

## CLASS-XII (2017-18)

Theory

Max. Marks 70

### Unit-I : Planning in Sports

- Meaning & Objectives Of Planning
- Various Committees & its Responsibilities (pre; during & post)
- 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 : Sports & Nutrition

- Balanced Diet & Nutrition: Macro & Micro Nutrients
- Nutritive & Non-Nutritive Components Of Diet
- Eating For Weight Control - A Healthy Weight, The Pitfalls Of Dieting, Food Intolerance & Food Myths
- Sports nutrition & its effect on performance (fluid & meal intake, pre, during & post competition)
- Food supplement for children

### Unit-III : Yoga & Lifestyle

- Asanas as preventive measures
- Obesity: Procedure, Benefits & contraindications for Vajrasana, Hastasana, Trikonasana, Ardh Matsyendrasana
- Diabetes: Procedure, Benefits & contraindications for Bhujangasana, Paschimottasana, Pavan Muktasana, Ardh Matsyendrasana
- Asthema: Procedure, Benefits & contraindications for Sukhasana, Chakrasana, Gomukhasana, Parvatasana, Bhujangasana, Paschimottasana, Matsyasana
- Hypertension: Tadasana, Vajrasana, Pavan Muktasana, Ardha Chakrasana, Bhujangasana, Sharasana
- Back Pain: Tadasana, Ardh Matsyendrasana, Vakrasana, Shalabhasana, Bhujangasana

### Unit-IV : Physical Education & Sports for Differently-Abled

- Concept of Disability & Disorder
- Types of Disability, its causes & nature (cognitive disability, intellectual disability, physical disability)
- Types of Disorder, its cause & nature (ADHD, SPD, ASD, ODD, OCD)
- Disability Etiquettes
- Advantage of Physical Activities for children with special needs
- Strategies to make Physical Activities assessable for children with special need.

### Unit-V : Children & Sports

- Motor development & factors affecting it
- Exercise Guidelines at different stages of growth & Development
- Advantages & disadvantages of weight training
- Concept & advantages of Correct Posture
- Causes of Bad Posture
- Common Postural Deformities - Knock Knee; Flat Foot; Round Shoulders; Lordosis, Kyphosis, Bow Legs and Scolioses
- Corrective Measures for Postural Deformities

### Unit-VI : Women & Sports

- Sports participation of women in India
- Special consideration (Menarch & Menstrual Dysfunction)
- Female Athletes Triad (Oestoperosis, Amenoria, Eating Disorders)
- Psychological aspects of women athlete
- Sociological aspects of sports participation

### Unit-VII : Test & Measurement in Sports

- Computation of Fat Percentage -  
Slaughter - Lohman Children Skinfold Formula:  
Triceps & Calf Skinfold (Male 6 to 17 yrs - % body fat =  $(0.735 \times \text{sum of skinfold}) + 1.0$   
(Female 6 to 17 yrs - % body fat =  $(0.610 \times \text{sum of skinfold}) + 5.0$
- Measurement of Muscular Strength - Kraus Weber Test
- Motor Fitness Test - AAPHER
- General Motor Fitness - Barrow three item general motor ability (Standing Broad Jump, Zig Zag Run, Medicine Ball Put - For Boys: 03 Kg & For Girls: 01 Kg)
- Measurement of Cardio Vascular Fitness - Harvard Step Test/Rockport Test -
- Computation of Fitness Index:  $\text{Duration of the Exercise in Seconds} \times 100$   
 $5.5 \times \text{Pulse count of 1-1.5 Min after Exercise}$
- 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, Aims & Scope of Sports Medicine
- Sports injuries: Classification, Causes & Prevention
- First Aid - Aims & Objectives
- 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 : Kinesiology, Biomechanics & Sports**

- Projectile & factors affecting Projectile Trajectory
- Newton's Law of Motion & its application in sports
- Aerodynamics Principles
- Friction & Sports
- Introduction to Axes & Planes
- Types of movements (Flexion, Extension, Adbuction & Adduction)
- Major Muscles involved in running, jumping & throwing

#### **Unit-XI : Psychology & Sports**

- Understanding Stress & Coping Strategies (Problem Focussed & Emotional Focussed)
- Personality; its definition & types - Trait & Type (Sheldon & Jung Classification) & Big Five Theory
- Motivation, its type & techniques
- Self-esteem & Body Image
- Psychological benefits of exercise
- Meaning, Concept & Types of Aggressions in Sports

#### **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
- Circuit Training & High Altitude Training; Introduction & its impact

## Practical

Max. Marks 30

- |  |            |
|--|------------|
| 01. Physical Fitness - AAHPER                                  | - 10 Marks |
| 02. Skills of any one Team Game of choice from the given list* | - 10 Marks |
| 03. Viva   | - 05 Marks |
| 04. Record File**  | - 05 Marks |

\*Athletics, Basketball, Football, Handball, Hockey, Kho Kho, Rifle Shooting, Unified Basketball (Differently-abled Children) & Volleyball

\*\*Record File shall include:

Practical-1: Modified AAHPER administration for all items.

Practical-2: Conduct Barrow 3 Item Test on 10 students.

Practical-3: Procedure for Asanas, Benefits & Contraindication for any two Asanas each lifestyle disease.

Practical-4: Procedure for administering Senior Citizen Fitness Test for 5 elderly family members.

Practical-5: Any one game of your choice out of the list above. Labelled diagram of field & equipment Rules, Terminologies & Skills).

### Note:

1. It is suggested that Unit No. III & VII may be taught by following the Principle of Learning by Doing.
2. Content is designed to complete the syllabus between 120-140 period.