

BHARATI VIDYAPEETH  
(DEEMED TO BE UNIVERSITY), PUNE, INDIA  
PhD Entrance Test – 2020  
**SECTION-II: Physical Education Syllabus - 50 Marks**

**1. Introduction, History and Foundations of Physical Education**

- 1.1 Aims and objectives of Education and Physical Education, Biological, Psychological and Sociological Principles and their Application in Physical Education.
- 1.2 Different Schools of Philosophy and their relevance to Physical Education (Idealism, Realism, Pragmatism, Naturalism, and Existentialism)
- 1.3 Physical Education in Greece (Sparta and Athens), Rome (Circus, Gladiatorial Combats), Germany (John Basedow, Guts Muths), Sweden (Per Henric Ling), India (Raj Kumari Amrita Kaur Coaching Scheme, YM.C.A., LNIPE, SAI, NSNIS)
- 1.4 Olympic Games (Ancient and Modern); Asian Games.

**2. Anatomy, Physiology and Physiology of Exercise**

- 2.1 Cell, Tissues, Organs and Systems - Structure and Function.
- 2.2 Bio-Electric Potential.
- 2.3 Study of following systems and processes with a view to understand the effect of exercise on different systems of the body.
  - 2.3.1 Cardio-Vascular System
  - 2.3.2 Respiratory System
  - 2.3.3 Nervous System
  - 2.3.4 Metabolism and Temperature Regulation
  - 2.3.5 Muscular System
- 2.4 Nutrition, Assessment of Nutrition,
- 2.5 Classification of Food, Balance Diet.

**3. Educational Psychology**

- 3.1 Development Psychology (Heredity and Environment, Stages of Growth and Development, Individual Differences).
- 3.2 Learning Processes (Theories of learning: Trial and Error, Conditioned Response and Learning by Insight), Laws of Learning (Law of readiness, Exercise, effect)
- 3.3 Transfer of Learning and Learning Curve, Memory & Types as well as concept of Memory.
- 3.4 Personality (Meaning & Nature)
- 3.5 Motivation and Emotion

**4. Kinesiology and Sports Training**

- 4.1 Types of Joints & Muscles
- 4.2 Major Terminologies of Fundamental Movements.
- 4.3 Location and Action of Major Muscles.
- 4.4 Axis and Planes Equilibrium and Friction, Newton's Laws of Motion, Centripetal and Centrifugal Force and Types of Lever
- 4.5 Meaning, Definition and Principles of Sports Training.
- 4.6 Training Load; Definitions, types and factors of training and Adaptation

4.7 Means and method of development of Motor Abilities (speed, strength, endurance, Flexibility, Coordinative abilities).

## **5. Tests & Measurements**

5.1 Tests, Measurements, Evaluation & Statistics and their Meaning.

5.2 Measures of Central Tendency & Measures of Variability.

5.3 Percentile and Correlation.

5.4 Criteria of Test Selection.

5.5 Motor Fitness Tests (AAHPER, JCR, Barrow, Indiana)

5.6 Skill Tests of different Games & Sports (Hockey, Volleyball, Basketball, Football, Badminton).