

# **CENTRAL BOARD OF SECONDARY EDUCATION**

## **PHYSICAL EDUCATION CURRICULUM (2018-19) Class XI**

Theory

Max. Marks 70

### **Unit I Changing Trends & Career In Physical Education**

- Meaning & definition of Physical Education
- Aims & Objectives of Physical Education
- Changing trends in Physical Education
- Various Physical Education Courses available in India
- Career Options in Physical Education
- Soft skills required for different careers

### **Unit II Olympic Movement**

- Ancient & Modern Olympics (Summer & Winter)
- Olympic Symbols, Ideals, Objectives & Values
- International Olympic Committee
- Indian Olympic Association
- Dronacharya Award, Arjuna Award & Rajiv Gandhi Khel Ratna Award
- Organisational set-up of CBSE Sports & Chacha Nehru Sports Award

### **Unit III Physical Fitness, Wellness & Lifestyle**

- Meaning & Importance Of Physical Fitness, Wellness & Lifestyle
- Components of physical fitness
- Components of Health related fitness
- Components of wellness
- Preventing Health Threats Through Lifestyle Change
- Concept of Positive Lifestyle

### **Unit IV Physical Education & Sports for CWSN (Children With Special Needs- Divyang)**

- Aims & objectives of Adaptive Physical Education
- Organization promoting Adaptive Sports (Special Olympics Bharat; Paralympics; Deaflympics)
- Concept and need of Integrated Physical Education
- Concept of Inclusion, its need and Implementation
- Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist & special Educator)

### **Unit V Yoga**

- Meaning & Importance of Yoga
- Elements of Yoga
- Introduction - Asanas, Pranayam, Meditation & Yogic Kriyas
- Yoga for concentration & related Asanas (Sukhasana; Tadasana; Padmasana & Shashankasana)
- Relaxation Techniques for improving concentration - Yog-nidra

### **Unit VI Physical Activity & Leadership Training**

- Concept of Physical Activity & Inactivity
- Leadership Qualities & Role of a Leader
- Behaviour change stages for physical activity (Pre-contemplation; Contemplation; Planning; Active; Maintenance)
- Creating leaders through Physical Education
- Meaning, objectives & types of Adventure Sports (Rock Climbing, Tracking, River Rafting, Mountaineering, Surfing and Para Gliding)
- Safety measures during physical activity and adventure sports

### **Unit VII Test, Measurement & Evaluation**

- Define Test, Measurement & Evaluation
- Importance Of Test, Measurement & Evaluation In Sports
- Calculation Of BMI & Waist - Hip Ratio
- Somato Types (Endomorphy, Mesomorphy & Ectomorphy)
- Procedures Of Anthropometric Measurement - Height, Weight, Arm & Leg Length

## Unit VIII Fundamentals Of Anatomy & Physiology

- Define Anatomy, Physiology & Its Importance
- Function Of Skeleton System, Classification of Bones & Types of Joints
- Properties of Muscles
- Function & Structure Of Muscles
- Function & Structure Of Respiratory System, Mechanism of Respiration
- Structure Of Heart & Introduction to Circulatory System
- Oxygen debt, second-wind

## Unit IX Kinesiology, Biomechanics & Sports

- Meaning & Importance of Kinesiology & Biomechanics in Phy. Edu. & Sports
- Concept of Musculoskeletal System
- Joints - Articulation of Bones (Neck, Shoulder, Elbow, Hip and Knees)
- Major Muscles around the Joints (Neck, Shoulder, Elbow, Hip and Knees)
- Levers & Its Types and its application in sports
- Equilibrium - Dynamic & Static And Centre of Gravity and its application in sports

## Unit X Psychology & Sports

- Definition & Importance of Psychology in Phy. Edu. & Sports
- Define & Differentiate Between Growth & Development
- Developmental Characteristics At Different Stage of Development
- Adolescent Problems & Their Management
- Define Learning, Laws Of Learning (Law of Readiness; Law of Effect & Law of Exercise) & Transfer of Learning
- Emotion: Concept, Type & Controlling of emotion

## Unit XI Training In Sports

- Meaning & Concept of Sports Training
- Principles of Sports Training
- Warming up & limbering down
- Load, Symptoms of Over-load, Adaptation & Recovery
- Skill, Technique & Style
- Role of Free-play in the development of Motor Component

## Unit XII Doping

- Concept & classification of doping
- Prohibited Substances & Methods
- Athletes Responsibilities
- Side Effects Of Prohibited Substances
- Ergogenic aids & doping in sports
- Doping control procedure

## Practical

Max. Marks 30

- |                                                                             |            |
|-----------------------------------------------------------------------------|------------|
| <b>01.</b> Physical Fitness (AAHPER)                                        | - 10 Marks |
| <b>02.</b> Skill of any one Individual Game of choice from the given list** | - 10 Marks |
| <b>03.</b> Viva                                                             | - 05 Marks |
| <b>04.</b> Record File***                                                   | - 05 Marks |

**\*\*Archery, Badminton, Gymnastics, Judo, Swimming, Table Tennis, Taekwondo, Tennis and Bocce**

**\*\*\*Record File shall include:**

*Practical-1: Labelled diagram of 400 M Track & Field with computations.*

*Practical-2: Computation of BMI from family or neighbourhood & graphical representation of the data.*

*Practical-3: Labelled diagram of field & equipment of any one game of your choice out of the above list.*

*Practical-4: Explanation & list of current National Awardees (Dronacharya Award, Arjuna Award & Rajiv Gandhi Khel Ratna Award)*

*Practical-5: Pictorial presentation of any five Asanas for improving concentration.*

# **CENTRAL BOARD OF SECONDARY EDUCATION**

## **PHYSICAL EDUCATION CURRICULUM (2018-19) Class XII**

### **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, Pawanuktasana, Ardh Matsyendrasana
- Asthma: Procedure, Benefits & contraindications for Sukhasana, Chakrasana, Gomukhasana, Parvatasana, Bhujangasana, Paschimottasana, Matsyasana
- Hypertension: Tadasana, Vajrasana, Pawanuktasana, Ardha Chakrasana, Bhujangasana, Shavasana
- Back Pain: Tadasana, Ardh Matsyendrasana, Vakrasana, Shalabhasana, Bhujangasana

#### **Unit IV Physical Education & Sports for CWSN (Children With Special Needs - *Divyang*)**

- 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 Scoliosis
- Corrective Measures for Postural Deformities

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

- Sports participation of women in India
- Special consideration (Menarche & Menstrual Dysfunction)
- Female Athletes Triad (Osteoporosis, Amenorrhea, 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:  $\frac{\text{Duration of the Exercise in Seconds} \times 100}{5.5 \times \text{Pulse count of 1-1.5 Min after Exercise}}$
- 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

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

## Unit XI Psychology & Sports

- Understanding Stress & Coping Strategies (Problem Focussed & Emotional Focussed)
- Personality; its definition & types - Trait & Types (Sheldon & Jung Classification) & Big Five Theory
- Motivation, its type & techniques
- Exercise Adherence; Reasons to Exercise, Benefits of Exercise
- Strategies for Enhancing Adherence to 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 - Introduction & its importance

## 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, Volleyball and Unified Basketball [CWSN (Children With Special Needs - Divyang)]

**\*\*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 for 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:**

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