

**PHYSICAL EDUCATION**  
**(DEGREE STANDARD)**

**SUBJECT CODE: 355**

**UNIT-I : PRINCIPLES OF PHYSICAL EDUCATION**

Meaning of Physical Education, Physical Culture, Physical Training. Aim and Objectives of Physical Education. Physical Education in Ancient Greece – Sparta and Athens – Ancient and Modern Olympic Games – Asian Games. Physical Education in India . Biological foundation: Muscle tone, Athletic heart – Reciprocal innervations – Vital capacity – Chronological age –Physiological age – mental age. Somatic Type: Sheldon & Kretschmer.

**UNIT-II : METHODS AND MANAGEMENT IN PHYSICAL EDUCATION**

Meaning and importance of methods in Physical Education- factors influencing methods. Presentation Techniques - Types of physical Education periods - Teaching aids - various methods of Teaching - Types of Tournaments, Preparation of Fixtures for Knock out, League and Combination Tournaments. Intramurals and Extramural. Guiding principles of organization, Records and Registers. Construction and maintenance of Swimming pool and Gymnasium.

**UNIT-III: TEST, MEASUREMENT AND EVALUATION**

Meaning of the terms: test, measurement and evaluation. Construction and Criteria of test evaluation. JCR Motor Fitness test, Muscular Fitness : Kraus Weber Minimum Muscular Fitness Test, Barrow Motor Ability Test - Newton Motor Ability Test, Cardio vascular test: Harvard step test, 12 minutes run/walk test. Badminton: Miller Wall Volley Test. Basketball: Johnson Basketball Test,. Hockey: Friedel Field Hockey Test,. Volleyball: Russel Lange Volleyball Test, Brady Volleyball Test. Football: MC-Donald Soccer Test.

**UNIT-IV: HEALTH EDUCATION**

Health Education: Meaning and Definition – Factors influencing Health: Heredity and Environment – Infection, Immunity and Immunization- Public Health measures to combat infection - Common Communicable Diseases: Definition – Causes,

symptoms, mode of transmission and prevention of Malaria - Filaria - Typhoid – Measles- Whooping Cough- Cholera – Chicken pox – Small Pox, Dysentery and Mumps. Personal Hygiene - School Health Programme- Health instruction – Health services – Health supervision. Nutrition, Diet and Components of Food.

### **UNIT-V : SPORTS PSYCHOLOGY AND FITNESS**

Meaning of Sports Psychology and its importance. Motor Learning and motor performance. Basic consideration in motor fitness: Body build, Mental aspects, Sense Perception: Vision, Kinesthesia, Tactile. Emotional effects: Tension, Anxiety, Stress. Theories of learning – Conditioned Response – Trial and Error – insightful. Laws of Learning – Transfer of Learning – Positive – Negative – Theories of Play. Physical fitness, Reaction time, Movement time, Types and Components of Physical fitness.

### **UNIT-VI: YOGA**

Meaning and Definition of Yoga. Eight limbs of yoga: Yama – Niyama – Asana – Pranayama- Pratyahara – Dharana – Dhyana – Samadhi. International Yoga Day. Suryanamaskar. Breathing exercises and Asanas towards Promotion of Physical, Mental and Emotional Health.

### **UNIT-VII : SPORTS TRAINING AND ATHLETIC INJURIES**

Principles and Characteristics of Sports Training. Definition of tactics and strategy: Offensive and Defensive Strategies, Periodisation in Training. Training Load, Components of Training Load, Training methods-Circuit Training, Interval Training, Plyometric training and Weight training. First – Aid. Athletic injuries their management and rehabilitation. Therapeutic modalities. Ergogenic aids and doping. Massage manipulation and therapeutic exercises. Concept of Sport Injury Management

### **UNIT-VIII: PHYSIOLOGY AND BIOMECHANICS**

Physiology of Muscular activity, Neurotransmission and Movement mechanism. Physiology of respiration. Physiology of blood circulation. Factors influencing performance in sports, bioenergetics and recovery process. Biomechanics: Meaning

and Definition. Joints and their movement-planes and axes. Laws of motion, Posture, postural deformation and their correction. Muscular analysis of Motor movement. Mechanical analysis of various sports activities. Mechanical analysis of fundamental movements-(running, jumping, throwing, pulling and pushing).

### **UNIT-IX: RULES OF SPORTS AND GAMES**

Ground marking maintenance, Equipments, Duties of Officials and Rule of sports and games: Basketball, Ball Badminton, Badminton, Cricket, Football, Handball, Hockey, Kabaddi, Kho-Kho, Tennis, Table Tennis, Volleyball.

### **UNIT-X: TRACK AND FIELD**

Layout of standard track (400 meters), Method of calculating Stagers and Arch start. Layout of Circle/Runway and sector for: Javelin, Shot-put, Discus, Hammer throw, Long Jump, Triple Jump and High Jump. Duties of Officials, Rules and Measurements of Standard Athletic Equipments.

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