Title: Measurement and Evaluation in Physical Education

Credits: 04
Max. Marks: 100
Sessional Marks: 30
Exam. Marks: 70
Paper Code: PEB-4001
Duration: 2:30 Hours

Unit - I
Introduction to Test & Measurement & Evaluation
1.1 Meaning of Test, Measurement & Evaluation in Physical Education.
1.2 Importance of Test, Measurement & Evaluation in Physical Education.
1.3 Criteria of selecting an appropriate test.
1.4 Type and classification of test

Unit - II
Construction and Administration of Test
2.1 Administration of testing programme.
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 Youth 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 S.A.I Hockey test

References:

Updated on 04.10.2018
TITLE: Kinesiology and Biomechanics

UNIT-I

1. 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 Origin, Insertion and Action of Muscles-Pectoralis Major and Minor, Deltoid, Biceps, Triceps (Anterior and Posterior) etc.

UNIT-II

2. Mechanical Concepts
   2.1 Speed/Velocity/Acceleration
      2.1.1 Velocity as a Vector Quantity
      2.1.2 Determining the Direction of the Velocity Vector
      2.1.3 Calculating Average Speed, Average Velocity and average Acceleration
      2.1.4 Average Speed versus Instantaneous Speed
   2.2 Distance, Displacement (Calculating average distance and displacement)
   2.3 Fundamental concepts of following terms
      2.3.1 Fluid resistance
      2.3.2 Buoyancy
   2.4 Newton’s Laws of Motion – Meaning, definition and its application to sports activities.

UNIT-III

3. Kinetic/Kinematics Concept for Analysis Human Motion
   3.1 Fundamental concepts of following terms
      3.1.1 Axes and Planes
      3.1.2 Centre of Gravity
      3.1.3 Equilibrium
      3.1.4 Line of Gravity
   3.2 Basic Concept related to kinetics
      3.2.1 Inertia
      3.2.2 Mass
      3.2.3 Force
      3.2.4 Centre of Gravity
      3.2.5 Pressure
      3.2.6 Density
      3.2.7 Torque
      3.2.8 Impulse

3.3 The Biomechanics of the Human Upper Extremity.
3.4 The Biomechanics of the Human Lower Extremity.
4. Qualitative/Quantitative Analysis

3.3 Angular Kinematics of Human Movement.
3.4 Linear Kinetics of Human Movement

REFERENCES:

2. By Peter M. (2013), Biomechanics of Sport and Exercise: Human Kinetics

Updated on 04.10.2018
Title: Research and Statistics in Physical Education

Objective: At the end of this course, the student will be able to:

1) Identify the usages of basic components of research and statistics for undertaking investigations; to take evidence based decision in the field of physical education.
2) Differentiate and rationally select the research paradigms to undertake a research problem.
3) Develop and apply the computer based data analysis skills in conducting systematic investigations using MS-Excel.
4) Develop an attitude of quality and strategic research in Indian physical education.

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: Understanding the introductory concept of variable in the domain of research, 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 Basic concept of population and sample; Differences of sample recruitment in qualitative and quantitative research

Unit - III

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

4.1 Applying correct grammar while writing different sections of a research proposal in quantitative and qualitative research

4.2 Understanding the difference between bibliography and referencing of a research work

4.3 Strategic need based selection of a referencing system while writing a research proposal.

4.4 Evaluation criteria's of quantitative research proposal

4.5 Personal preparation and presentation of the completed research work.

References:


Video Links:

Research Methods

Measures of variability

Types of sampling techniques

Referencing
https://www.youtube.com/watch?v=6RvrlMJaS8
Types of data
https://www.youtube.com/watch?v=7baNWq2A5p4
https://www.youtube.com/watch?v=hZxnzfnt5v8

Scales of measurements
https://www.youtube.com/watch?v=KJBBZUk39ncI
https://www.youtube.com/watch?v=y1piU4HblKLU

Hypothesis
http://study.com/academy/lesson/alternative-hypothesis-definition-example.html

Variables

Chi-square test
http://study.com/academy/lesson/what-is-a-chi-square-test-definition-example.html
https://www.youtube.com/watch?v=ODxEOdYF6R4

z-test
https://www.youtube.com/watch?v=McISIEiXsfE
https://www.youtube.com/watch?v=AvJhCKUKlq4

t-test
http://study.com/academy/lesson/what-is-a-t-test-procedure-interpretation-examples.html
https://www.youtube.com/watch?v=BI81D2Vl1U
https://www.youtube.com/watch?v=3azuAa0JACk

Updated on 04.10.2018
Title: Sports Management

Course objectives:
- To understand the importance of management of Physical Education.
- To gain knowledge regarding management of Physical Education and Sports at different level.
- To gain knowledge regarding the organization of various Physical Education programmes.
- To gain knowledge of various schemes and plans of State/Central Government.
- To gain the knowledge regarding planning, facility and financial management.

Unit - I

The Management Process:
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

Leadership in Sports Management Process:
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

Planning and Management of sports at Institutional level:
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

Financial Management in Sports:
4.1 Financial management in Physical Education & sports in schools, Colleges and Universities.
4.2 Objectives and scope of financial planning.
4.3 Management of Infrastructure, finance and personal
4.4 Mechanics of purchase and audit.

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Course Learning Outcomes:
- Understanding of the theoretical concept of sports management.
- Understanding of the practical & theoretical implications of financial planning and personnel management
- Knowledge of sport event management and their Evaluation process.
- Understanding of the competencies and skill of sport manager.

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Self-Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

Updated on 04.10.2018