



Semester-III

THEORY

BPES301 T Kinesiology & Sports Biomechanics

Unit I: Introduction to Kinesiology and Sports Biomechanics

- **Meaning and Definition** of Kinesiology and Sports Biomechanics.
- **Importance** of Kinesiology and Biomechanics in sports and physical activities.
- **Origin and Insertion** on bones and action of major muscles.
- **Types of joints** with their structure and functions.

Unit II: Mechanical Concepts

- **Speed, Velocity, and Acceleration**
 - Velocity as a **Vector Quantity**
 - Determining the **Direction** of the Velocity Vector
 - Calculating **Average Speed, Average Velocity, and Average Acceleration**
 - **Average Speed vs. Instantaneous Speed**
- **Distance and Displacement**
 - Calculating **Average Distance and Displacement**
- **Fluid Resistance and Buoyancy**
- **Newton's Laws of Motion** and their applications to sports activities.

Unit III: Kinetic/Kinematics Concepts for Analysis of Human Motion

- **Axes and Planes**
- **Centre of Gravity, Equilibrium, and Line of Gravity**
- **Basic Concepts** related to kinetics:
 - **Inertia, Mass, Force, Torque, Impulse, Pressure, Density**
- **Biomechanics of the Human Upper Extremity**
- **Biomechanics of the Human Lower Extremity**



Unit IV: Qualitative/Quantitative Analysis of Human Movement

- **Angular Kinematics** of Human Movement.
- **Linear Kinetics** of Human Movement.

BPES302 T Sports Psychology

Unit I: Introduction to Sports Psychology

- **Meaning and Nature** of Sports Psychology.
- **Historical Evolution** of Sports Psychology.
- **Relevance** of Sports Psychology in **Physical Education** and **Coaching**.
- **Psychological Factors** affecting sports performance.

Unit II: Personality and Sports

- **Meaning and Nature of Personality**.
- **Theories of Personality** in sports.
- **Dimensions of Personality** and **Development** of Personality.
- **Motivation**
 - **Types of Motivation**
 - Conditions for developing **Achievement Motivation**.

Unit III: Learning

- **Meaning, Nature, and Principles of Learning**.
- **Types of Learning**.
- **Laws of Learning** and **Transfer of Learning**.
- **Factors affecting Learning**.
- **Learning Curve** and **Plateau**.

Unit IV: Sports Sociology and Leadership

- **Nature of Sports Sociology**.
- **Importance of Sports Sociology** in Physical Education.
- **Socialization** and **Value Education** through Physical Education.



- **Impact of Society** on sports and vice versa.

B PES303 T SPORTS TRAINING

Unit I: Introduction to Sports Training

- **Meaning and Nature** of Sports Training.
- **Aim and Objective** of Sports Training.
- **Principles** of Sports Training.
- **Characteristics** of Sports Training.

Unit II: Training Components

- **Strength**: Types and methods employed for developing strength.
- **Speed**: Types and methods employed for developing speed.
- **Endurance**: Types and methods employed for developing endurance.
- **Flexibility**: Types and methods employed for developing flexibility.
- **Coordinative Abilities**: Methods employed for developing coordinative abilities.

Unit III: Load

- **Principles of Load** and its components.
- **Determination of Optimum Load**.
- **Overload**: Causes and identification of overload.
- **Tackling Overload**.

Unit IV: Training Programming and Planning

- **Periodization**: Definition and types of periodization.
- **Aim and Content of Periods**: Preparatory, Competition, and Transitional periods.
- **Planning**: Meaning and types of planning.
- **Principles of Planning**.

B PES304 T OFFICIATING AND COACHING-III

Unit I: Officiating and Coaching in Chosen Racket Game - I



- **Dimensions, layouts, and marking** of fields for the chosen racket game - I.
- **Rules and interpretations** of the chosen racket game - I.
- **Qualification and number of officials** in the chosen racket game - I.
- **Coaching** in the chosen racket game - I.

Unit II: Officiating and Coaching in Chosen Racket Game - II

- **Dimensions, layouts, and marking** of fields for the chosen racket game - II.
- **Rules and interpretations** of the chosen racket game - II.
- **Qualification and number of officials** in the chosen racket game - II.
- **Coaching** in the chosen racket game - II.

Unit III: Indigenous Activities

- **Concept of Indigenous Activities:** Understanding traditional sports and games.
- **History of Indigenous Activities:** Historical significance and evolution.
- **Principles and Importance** of Indigenous activities in physical education.
- **Various Types of Indigenous Activities:** Involving different equipment and skill sets.

Unit IV: Swimming Activities

- **Swimming Activities:** Understanding different types of swimming activities and their outcomes.
- **Swimming Pools:** Dimensions, setup, and the rules of swimming.
- **Maintenance of Swimming Pools:** Ensuring proper upkeep of facilities.
- **Coaching and Training in Swimming:** Techniques for effective swimming coaching and athlete development.

PRACTICAL

BPES305 P Racket Games (from the list of SGFI/AIU/IOA)

Unit I: History and Development of the Game



- **History:** Study the **origin, evolution, and current trends** in the racket game at **national and international levels**.
- **Development:** Explore the **advancements** in techniques, coaching methods, and technology used in the game.

Unit II: Dimensions and Marking of Playing Area

- **Field Layout:** Learn the **dimensions and marking** for the **playing area**.
- **Basic Requirements:** Understand the essential elements of the **playing environment**, including the surface type, boundaries, and equipment setup.

Unit III: Fundamental Skills of the Game

- **Skills:** Master the basic **skills** required for the chosen racket game (e.g., grip, stance, swings, serves).
- **Skill Development:** Conduct practice sessions focusing on **fundamental techniques**.

Unit IV: Skill Tests, Scoring, and Arrangement of Skill Tests

- **Skill Testing:** Learn how to conduct and evaluate **skill tests** to assess performance in fundamental skills.
- **Scoring Systems:** Understand the **scoring** methods and their applications in various contexts (training and competition).
- **Arrangement of Tests:** Plan and **organize skill tests** effectively for the students to demonstrate their proficiency.

Unit V: National and International Organizations/Federations

- **Organizations:** Study the role of **national and international federations** and organizations governing the racket game.
- **Regulations:** Familiarize with the regulations and standards set by organizations such as **SGFI, AIU, and IOA**.

Unit VI: Rules and Their Interpretations



- **Game Rules:** Understand the **rules** and **regulations** of the game, with a focus on their interpretation in different contexts.
- **Refereeing:** Learn how to apply rules during matches, with an emphasis on **decision-making**.

Unit VII: Team Selection and Coaching

- **Team Selection:** Understand the criteria and process for **team selection** based on skill levels and physical attributes.
- **Coaching Techniques:** Develop strategies for **coaching** teams effectively, focusing on technical, tactical, and mental aspects of the game.

Unit VIII: Officiating & Refereeing

- **Officiating Roles:** Learn the roles of **referee**, **umpire**, **scorer**, and **curator**.
- **Self-Employment:** Understand how officiating can be a source of **self-employment** and its career potential.

BPES306 P Indigenous Activities (OR) Yoga

Unit I: Indigenous Activities (OR) Yoga

Part A: Indigenous Activities

- **History and Development:** Study the **history** and **development** of **indigenous activities** in India.
- **Aims, Objectives, and Principles:** Understand the **aims**, **objectives**, and **principles** of **indigenous activities**.
- **Types of Activities:** Learn about **individual**, **group**, and **team activities**.
- **Marking:** Explore the process of **marking** indigenous activities for competitions and events.
- **Indigenous Activities with Equipment:** Learn how to incorporate **traditional equipment** into activities.
- **National Organizations:** Study the role of **national organizations** and **federations** governing indigenous games.
- **Rules and Interpretations:** Understand the **rules** and their **interpretations** in indigenous activities.
- **Team Selection and Coaching:** Learn how to **select teams** and coach participants in indigenous activities.



- **Officiating:** Develop skills in **officiating**, including roles like **referee, umpire, scorer, and curator**.
- **Self-Employment:** Explore **self-employment opportunities** through officiating and coaching in indigenous activities.

Part B: Yoga

- **Meaning and Concept:** Understand the **meaning and concept** of Yoga.
- **History and Development:** Learn about the **history and development** of Yoga in **India** and worldwide.
- **Asanas:** Practice **sitting, standing, and lying position** asanas, and learn their **advantages**.
- **Suryanamaskar:** Practice **Suryanamaskar** and understand its **benefits**.
- **Pranayama:** Understand **Pranayama**, practice different types, and study their impact on **health**.
- **Meditation:** Learn different **meditation techniques** and their effects on the mind and body.
- **Officiating and Scoring:** Understand **officiating and scoring** systems in **Yoga competitions**.
- **Coaching and Career Opportunities:** Explore the **coaching techniques and career opportunities** in Yoga.

Project work

Unit-I: Introduction to State-Level Study

1. **Objective:** Understand the **importance** of conducting a study on **sports infrastructure** in schools.
 - **Methods:** Introduction to survey methods and techniques.
 - **Activities:** Review of the concept and need for better sports infrastructure in schools.
2. **Survey Design:** Learn to **design a survey** on sports facilities, including data collection tools and methodologies.
 - **Methods:** **Questionnaire design, interviews, and fieldwork training.**
 - **Activities:** Visit various schools for **data collection**.

Unit-II: Data Collection and Survey Execution

1. **Survey Execution:** Students will **conduct surveys** in selected districts to assess the **sports infrastructure** available at schools.



- **Methods:** **Field visits, data collection, and documentation** of infrastructure availability such as playgrounds, equipment, and facilities.
 - **Activities:** Conduct interviews with school authorities, observe sports facilities, and document findings.
2. **Types of Data:** Focus on **quantitative and qualitative data** related to infrastructure, equipment, and usage in schools.
- **Methods:** **Observation and interviews** with teachers, students, and administrators.
 - **Activities:** Survey schools across the district, collecting information on existing sports facilities.

Unit-III: Project Report Preparation

1. **Data Analysis:** Students will analyse the **survey data**, categorizing the availability of infrastructure in schools across the district.
- **Methods:** **Statistical analysis and interpretation** of data.
 - **Activities:** Write a **project report** that includes analysis, findings, and recommendations.
2. **Project Report Structure:** Guide students in preparing a comprehensive project report that includes:
- **Introduction to the Study**
 - **Methodology**
 - **Survey Findings**
 - **Recommendations**
 - **Conclusion**
 - **Activities:** Work on the **final draft** of the project report, ensuring that it meets academic and practical standards.

Unit-IV: Viva-Voce and Presentation

1. **Viva-Voce:** Students will be assessed through a **viva-voce** on their **project findings** and the **methodologies** used in their survey.



- **Methods: Oral examination** focusing on the **research process**, findings, and implications of the study.
 - **Activities:** Preparation for the **viva-voce** by practicing presenting key points of the report.
2. **Presentation Skills:** Develop **presentation skills** for effectively communicating survey results in the viva.
- **Methods:** Training in **public speaking, defending findings**, and answering questions related to the project.

Assessment Criteria

Project Report (70 Marks): Based on the **quality of data collection, analysis**, and the **clarity of the report**. Emphasis is on how well the findings are documented and the **recommendations** for improving sports infrastructure in schools.

- **Viva-Voce (30 Marks):** Assessed based on the student's ability to **defend the report** and explain the research methods, findings, and implications clearly and confidently.

Practical Component Overview

- **Fieldwork:** Students will visit various schools in the district to conduct surveys on the **availability of sports infrastructure**.
- **Survey Execution:** Data will be collected through **field visits, interviews, and questionnaires**.
- **Report Preparation:** Students will analyse the data and prepare a report documenting the findings, which will be the primary focus of the assessment.
- **Viva-Voce:** Students will present their findings and defend their reports in a viva-voce format.

OR

Lesson Plan – In which student will make total **20 General** lesson plan –

10 indoor and 10 outdoor at any school.