

## Unit XI Training In Sports

- Meaning & Concept of Sports Training
- Principles of Sports Training
- Warming up & limbering down
- Load, Adaptation & Recovery
- Skill, Technique & Style
- Symptoms of Over-load & How to Overcome it

### Practical

**Max. Marks 30**

- |  |            |
|--|------------|
| 01. Physical Fitness   | - 05 Marks |
| 02. Athletics - Any two events - Sprints & Jumps*  | - 05 Marks |
| 03. Health & Fitness Activities - Medicine Ball/Thera Tube/Pilates/Rope Skipping (Any one) | - 05 Marks |
| 04. Skill of any one Individual Game of choice from the given list***                      | - 05 Marks |
| 05. Viva   | - 05 Marks |
| 06. Record File**  | - 05 Marks |

\*The events being opted must be other than from those administered under Physical Fitness Test.

\*\*1. Write benefits of Medicine Ball, Thera Tube & Pilates.

2. Measure BMI of ten members from family or neighbourhood & show graphical representation of the data.

3. Draw a neat diagram of Standard Track with all its specifications. Mention all the Track & Field Events.

Mention the latest records at Indian, World & Olympic Level.

\*\*\* Badminton, Judo, Swimming, Table Tennis, Taekwondo & Tennis

## PHYSICAL EDUCATION (Code No. 048) CLASS XII (2016-17)

### THEORY

**Max. Marks 70**  
**No. of Periods 180**

#### Unit I Planning in Sports

- Meaning & Objectives of Planning
- Various Committees & Its Responsibilities
- Tournament - Knock-Out, League or Round Robin & Combination
- Procedure to Draw Fixtures - Knock-Out (Bye & Seeding) & League (Staircase & Cyclic)
- Intramural & Extramural - Meaning, Objectives & Its Significance
- Specific Sports Programme (Sports Day, Health Run, Run For Fun, Run For Specific Cause & Run For Unity)

#### Unit II Adventure Sports & Leadership Training

- Meaning & objectives of Adventure Sports
- Types of activities - Camping, Rock Climbing, Tracking, River Rafting & Mountaineering

- Material requirement & safety measures
- Identification & use of Natural Resources
- Conservation of surroundings
- Creating Leaders Through Physical Education

### **Unit III Sports & Nutrition**

- Balanced Diet & Nutrition: Macro & Micro Nutrients
- Nutritive & Non-Nutritive Components of Diet
- Eating Disorders - Anorexia Nervosa & Bulimia
- Effects of Diet On Performance
- Eating For Weight Control - A Healthy Weight, The Pitfalls Of Dieting, Food Intolerance & Food Myths
- Sports nutrition (fluid & meal intake, pre, during & post competition)

### **Unit IV Postures**

- Concept of Correct Postures - Standing and Sitting
- Advantages of Correct Posture
- Causes of bad posture
- Common Postural Deformities - Knock Knee; Flat Foot; Round Shoulders; Lordosis, Kyphosis, Bow Legs and Scolioses
- Physical Activities as Corrective Measures

### **Unit V Children & Sports**

- Motor development in children
- Factors affecting motor development
- Physical & Physiological benefits of exercise on children
- Advantages & disadvantages of weight training & food supplement for children
- Activities & quality of life.

### **Unit VI Women & Sports**

- Sports participation of women in India
- Special consideration (Menarch, Menstrual Dysfunction, Pregnancy, Menopause)
- Female Athletes Triad (Anemia, Osteoporosis & Amenoria)
- Psychological aspects of women athlete
- Sociological aspects of sports participation
- Ideology

### **Unit VII Test & Measurement in Sports**

- Measurement of Muscular Strength - Kraus Weber Test
- Motor Fitness Test - AAPHER

- Measurement of Cardio Vascular Fitness - Harvard Step Test/Rockport Test
- Measurement of Flexibility - Sit & Reach Test
- Rikli & Jones - Senior Citizen Fitness Test
  1. Chair Stand Test for lower body strength
  2. Arm Curl Test for upper body strength
  3. Chair Sit & Reach Test for lower body flexibility
  4. Back Scratch Test for upper body flexibility
  5. Eight Foot Up & Go Test for agility
  6. Six Minute Walk Test for Aerobic Endurance

### **Unit VIII Physiology & Sports**

- Gender differences in physical & physiological parameters.
- Physiological factor determining component of Physical Fitness
- Effect of exercise on Cardio Vascular System
- Effect of exercise on Respiratory System
- Effect of exercise on Muscular System
- Physiological changes due to ageing
- Role of physical activity maintaining functional fitness in aged population

### **Unit IX Sports Medicine**

- Concept & definition
- Aims & scope of sports medicine
- Impact of surfaces & environment on athletes
- Sports injuries: Classification, Causes & Prevention
- Management of Injuries:
  - Soft Tissue Injuries:**  
(Abrasion, Contusion, Laceration, Incision, Sprain & Strain)
  - Bone & Joint Injuries:**  
(Dislocation, Fractures: Stress Fracture, Green Stick, Communated, Transverse Oblique & Impacted)

### **Unit X Biomechanics & Sports**

- Projectile & factors affecting Projectile Trajectory
- Angular & Linear Movements
- Introduction to Work, Power & Energy
- Friction
- Mechanical Analysis of Walking & Running

### **Unit XI Psychology & Sports**

- Understanding stress, anxiety & its management
- Coping Strategies

- Personality, its dimensions & types; Role of sports in personality development
- Motivation, its type & technique
- Self-esteem & Body Image
- Psychological benefits of exercise

### Unit XII Training in Sports

- Strength - Definition, types & methods of improving Strength - Isometric, Isotonic & Isokinetic
- Endurance - Definition, types & methods to develop Endurance - Continuous Training, Interval Training & Fartlek Training
- Speed - Definition, types & methods to develop Speed - Acceleration Run & Pace Run
- Flexibility - Definition, types & methods to improve flexibility
- Coordinative Abilities - Definition & types

### Practical

**Max. Marks 30**

- |   |            |
|---|------------|
| 01. Physical Fitness - AAHPER   | - 05 Marks |
| 02. Athletics - Middle & Long Distance Runs & Throws*                             | - 05 Marks |
| 03. Health & Fitness Activities - Asanas/Swiss Ball/Plyometric/Aerobics (Any one) | - 05 Marks |
| 04. Skill of any one Team Game of choice from the given list***                   | - 05 Marks |
| 05. Viva  | - 05 Marks |
| 06. Record File**   | - 05 Marks |

\*The events being opted must be other than from those administered under Physical Fitness Test.

- \*\*1. Write benefits of Asanas, Swiss Ball & Plyometric
2. Measure Resting Heart Rate & Respiratory Rate of ten members from family or neighbourhood for three weeks & show graphical representation of the data.
  3. Draw a neat diagram of the Field/Court of any one Game of choice. Write its history, Rules & Regulations, Terminologies & Important Tournaments.

\*\*\* Athletics, Basketball, Football, Handball, Hockey, Kho Kho & Volleyball