## CENTRAL BOARD OF SECONDARY EDUCATION

# PHYSICAL EDUCATION CURRICULUM Class XII Syllabus break-up, (2019 - 20)

## Theory (April – September 2019)

(Maximum 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 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 (October 2019 – March 2020)

Computation of Fat Percentage: -

Slaughter – Lohman Children Skinfold Formula: Triceps & Calf Skinfold (Male 6 to 17 years - % body fat =  $(0.735 \times \text{sum of skinfold}) + 1.0$  (Female 6 to 17 years - % 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: (Duration of the Exercise in Seconds x 100) / (5.5 x 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, Comminuted, 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 Focused & Emotional Focused)
- 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 & High Altitude Training; Introduction & its impact

## Practical's

## (Maximum marks 30)

		Max. Marks 30
01	Physical Fitness - AAHPER	10
02	Skills of any one Team Game of choice from the given list*	10
03	Viva	05
04	Record File**	05

<sup>\*</sup>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 Asana, Benefits & Contraindication for any two Asana 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.