, one tail and two tail)  
2.5 Concept of population, sample; sampling methods and sample recruitment in qualitative and quantitative research

Unit-III

3.1 Data analysis in research: continuous and discrete data, raw score  
3.2 Computing measures of central tendency and measures of variability from the sample/population (Using MS Excel)  
3.3 Computing percentiles and quartiles from data(Using MS Excel)  
3.4 Introduction and criteria for applying basic parametric and nonparametric techniques of data analysis (chi-square, z-test, t-test)  
3.5 Graphical presentation of data(Using MS Excel)

Unit- IV

4.1 Writing grammar of research proposal (Quantitative and Qualitative research)  
4.2 Evaluation criteria’s of quantitative research proposal  
4.3 Difference between bibliography and referencing  
4.4 Introduction to referencing systems and writing reference in research.
References:


TITLE: (PEB-4012) - SPORTS MANAGEMENT

Unit-I

1.2 Progressive concept of Sports management.
1.3 The purpose and scope of Sports Management.
1.4 Essential skills of Sports Management.
1.5 Qualities and competencies required for the Sports Manager.
1.6 Event Management in physical education and sports.

Unit-II

2.1 Meaning and Definition of leadership.
2.2 Leadership style and method.
2.3 Elements of leadership.
2.4 Forms of Leadership.
   2.4.1 Autocratic
   2.4.2 Laissez-faire
   2.4.3 Democratic
   2.4.4 Benevolent Dictator
2.5 Qualities of administrative leader.
2.6 Preparation of administrative leader.
2.7 Leadership and Organizational performance.

Unit-III

3.1 Sports Management in Schools, colleges and Universities.
3.2 Factors affecting planning
3.3 Planning a school or college sports programme.
3.4 Directing of school or college sports programme.
3.5 Controlling a school, college and university sports programme.
   3.5.1 Developing performance standard
   3.5.2 Establishing a reporting system
   3.5.3 Evaluation
   3.5.4 The reward/punishment system

Unit-IV

4.1 Financial management in Physical Education & sports in schools, Colleges and Universities.
4.2 Budget – Importance, Criteria of good budget,
4.3 Steps of Budget making
4.4 Principles of budgeting
REFERENCES:

TITLE: (PEB-4071) - Track and Field

Decathlon Events:

**Unit-I**

1.1 100 metres, 400 metres
1.2 Long Jump, High jump
1.3 Shot put

**Unit-II**

2.1 110 m Hurdles
2.2 Discuss throw, Javelin throw
2.3 Pole vault, 1500 m

**Officiating, Scoring, Layout & Marking**

**Unit-III**

3.1 Rules and Interpretation
3.2 Officiating for Decathlon Events
3.3 Layout and Standard Measurement for Decathlon Events

**Scoring/ Point System:**

**Unit-IV**

4.1 Formula for combined events scoring system
4.2 Points system in Decathlon events (Men)
4.3 Points system in Decathlon events (Women)

**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: (PEB-4074) - Skating & Football

Skating:

Unit – I
1.1 Step Ratham on skates
1.2 Walking on Skates
1.3 Roll on Skates
1.4 Half Camel (Hand straight, right on the Rink and left on the air)

Unit – II
2.1 Half Camel (Hand straight, left on the Rink and Right on the air)
2.2 T-Brake (Right Leg/Left Leg)
2.3 Sit Forward (Both legs on Rink)
2.4 Sit Forward with Hinging Legs (Right Leg / Left Leg)

Football:

Unit – III
Push-Pass
3.1 Inside of the foot.
3.2 Inside Instep of the foot.
3.3 Drills

Unit – IV
Kicking
4.1 Inside Instep Kick
4.2 Instep Kick
4.3 Outside Instep Kick

Books Recommended For Study
3) Widdows, R. The Handbook of Football Techniques and Tactics.
   US Youth Soccer Technical Department
TITLE: (PEB-4075) - Skating & Cricket

Skating:

Unit – I

1.1 Step Ratham on skates
1.2 Walking on Skates
1.3 Roll on Skates
1.4 Half Camel (Hand straight, right on the Rink and left on the air)

Unit – II

2.1 Half Camel (Hand straight, left on the Rink and Right on the air)
2.2 T-Brake (Right Leg/Left Leg)
2.3 Sit Forward (Both legs on Rink)
2.4 Sit Forward with Hinging Legs (Right Leg / Left Leg)

Cricket:

Unit-III

Fielding:

3.1 Pre-requisite of Fielding in Cricket
3.2 Basic Skills of Fielding
3.3 Fielding Positions in Cricket

Unit-IV

Bowling:

4.1 Spin Bowling in Cricket
4.2 Types of Spin Bowling
4.3 Development of Bowling related Fitness Components.
TITLE: (PEB-4076) - Skating & Basketball

Skating:

Unit – I
1. Step Ratham on skates
2. Walking on Skates
3. Roll on Skates
4. Half Camel (Hand straight, right on the Rink and left on the air)

Unit – II
1. Half Camel (Hand straight, left on the Rink and Right on the air)
2. T-Brake (Right Leg/Left Leg)
3. Sit Forward (Both legs on Rink)
4. Sit Forward with Hinging Legs (Right Leg / Left Leg)

Basketball:

Unit- III

Introduction and Advanced Skills
3.1 Lay-up shot with variation
3.2 Rebounding with variation
3.3 Screening with variation
3.4 Shooting with variation
3.5 Tapping
3.6 Signals (Officials and Referees)
3.7 Score Sheet

Unit- IV

Advances Playing Techniques
4.1 Man to Man Full Court Press
4.2 Man To Man Half Court Press
4.3 Zone, 212, 122, 32, Techniques
4.4 Low Post & High Post
4.5 One on One Beat
4.6 Pick and Roll
4.7 Officiating Techniques
TITLE: (PEB-4080) - Sports Specialization: Coaching lessons Plans - Track and Field

Credits: 04
Max. Marks: 100
Sessional Marks: 40
Exam. Marks: 60
Paper Code: PEB-4080

Coaching Track & Field Event:

Unit-I

1.1 Important Terminology
1.2 Essential for sprinter
1.3 Qualities of Sprinter

Unit-II

2.1 Techniques for sprinter start
2.2 Proper Technique of a Runner
2.3 Coaching the correct Running Technique
2.4 Competitive Tactics

Unit-III

3.1 Rules for Race
3.2 Rules of Leaving the Track

Unit-IV

4.1 General Introduction of the Shot- put through
4.2 Technique of Shot-put throws
4.3 Technique of Javelin throws
4.4 Rules of throws

Books Recommended: