

SYLLABUS FOR THE POST OF PHYSICAL TRAINING INSTRUCTOR

Unit – 1:

Introduction to physical education

The Unitary Aspect of Man. The nature of physical education outcomes of physical education Changing trends and career in physical education, concept and principles of integral physical education. Movement as a process of integration. Physical education meaning and source of its principles

Physical education –its Humanistic Foundation

Physical education in ancient nations (Greece, Rome)
Physical education during the Dark Ages and middle Ages
European background for modern physical education
Physical education in the Twentieth century
Trilogy of Great Leaders of physical education
History of physical education in India
Sports schemes in India

Physical education its Philosophical Bases

Components of philosophy
Traditional Philosophy
Implication of philosophy for physical education

Olympic Movement

Ancient and modern Olympic games
Asian games
South Asian Federation Games
Afro –Asian Games
Structure and functions of international bodies controlling various games and sports
Prominent honours and awards in games and sports.

Unit – 2:

Anatomical and physiological bases

Biological basis of life
Biological weaknesses
The Skeleton (Axial and Appendicular)
Joint and lever system
The muscles
The nervous system

Human growth and development

Genetics
Body types
Posture and body mechanics
Health and fitness
The fitness cycle

Types of fitness

Health (community health, school health and personal health)

Hypokinetic diseases

Benefits of exercise to the (Respiratory system, Muscular system, vital organs and nutritive system)

Anthropological bases

Biological Evolution

Cultural Evolution

Implication of anthropology for the physical education

Sports training and Therapeutic modalities

Principles of training

Methods of executing training load

Training plans

First –Aid and emergency treatment in various cases.

Electrical stimulation

Cryotherapy

Laser therapy, Massage and Traction.

Unit – 3:

Biomechanics

Use of Biomechanics in sports

Principles of biomechanics

Analytic Biomechanical Techniques

Cinematography

Kinetography

Electromyography

Goniography

Kinetics and kinematics

Newton's Laws of motion

Centrifugal and centripetal forces

Levers

Impact and elasticity

Equilibrium, principles of equilibrium and its application in sports

Forces and its types

Friction

Osteokinematics and arthrokinematics

Projectiles and trajectory

Factors affecting the projectile and trajectory in sports

Mechanical analysis of jumps

Mechanical of throws

Mechanical analysis of running

Unit – 4:

Learning

General assumptions about learning
Kinds of learning, conditions affecting learning
Various psychological factors that affect performance in sports
Theories of learning
Laws of learning
Adolescent problems and their management

Motivation

Internal process and external process theories
Conditions and factors for sports motivation
Levels of motivation
Role of motivation in sports
Association between motivation and mental health in sports

Personality

Dimensions of personality
Theories of personality
Assessment of personality traits
Relationship between personality and sports

Intelligence

Nature of intelligence
Approach to intelligence (Implicit approach and Explicit approach)
Measurement of intelligence
Body –mind interaction and Intelligence
Concept of athletic intelligence

Unit – 5:

History of test and measurement

Anthropometry, Muscular strength and endurance, cardiovascular measurements, Athletic ability testing, sports skill testing, power measurement, knowledge testing and social measurement,

Physical and motor fitness testing

AAHPER youth physical fitness test
National Physical Efficiency Test
Indiana Motor fitness test
Barrow general motor ability test
Newton motor ability test
Metheny –Johnson motor educability test

Cardio –pulmonary endurance

Tuttle Pulse test
Harvard step test
Run –walk test
Measurement of cardio- vascular test

Sports skill testing

Basket Ball skill tests and Badminton skill testing
Football Skill tests
Volleyball skill tests
Hockey skill test and Hand ball skill testing
Athletic s skill testing and Archery skill testing

Unit – 6:

Statistic and evaluation

Statistical concepts
Functions of statistical test
Classification of statistic
Data , its types and collecting measures
Rating scales in physical education

Sampling in research

Population and sampling
Steps in sampling process
Sampling theory
Techniques
Sampling size

Elements of research

Hypothesis
Variable
Value of hypothesis in research
Elements of a good hypothesis
Conditions for accepting and or rejecting Null hypothesis
Level of significance

Methods of research

Descriptive Research method
Historical research method
Experimental research method

Unit – 7:

Sports and social values

Sports as a socializing process
Sports in educational settings
Equity and discrimination in sports
Sports sociology in future
Principles of sports sociology
Leadership qualities

Violence in sports

Violence of sports through history
Violence on the and off the field
Assaults and sexual assaults by athletes
General factors related to violence in sports.

Sports and economics

Economic motives and the globalization of commercial sports
Corporations use sports as vehicles for global expansion
Youth sports programs and spectator interest
Out sports in action: Branding sports

Race and ethnicity

Racial concepts in sports
Sports participation among racial and ethnic minorities
Sports participation
Influence of international politics on Sports and games
Effects of Indian politics and economy on the promotion of sports events