

## PHYSICAL EDUCATION

### UNIT: I

- Definition, Aim and Objectives of Physical Education, Health Education and Recreation.
- Philosophies of Physical Education- Idealism, Naturalism, Realism, Pragmatism, Existentialism, Humanism.
- Benefits of Exercise, Exercise and Well-being and Body types.
- Definition and theories of play, General Principles of Growth and development, principles of Motor skills acquisition, Transfer of Training.
- Role of sports in socialization Process, physical activities and sports as cultural Heritage, role of sports in Globalization process.
- Physical Education in Ancient Greece, Rome, Germany, Sweden, Denmark and Russia.
- Olympic Movement. Historical Development of Ancient and Modern Olympic Games.
- Historical developement of physical Education in India.

### UNIT: II

- Physiology of Muscular activity, Neurotransmission and Movement Mechanism.
- Physiology of cardio- Respiratory System.
- Energy cost of various Sports Activities.
- Bio- Energetics and energy Process.
- Physiological Factors Influencing sports Performance.
- Athletic Injuries- their Management and Rehabilitation.
- Therapeutic modalities and Massage manipulations.
- Ergogenic Aids and Doping.
- Ageing Process and Exercise .

### **UNIT: III**

- Joints and their movements- Planes and Axes.
- Kinematics-Linear and angular Motion, Levers and their applications in sports.
- Laws of motion, Principles of Equilibrium and Force, Spin and Elasticity.
- Posture- Deformities and their corrections
- Muscular/ mechanical analysis of Motor Movements.
- Mechanical Analysis of basic movements-Running, Walking, Jumping, Throwing, Pulling and Pushing.

### **UNIT-IV**

- Learning Process- Theories and laws of learning, Factors affecting Motor Learning.
- Motivation- Types, Theories and Dynamics of Motivation in sports.
- Psychological Factors affecting sports performance.
- Personality- Its dimensions theories personality, relationship between personality and performance, traits of Athletic personality.
- Individual differences and sports performance.
- Group Dynamics, Team Cohesion and Leadership in sports.
- Media and sports, Audience behaviour and performance, cognitive process in sports.

### **UNIT-V**

- Development of Teacher Education in Physical Education.
- Ethical Values in physical education and sports.
- Principles of curriculum planning.
- Principles of classification of pupils for physical activities.

### **UNIT-VI**

- Health- Guiding principles of Health and Health Education.
- Balanced Diet, Nutrition and Dietary manipulation.
- Health Related fitness, Obesity and its management.



- Communicable Diseases-Their preventive and therapeutic aspects.
- School Health programme and personal Hygiene.
- Theories and principles of Recreation.
- Recreation Programme for various categories of pupils.

### **UNIT-VII**

- Principles and characteristics of sports training.
- Training Load- Its components, super-compensation and adaptation process.
- Process of periodisation.
- Training Methods and specific Training programme for developing various Motor abilities.
- Technique and phases of skill acquisition.
- Strategy and Tactics, various systems of play in team games.
- Short term and Long term training programmes.
- Principles of planning physical activities.
- Talent identification, its process and procedures.
- Types of competitions, special preparations for competitions, psychological preparation.
- Rules of games and sports and their interpretation.

### **UNIT-VIII**

- Nature, scope and types of research, formulation and selection of research problem.
- Sampling- process and techniques.
- Methods of research.
- Data collection – tools and techniques.
- Statistical techniques of data analysis, measures of central tendency and variability, correlation, normal probability curve, t-test, f-test, chi-square, z-test.
- Hypothesis-formulation types and testing.
- Writing research report.
- Application of ICT in physical education and sports.

## UNIT-IX

- Concept of test, Measurement and evaluation.
- Principles of Measurement and evaluation.
- Construction and classification of tests.
- Criteria of test evaluation.
- Concepts and assessment of physical fitness, motor fitness, motor abilities and Motor educability.
- Specific skill tests for Badminton, Basketball, Hockey, Lawn-tennis, soccer, Volleyball.
- Testing psychological variables-competition anxiety, aggression, team-cohesion, motivation, self concept.
- Anthropometric measurements and body composition.

## UNIT-X

- Concept and Principles of management.
- Organization and Function of sports bodies.
- Intramural and Extramural programmes.
- Management of infrastructure, equipments, finance and personnel.
- Methods and techniques of teaching in physical education.
- Principles of planning physical education lessons.
- Pupil-teacher inter-action and relationship.
- Concept of supervision and its techniques.