There will be two papers in the subject:

Paper I: Theory: 3 hours -----70 marks

Paper II: Practical Work ----- 30 marks

### PAPER I (THEORY) - 70 Marks

**Note**: Details regarding evaluation of Practical Work are given at the end of Class XII. Practical Evaluation for Class XI is to be done by the Internal Examiner.

#### SECTION – A

### **1.** Concept of Physical Education

i. Meaning of Physical Education, its aim and objectives.

Understanding of the term 'Physical Education'.

Aims and objectives of Physical Education.

Importance of Physical Education.

Need for Physical Education and how it is important.

ii. Misconceptions about Physical Education and the relevance of Physical Education in the inter-disciplinary context (sports medicine, sports engineering, sports psychology, sports journalism, sports physiotherapy, sports nutritionist, sports fashion designing).

Misconceptions with respect to Physical Education; how Physical Education is related to various other disciplines as listed above.

iii. Meaning of 'Play' and 'Recreation'.

Definition and importance of 'Play'; Characteristics of Play (freedom and time, space and spontaneity, enjoyment, intrinsic value).

Definition and importance of recreation.

iv. Meaning and concept of 'Games and Sports'.

Meaning, definition and characteristics of 'Games and Sports'

### 2. Individual Aspects and Group Dynamics

- a) Interest and attitude.
  - Meaning and definition of the term Interest (inborn and acquired); Methods of developing interest (in Physical Education activities and programmes).
  - Meaning and definition of the term Attitude (experience, derived, emotional challenge, profession); methods of forming attitude: by means of suggestions, by blindly accepting the social norms, by means of some intense emotional experiences, through participating in games and sports (forming attitude to win, attitude towards exercise, attitude towards physical fitness, fair play, obedience, discipline, etc.)

- b) Motivation.
  - Introduction, meaning and definition of 'Motivation'.
  - *Types of Motivation: intrinsic and extrinsic.*
  - Methods of Motivation: praise or blame, competition, reward and punishment, setting clear goals, success and failure, record of progress, scholarships, social recognition, honour and glory.
- c) Leadership.
  - Meaning and definition of the word 'Leader'.
  - Desirable qualities of a Leader.

### 3. Effects of Physical Exercise on Human Body Systems

Various systems and the effects of exercise and training on the following: skeletal system, muscular system, respiratory system, circulatory system and digestive systems.

- *i.* The skeletal and muscular system: Types of bones in the body, various types of joints and major movements; structural classification of muscles, structure and function of muscle.
- *ii. Respiratory System: Meaning and types of respiration, organs of the respiratory system* (nose, larynx, trachea, bronchi, diaphragm) and their functions.
- *iii. Circulatory system: Meaning; Heart, its structure and functions; control of the heart rate; function and composition of blood, maintenance of blood supply.*
- *iv.* Digestive System: Meaning, major organs (mouth, oesophagus, stomach, pancreas, liver, gallbladder, small intestine, large intestine) and functions of each.
- v. Effect of exercise and benefits of regular training on the above systems.

## 4. Nutrition, Weight Control & Exercise

i. Nutrition Basics – Dietary Goals and basics of a Nutritious Diet.

Nutrition basics: Dietary Goals for various stages of growth (childhood, adolescence, adulthood, old age); Meaning of 'Nutritious Diet'.

*ii.* Balanced Diet and role of balanced diet in performance.

Concept of a Balanced diet; elements and sources of a balanced diet; factors affecting balanced diet; Importance of Balanced diet in sports performance.

iii. Obesity and weight control; Life time concept of weight control.

Meaning and definition of obesity; causes of Obesity, dangers of Obesity, prevention of Obesity through exercise and weight control.

*Life-time concept of weight control – an understanding of how weight can be controlled through proper eating habits and exercise.* 

### 5. Physical Fitness & Wellness

i. Physique, Physical Fitness and Wellness.

Understanding of the term 'Physique'; A basic understanding of the three body types (a) Endomorph (b) Mesomorph (c) Ectomorph.

Meaning and importance of Physical Fitness and Wellness.

ii. Components of physical fitness and wellness.

Components of physical fitness:

Health related fitness such as Cardio vascular endurance, muscular endurance, strength; flexibility; body composition.

Skill related fitness: such as Cardio vascular endurance, muscular endurance, strength; flexibility; body composition, balance; coordination; agility; power, reaction time and speed (Candidates should be made to understand that skill related fitness includes all health related fitness components).

*Components of Wellness: social, spiritual, physical, mental, emotional and intellectual (a basic understanding of each).* 

iii. Factors affecting physical fitness and wellness.

Factors affecting physical fitness and wellness: Heredity, exercise (physical, mental and social benefits), illness, physical deformity, age and gender, diet, stress, living style, substance use (smoking, drugs, alcohol) and environment.

iv. Tests and Measurements in Sports.

Basic understanding, importance and calculation of the following: Kraus Weber Test; Body Mass Index (BMI); Waist Hip Ratio; Measurement of Heart Rate; Rockport onemile test.

### 6. Games and Sports – a global perspective

i. Olympics as a Social force.

An understanding of how the Olympic games promote international understanding and appreciation of cultural diversity by providing a platform for athletes from all over the world to meet and compete, irrespective of their colour, race, creed and political beliefs.

ii. History of Modern Olympics.

Motto of the Olympic games; Events held in modern Olympics; Where and when the first modern Olympics took place and where and when the upcoming Olympics will take place; significance of the colours used in the rings of the Olympic flag and what these rings signify. The founder of modern Olympics.

iii. Asian Games.

Where and when the first Asian Games took place and where and when the upcoming Asian Games will take place. Events held in Asian Games; Countries participating in Asian Games.

#### **SECTION B**

Any **two** of the following games are to be studied:

Cricket, Football, Hockey, Basketball, Volleyball, Badminton, Tennis, Swimming, Athletics.

The following aspects should be studied for **each** of the **two games** selected by the candidate.

Rules and regulations of the game; Interpretation of laws of the game; Duties and responsibilities of the officials and players; Measurement and dimensions related to the game; Terminologies related to the game; Fundamental skills of the game; Strategies and formation of the game; Names and abbreviations of the National and Major International Tournaments linked with the game; Diagrams and dimensions of play area; Diagrams and dimensions of equipment related to the game.

The details for each game are given below:

CRICKET

- Knowledge of the game, strategies and tactics, and how to improve performance.
- Detailed understanding of the rules and regulations of the game. Diagrams of the field and pitch, and various fielding positions.
- Knowledge of the dimensions of the field, thickness of the lines, dimensions of pitch and complete specifications and markings on it. Equipment of the game with their length, width weight, thickness and material. Score board, scorer, sightscreen. Flood light.
- Duties of the officials, before, during and after the match. Umpires and third umpire, requirements of the game, equipment needed, numbers of players, duty of coach, captain etc.
- Laws governing the game. Suspensions, penalisations, draws, match fixtures, arrangements needed to conduct tournaments, forfeitures, follow on, tie, power play, match fixing, duck worth rule, sledging, ball tampering.
- Basic skills and techniques. Batting (different types of shots, footwork, body position and actual bat movement. Bowling (run up, delivery stride, follow through, types of bowling variations, good line and length, grip action. Fielding positions, catching and throwing skills, Wicket keeping techniques, skills of getting the batsmen out.
- Different types of signals, extra runs, extra players, runner, substitute, provisions and restrictions, player's equipment, danger area, various terms of cricket.

 Knowledge of associations and federations linked to the game. Important tournaments. Abbreviations of associations and federations concerned with the game.

## FOOTBALL

- Knowledge of the game, strategies and tactics, and how to improve performance.
- Detailed understanding of the rules and regulations of the game. Match time, extra time, tie breaker, sudden death, ball in play and out of play, importance of lines on the field. Various methods of starting and restarting the game. Substitution procedure, penalty cards and their importance.
- Knowledge of the dimensions of the field, thickness of the lines, dimensions of center circle, quarter circle, goal and penalty area, penalty arc and complete specifications and markings on it. Equipment of the game with their length, width, weight, thickness, material and dimensions. Diagram of goal post and field.
- Duties of the officials, requirements of the game, equipment needed, numbers of players, duty of coach, captain, assistant referees, technical officials, grounds men, ball boys, match organizers, technical area.
- Laws governing the game. Suspensions, penalisations, draws, match fixtures, arrangements needed to conduct tournaments, punishment on players, coaches.
- Basic skills and techniques (Passing types of pass, ground lofted, chip, volley, angle of pass. Control (use of various surfaces-head chest, foot thigh). Dribbling (running with the ball, rhythm and pace, feints, body swerves, screening, beating an opponent. Heading the ball with intention of (attacking, defending, jumping, to head down, high, pass, score). Shooting skills with either foot, inside or outside, short and long range shots, swerving shots, volleys, penalty kicks, power and accuracy. Tackling skills interception, jockeying for the ball, trapping by various body parts, position, tackle front, side, slide, recovery. Goalkeeping skills stopping, watching, guiding the team, saving goal, dealing, catching, heading, kicking, punching, throwing, diving, anticipation, speed and reflexes.
  - Principles of play-attack, depth, defence, penetration, sweeper systems, 4-4-2, 4-3-3, 4-2-4. Kick-off, corner kick, throw-in, goal kick, free kick, penalty kick. Importance of penalty arc, center circle and lines on the field.
- Knowledge of associations and federations linked to the game. Important tournaments. Abbreviations of associations and federations concerned with the game.

### **HOCKEY**

- Knowledge of the game, strategies and tactics, and how to improve performance.
- Detailed understanding of the rules and regulations of the game. Match time, extra time, tie breaker, sudden death, ball in play and out of play, penalty stroke, short corner, long corner, free hits, hit or push back, 16 yard hit, importance of lines on the field. Start and restart of the match.
- Knowledge of the dimensions and diagrams of the field and goalpost, thickness of the lines, dimensions and complete specifications and markings on it. Equipment of the game with their length, width, weight, thickness, material and dimensions. Protective equipment of the goalkeeper and players.

- Duties of the officials, requirements of the game, equipment needed, numbers of players, reserve bench, running substitution duty of coach, captain, assistant referees, ball boys, doctor, grounds men.
- Laws governing the game. Suspensions, penalisations, draws, match fixtures, arrangements needed to conduct tournaments, punishment on players, coaches.
- Basic skills and techniques (Passing types of pass, ground lofted, chip, volley, angle of pass. push, scoop, flick, aerial ball. Receiving the ball control, dribbling (running with the ball, rhythm and pace, feints, body swerves, screening, beating an opponent from the right to the left, right and behind. Shooting skills with Stick, inside or outside, short and long range shots, swerving shots, volleys, penalty, power and accuracy. Tackling skills interception, jockeying for position. Goalkeeping skills stopping, watching, guiding the team, saving goal, kicking, diving, anticipation, speed, reflexes.
- Principles of play-attack, depth, defence, penetration, team formations 1-2-3-5/1-1-3-4- 2/1-1-3-3.
- Knowledge of associations and federations linked to the game. Important tournaments.
  Abbreviations of associations and federations concerned with the game.

# BASKETBALL

- Knowledge of the game, strategies and tactics, and how to improve performance.
- Detailed understanding of the rules and regulations of the game.
- Knowledge of the dimensions of the court, thickness of the lines, diagrams and dimensions of the court, full specifications of the ring, pole, boards and ball.
- Duties of the officials, table officials, referees, scorers, requirements of the game, equipment needed, numbers of players, reserve bench, duty of coach, captain, technical equipment team and player foul markers.
- Laws governing the game. Suspensions, penalisations, draws, match fixtures, arrangements needed to conduct tournaments.
- Basic skills and techniques, tactics and team skills Knowledge of basic skills, free throws stance (passing, dribble, shoot); Shooting (jump shot, layup, hook shot); passing (pass, signal, receive feint footwork, chest-pass, bounce pass, overhead pass, javelin pass. Footwork (pivot, 1 count and 2 count stop). One to one defence, fake and drive, pass and cut defence, types of defence, zone defence, and fast break.
- Knowledge of associations and federations linked to the game. Important tournaments.
  Abbreviations of associations and federations concerned with the game.

# VOLLEYBALL

- Knowledge of the game, strategies and tactics, and how to improve performance.
- Detailed understanding of the rules and regulations of the game.
- Knowledge of the dimensions and diagram of the court, thickness of the lines, dimensions within the court, full specifications of the net, pole and other equipment required for the game.
- Duties of the officials, table officials, referees, requirements of the game, equipment needed, numbers of players, reserve bench, duty of coach, captain, etc.
- Laws governing the game. Suspensions, penalisations, draws, match fixtures, arrangements needed to conduct tournaments, default by teams.

- Basic skills and techniques, tactics and team skills, Knowledge of basic skills, volleytwo hand pass over the head forearm pass. The serve underarm, over arm float, over arm jump, over arm top spin, round house jump. The smash - high set cross court, down the line, speed smash, tip the ball over the block. The block-line of defence, defence against smash, attack at set ball. Teamwork importance in both defence and attack. Understanding rotation, blocking and screening
- Knowledge of associations and federations linked to the game. Important tournaments.
  Abbreviations of associations and federations concerned with the game.

### **BADMINTON**

- Knowledge of the game, strategies and tactics, and how to improve performance.
- Detailed understanding of the rules and regulations of the game. Match time, extra time, tie, shuttle in play and out of play, importance of lines on the court, singles and doubles.
- Knowledge of the dimensions and diagram of the court, thickness of the lines.
  Equipment required for the game with their length, width weight, thickness, material and dimensions.
- Duties of the officials, requirements of the game, equipment needed, number of players, duty of coach, match organisers.
- Laws governing the game. Suspensions, penalisations, draws, match fixtures, arrangements needed to conduct tournaments, punishment on players, coaches, match points, etc.
- Basic skills and techniques forehand or backhand, correct grip, smash, drop, drive, net play, return upshots and low/high/flick serves. Basic positioning for men and women rallies.
- Knowledge of associations and federations linked to the game. Important tournaments. Abbreviations of associations and federations concerned with the game.

### TENNIS

- Knowledge of the game, strategies and tactics, and how to improve performance.
- Detailed understanding of the rules and regulations of the game. Match time, deuce, advantage, tie foot fault. Ball in play and out of play. Dimensions and importance of lines on the court, singles and doubles.
- Knowledge of the dimensions and diagram of the court net, racket, thickness of the lines. Equipment required for the game with their length, width, weight, thickness, material and dimensions. Types of courts.
- Duties and number of officials, requirements of the game, number of players, duty of coach, match organisers.
- Laws governing the game. Suspensions, penalisations, draws, match fixtures, arrangements needed to conduct tournaments, punishment on players, coaches, match points, etc.
- Basic skills and techniques forehand or backhand, chopper grip, correct grip, smash, drop, drive, net play, return upshots and low/high/flick serves. Basic positioning for men and women rallies. The racket grip-shake hand. Strokes backhand push, forehand drive, forward push. Service two bounce serve, high toss, forehand spin, backhand spin, long serve. Spin forehand topspin, backhand topspin chopping blocking lobbing, follow through, placement of ball for each service.

Knowledge of associations and federations linked to the game. Important tournaments.
 Abbreviations of associations and federations concerned with the game.

#### **SWIMMING**

- Knowledge of competitive swimming events, activities, strategies and tactics, and how to improve performance (individual and team).
- Detailed understanding of the rules and regulations of various swimming events, strategies and tactics in chosen events. Planning performing and evaluating particular event.
- Knowledge of the dimension, depth and distance of the pool. Importance of starters and judges for start and finish of individual and medley races. Various officials in charge of conducting the events. Types of races, types of strokes, diving competitions, false start, individual and medley events. Stances for different strokes.
- Duties of the officials, table officials, referees, requirements of the game, equipment needed, numbers of players, reserve bench, duty of coach, physiotherapist, wind gauge operator, lifeguard, photo finish.
- Laws governing the game. Suspensions, penalisations, draws, fixtures, arrangements needed to conduct tournaments.
- Basic skills and techniques requiring control, balance, weight transfer, flow and clear body positions, complex sequence of movements and ability to perform showing high standards of precision control power speed and stamina, fitness and tactics to outwit the opponents. Warming up and cooling down safely, safety requirements for swimmers.
- Knowledge of associations and federations linked to the game. Important tournaments.
  Abbreviations of associations and federations concerned with the game.

### ATHLETICS

- Knowledge of track and field events, activities, strategies and tactics, and how to improve performance (individual and team).
- Detailed understanding of the rules and regulation of various events, strategies and tactics in chosen events. Planning performing and evaluating particular event.
- Knowledge of the dimension of the track. Width of the track. Measurement of 400 and 200 meters, relay and solo races. Equipment of athletes in various events dimensions and requirements. Importance of starters and judges for start and finish. Importance of staggers.
- Duties of the officials, table officials, referees, requirements of the game, equipment needed, numbers of players, reserve bench, duty of coach, physiotherapist, wind gauge operator, photo finish.
- Laws governing the game. Suspensions, penalisations, draws, match fixtures, arrangements needed to conduct meets. Rules and distances and requirements of various events.
- Basic skills and techniques requiring control, balance, weight transfer, flow and clear body positions, complex sequence of movements and ability to perform showing high standards of precision control power speed and stamina, fitness and tactics to outwit the opponents. Warming up and cooling down exercises.
- Knowledge of associations and federations linked to the game. Important tournaments.
  Abbreviations of associations and federations concerned with the game.