

PHYSICAL EDUCATION (875)

Aims:

1. To create awareness of the necessity for vigour and efficiency through physical fitness.
2. To develop knowledge and understanding of the requirements of healthy living, nutrition, exercise and relaxation.
3. To create awareness of the necessity to develop a good posture and physical poise.
4. To develop knowledge and understanding of skills that will be useful as leisure time activities and those of a recreational nature.
5. To create opportunities to develop *esprit de corps*, courtesy, sportsmanship, social skills, democratic conduct and ideals.
6. To develop appreciation of the aesthetics and cultural aspects of movement.

CLASSES XI & XII

There will be one theory paper of three hours duration and a Practical Test. Theory - 100 marks; Practical - 100 marks.

*The theory paper will be divided into sections as follows: **Section A** will contain **six compulsory questions**; **Section B** will contain **two questions**, based on each major game to test the practical experience of the candidates in two games of their choice.*

1. Sociological Aspects of Physical Education

- (a) Games and sports as man's cultural heritage.
- (b) Development of the individual through games and sports.
- (c) Role of Physical Education in promoting national integration development of attitudes, helpfulness, tolerance, patience team spirit and unity, etc.

2. Physical Education

- (a) Theories of Play.
- (b) Interest and attitude.
- (c) Motivation.
- (d) Leadership.

3. Training Method

- (a) Warming up and conditioning.
- (b) Isometric exercises.
- (c) Isotonic exercises.
- (d) Circuit training.

(e) Interval training.

(f) Leadership training in Physical Education. Its importance and facilities available in India.

4. Officiating and Coaching

Candidates to be fully aware of rules of sports and games and their interpretation - Tournaments - Trophies and Personalities connected with them. Olympic Movement - difference between Professional and Amateur. Modern trends and above all, role of Physical Education in building the all round personality of an individual.

5. Health Education

- (a) Principles of Health Education. Importance of Health Education for adults and the younger generation through formal and non-formal channels of education. Health problems and role of Health Education in solving them.
- (b) Prevention of disability and rehabilitation. General principles of prevention of disability; meaning and scope of rehabilitation; services available for rehabilitation; role of the community in rehabilitation.
- (c) Correct posture, personal cleanliness, recreation, foot care, sleep requirements. Dangers of misuse of drugs. Dangers of alcohol and smoking.

6. General

Study of the human skeleton; various systems and their effect; muscular, circulatory, respiratory, digestive, nervous and endocrine systems.

7. Nutrition: Weight Control and Exercise

Nutrition basics: dietary goals and basics for a nutritious diet. Overweight and obesity. Role of exercise in weight control; plan for losing weight; lifetime concept of weight control.

8. First Aid

Treatment of cuts and abrasions, application of splints. Treatment of sprains, cramps and cases of drowning.

Note: The candidates should be oriented fully towards physical education in terms of strength, muscular endurance, flexibility and above all educational, recreational and competitive aspects besides coaching, rules and organisation of various major games and sports.

PRACTICAL TEST - 100 Marks

Practical work will be assessed in two parts as follows:

- (i) Course Work (ii) Practical Examination

1. Course Work - 50 marks

The skill and performance of the candidates will be assessed by the teacher(s) responsible for preparing them for the examination in *two of the following games and activities of their choice*.

Athletics, Cricket, Hockey, Football, Volleyball, Softball, Basketball, Tennis, Badminton, Swimming, Dancing, Gymnastics, Yoga.

2. Practical Examination - 50 marks

The Practical Examination will consist of the following:

- (i) Physical efficiency tests,
(ii) Specialisation tests.

PHYSICAL EFFICIENCY TESTS

The following tests to evaluate the physical fitness of candidates will be conducted in the presence of the Visiting Examiner. Tests 1 to 3 should be conducted on one day and 4 to 6 on the next.

(a) Test 1

50 metre run, standing start: Timings to be taken to the nearest tenth of a second (weather should be relatively windless without extremes of temperature).

(b) Test 2

Standing long jump: A flat no slip surface should be used. The candidate should stand with toes just behind the take-off line and jump when ready. After making preliminary swing with the arms the candidate swings them forward vigorously, springing with both feet simultaneously to land as far forward as possible. Distance jumped to be measured in centimetres.

(c) Test 3

Distance run - 1000 metres run for boys, 600 metres run for girls. Time to be taken to the nearest second.

(d) Test 4

(i) **Floor push-ups for boys:** The boy takes a front-leaning position with body supported on hands and balls of feet; the arms are straight and at right angles to the body. He then dips or lowers the body so that the chest touches or nearly touches the floor, then pushes back to the starting position by straightening the arms and repeats the procedure as many times as possible. Only the chest should touch the floor; the arms must be completely extended with each push-up; the body must be held straight throughout. Scoring consists of the number of correct push-ups.

(ii) **Push-ups for girls:** This is executed from a stall bar bench or a stool 32 cm high by 50 cm long and 35 cm wide. It should be placed on the floor about 15 cm from a wall so that the subject will not take a position too far forward. The girl should grasp the outer edges of the bench, or stool, at the nearest corners and assume the front-leaning rest position, with the balls of her feet on the floor and with her body and arms forming a right angle. She should then lower her body so that the upper chest touches the near edge to the bench or stool, then raise it to a straight arm position as many times as possible. The girl's body should be held straight throughout. If the body sways or arches, or if the subject does not go completely down or does not push completely up, half credit is given up to 4 half credits.

(e) **Test 5**

Shuttle run: A flat course of 10 metres is required to be measured between the two parallel base lines. Behind each base line, a semicircle 50 cm radius with centre on the base line is required to be marked. In the far semicircle two wooden blocks (5 x 5 x 5 cm) are to be placed. The candidate stands with feet behind the base line, and on a signal, runs to the far line, picks up one block which the candidate places in the starting semicircle when he/she returns. The candidate then repeats the procedure with the second block. The time to the nearest tenth of a second is to be taken till the second block is grounded in the starting semicircle.

(f) **Test 6**

60-second sit-ups: The candidate lies with his/her back on a mat or flat surface, feet about 30 cm apart and knees flexed at a right angle. The candidate's hands with fingers interlocked are placed behind the back. A partner holds the candidate's feet in contact with the mat or floor. On the signal "Go" the candidate sits up to touch the knees with his/her elbows. Without pause he/she returns to his/her starting position and immediately sits up again. The number of sit-ups completed in 60 seconds are to be counted.

SPECIALISATION TESTS

Candidates will be tested by a Visiting Examiner in the presence of the teacher in **two** of the games/activities that were selected for the Course Work. Details of skill areas are given below.

ATHLETICS

Candidates will choose two of the following events in which they wish to be tested:

- (i) Track events - sprints, middle and long distance races:

Boys - 100 m, 200 m, 400 m, 800 m, 1500 m and 3000 m.

Girls - 100 m, 200 m, 400 m, 800 m.

- (ii) Track events – hurdles:

Boys - 110 m and 400 m.

Girls - 100 m.

- (iii) Field events - jumps and throws:

Boys - Broad jump, high jump, triple jump, pole vault, shotput, discus throw, javelin throw, hammer throw.

Girls - Broad jump, high jump, shotput, discus throw.

The following fundamental skills are required:

Sprints

Practice of starts with blocks using proper command.

Time action period - Reaction time, block clearance time, acceleration time, velocity maintenance time, finish time.

Middle Distance and Long Distance Races

- (i) Style of endurance running.
(ii) Methods of endurance development.

Broad Jump

- (i) Approach run.
(ii) Take off.
(iii) Flying Phase.
(iv) Landing.

Hop, Step and Jump (Triple Jump)

- (i) Approach run.
(ii) Take off.
(iii) Performance of hop, step and jump.
(iv) Performance of combination of hops and steps.

High Jump

- (i) Approach run.
(ii) Take off.
(iii) Flying phase: scissors, straddle, western roll or "Fosbury flop".

Pole Vault (Boys only)

- (i) Grip.
(ii) Pole carry.
(iii) Approach run.

- (iv) Take off.
- (v) Planting of pole.
- (vi) Clearance of bar.
- (vii) Landing.

Javelin Throw

- (i) Grip.
- (ii) Javelin carry.
- (iii) Transition from approach to five stride rhythm.
- (iv) Release.
- (v) Reverse.

Shot put

- (i) Stance.
- (ii) Glide.
- (iii) Release.
- (iv) Reverse.

Discus Throw

- (i) Stance.
- (ii) Preliminary Swings.
- (iii) Throws with one and a half turn.
- (iv) Reverse.

CRICKET

1. **Batting:** pull, cut, hook, glance, stepping out to drive the flighted ball.
2. **Bowling:** outswing, inswing, off break, leg break and googly.
3. **Fielding:** Catching high and low and ground balls.

HOCKEY

1. **Straight hitting and stopping:**
 - (a) Reverse hitting and stopping
 - (b) Hitting on the wrong foot
2. **Straight push and stopping:**
 - (a) Reverse push and stopping
 - (b) Pushing on the wrong foot

3. Scooping:

- (a) Push scoop
- (b) Shovelling

4. Flick:

- (a) Straight Flick
- (b) Reverse flick
- (c) Flick on the wrong foot

5. Dribbling and carrying the ball

6. Passing:

- (a) Through pass
- (b) Return pass
- (c) Deflection pass
- (d) Interchanging position

7. Dodging:

- (a) Dodging to opponent's left.
- (b) Dodging to opponent's right.
- (c) Double dodging.

8. Different Techniques of:

- (a) Corner
- (b) Penalty stroke
- (c) Push in
- (d) Goal keeping

9. Tackling:

- (a) Lunging
- (b) Feinting

FOOTBALL

1. Passing and Interpassing:

- (a) Interpassing between two players.
- (b) Interpassing among three players.
- (c) Three men weave.
- (d) Interpassing among four players.
- (e) Related practices.

2. Kicking:

- (a) Revision of all kicking fundamentals.
- (b) Lofted kick with either foot.
- (c) Practice of corner kicks - lobbing chip shots and penalty kicks.

3. Tackling:

- (a) Interception and hasty tackles.
- (b) Sliding tackles.
- (c) Related practices.

4. Heading:

- (a) Related practices, front, right side and left side.
- (b) Head-up drills.

5. Dribbling:

Practice of dribbling skills suited to actual playing situations.

6. Tactics and coaching:

- (a) Two back system - three back system.
- (b) Principles of zone and man to man defence.
- (c) Free kicks, penalty kicks, corner kicks.
- (d) Tactics of defence and attachment.

VOLLEYBALL

1. The Pass:

- (a) Over-head pass: Two-handed pass with back rolling.
- (b) Two-handed pass with side rolling.
- (c) Jump and pass.
- (d) Under arm pass.
- (e) Forward dive and pass.
- (f) One arm pass with side rolling.

2. The Serve:

- (a) Over head service (Tennis-type).
- (b) Round arm service.
- (c) Floating service (overhead and arm).

3. The Set-up:

- (a) Setting up for quick smash.
- (b) Move and set up (from back zones).
- (c) Setting up to different zones at varying trajectories.

4. The Net Recovery:

Two-handed overhead pass without rolling, one hand under arm with or without rolling.

5. The Attack:

- (a) Smash with turn of body.
- (b) Smash with turn of wrist.

- (c) Round arm smash.

- (d) Smash on short pass (ascending balls).

- (e) Simple attack combination.

6. The Block:

- (a) Double block against different types of attack.
- (b) Double block in assigned zones.
- (c) Double block against quick attack.
- (d) Double block against attack combination.
- (e) Triple block against attack from zone.

7. Patterns of play:

4-2 system, 5-1 system.

BASKETBALL

1. Ball handling:

Holding position of fingers, body, position, stance of player with ball.

2. Catching the ball:

(Receiving) skills involved.

3. Passing: Skills - (Drills in Pairs)

- (a) Two-handed chest pass.
- (b) Two-handed bounce pass.
- (c) Two-handed underhand pass (Right / Left side).
- (d) Two-handed over head pass.

4. Dribbling:

Dribbling high with speed, using alternate hands, low dribble.

5. Shooting:

- (a) Two-handed set shot.
- (b) Two-handed free throw.
- (c) Lay up shot following dribble using right hand (over the shoulder lay up).

6. Footwork:

Player stance, position of feet, position of hand, elementary shuffling and slicing movements (drills).

7. Pivoting, Stationary Pivot.

8. Individual defence:

Player stance: position of hands, position of feet, defender's position in between opponent and basket.

9. Team defence: Man to man defence.

10. Team offence: First break offence.

11. Full Court: Half court game using defence, offence taught.

SOFTBALL/TENNIS/BADMINTON

Candidates will be required to demonstrate competency in the rules, skills and fitness training related to the game.

SWIMMING

Candidates will be tested in *two* of the following events of their choice.

Boys Free style - 100 m, 200 m, 400 m, 800 m.

Breast stroke - 100 m and 200 m.

Diving - Forward dive, backward dive, reverse dive and inward dive.

Girls Free style - 100 m, 200 m.

Breast stroke - 50 m and 100 m.

Back stroke - 50 m and 100 m

Butterfly stroke - 50 m and 100 m.

Diving - Forward dive, backward dive, reverse dive and inward dive.

DANCING

The candidates will be required to give a performance of any *two* of the following dances of their choice, with suitable accompaniment:

(i) *Indian dancing*: Bharatanatyam, Kuchipudi, Kathakali, Kathak, Manipuri, Odissi, Mohiniyattam, Bhangra and other folk dances.

(ii) *Western dancing*: Ballet, ballroom dancing, waltz, fox trot, tango, samba, charleston, square dancing; pop-dancing - jitterbug, twist, rock-and-roll.

GYMNASTICS

The candidates will be tested in four exercises using any two of the following bits of apparatus of their choice.

(i) Floor Exercise

Boys - handspring to front somersault (tucked); two headsprings; cartwheel to arabesque; arab spring; side somersault; back roll to handstand, cabriole jump throw; flic-flacs.

Girls - Leap and cabriole; step into ball of either foot; flic-flacs; round off; handspring; cat leap; legs split in air, cartwheel; handstand.

(ii) Balancing Beam (Girls only)

Run 2-3 steps; leap to riding seat with $\frac{1}{2}$ turn; rise to squat stand; ballet stand with $\frac{1}{2}$ turn; leap on either foot; step forward leap changing legs to rear leap; lunge to side; stag leap; one-arm cartwheel.

(iii) Parallel bars (Boys only)

Swing forward and cast to upper arm hand; forward roll; pirouette forward; lower to upper arm hand; swing backward; straddle forward to support (hold).

(iv) Vaulting horse

Boys - (long horse) Split vault; through vault; hand stand with cartwheel; cartwheel and handspring.

Girls - Astride vault; split vault, through vault; handspring.

(v) Horizontal bar (Boys only)

Forward and backward giant swings; change of grip; twists; the hip-circles.

YOGA

Candidates will be tested in any *four* of the following asanas:

(i) Vrikshasana (Balancing on one leg with the other flexed sideways).

(ii) Utitha Trikonasana (Feet apart stand, side bending).

(iii) Parivrtta Trikonasana (Feet apart stand, side bend, with the trunk rotated backward).

- (iv) Utitha Parvakonasana (Feet apart stand lunging on one side).
- (v) Purivrita Parvakonasana (Feet apart stand lunging on one side and rotate the trunk backwards).
- (vi) Virabhadrasana (Balancing on one leg with stretched hands, trunk and leg in a horizontal position).
- (vii) Uthitha Hasta Padangusthasana (Balancing on one leg and trunk bending over the other stretched horizontally).
- (viii) Parasuottansasana (Feet apart stand and turning one side and bend the trunk over the knee on that side).
- (ix) Ushttrasana (kneel sit and flex back the trunk).
- (x) Padakastana (Attention position, flex and trunk over the thighs).
- (xi) Garudana (Balancing one leg with the other turned over the former).
- (xii) Navasana (Balancing on buttocks with the legs and trunk flexed over each other).
- (xiii) Vajrasana (Sitting with flexed legs feet on the side of buttocks).
- (xiv) Supta Vajrasana (Supine lying in the position of Vajrasana).
- (xv) Kukutasana (Balancing on hands inserted through the thighs and legs in padmasana).
- (xvi) Janasirana (Paschimattarasana on one leg with the other leg flexed sideways).
- (xvii) Ardha Baddha Padma Paschimttanasana (Paschimattanasana on one leg with the other in Padmasana position).
- (xviii) Triang Mahaikapada Paschimatanasana (Paschimottanasana on one leg with the other in Vajrasana position).
- (xix) Moridrasana (Long sit with one knee flexed and kept up and trunk turned over the stretched leg).
- (xx) Akanraha Dhannrasana (Long sit and pull one foot to the corresponding ear).
- (xxi) Uparrshta Konasana (Long sit with feet spread and bring the head to the ground).
- (xxii) Bakasana (Balancing on hands with thighs over the arms above elbows).
- (xxiv) Chakrasana (Cartwheel position).
- (xxv) Nowli (contracting rectii abdominal in uddiyana position alternate relaxation and contraction of left and right muscles in quick succession).
- (xxvi) Kapalabathi (Quick succession of abdominal strokes in padmasana position).
- (xxvii) Bhastrika (Pranavam following the strokes of Kapalabathi).

N. B.

- (a) The Rules and Regulations of Tournaments (National and International); Trophies connected with such tournaments and also personalities connected should be taught.
- (b) Organisation of Olympics, Asian Games and Commonwealth games and the countries usually participating in them should be taught.
- (c) Various terms and terminologies connected with each game should be clearly defined.
- (d) While testing the candidates in games, the following method should be adopted. Test of the skill as a whole with emphasis on:
 - (i) Approach
 - (ii) Stance/Grip
 - (iii) Execution (degree of perfection) and
 - (iv) Follow through.

PERFORMANCE TABLE - PHYSICAL EDUCATION

PHYSICAL EFFICIENCY TESTS

Marks	Test No. 1 50m dash (Timing in seconds and tenths)		Test No. 2 Standing long jump (Distance in cm)		Test No. 3 Distance run (Timing in minutes and seconds)		Test No. 4 Push-ups (Numbers)		Test No. 5 Shuttle run (Timing in seconds and tenths)		Test No. 6 60 s sit-ups (Numbers)	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
5	6.5	7.6	204	167	4 min 40 s	2 min 45 s	30	22	9.8	11.0	47	30
4	6.6	7.9	197	155	4 min 50 s	2 min 55 s	24	14	10.0	11.2	44	28
3	6.8	8.2	190	149	5min	3 min 15 s	17	8	10.2	11.6	41	26
2	7.1	8.4	183	142	5min 10 s	3 min 35 s	10	6	10.6	11.9	37	24
1	7.5	8.9	175	132	5 min 30 s	4 min 15 s	6	3	11.1	12.1	32	20

PERFORMANCE TABLE - PHYSICAL EDUCATION SPECIALISATION TESTS

ATHLETICS - FIELD EVENTS

Marks	Long jump (m and cm)		High jump (m and cm)		Hop step & jump (m and cm)	Pole vault (m and cm)	Shot put throw (m and cm)		Discus (m and cm)	Javelin throw (m and cm)
	Boys	Girls	Boys	Girls	Boys	Boys	Boys	Girls	Boys	Boys
10	5.50	5.00	1.70	1.50	12.00	3.00	10.00	8.50	25.00	35.00
8	5.00	4.50	1.55	1.45	11.50	2.75	9.00	7.50	22.00	32.00
6	4.50	4.00	1.40	1.30	11.00	2.25	8.00	6.50	19.00	29.00
4	4.00	3.50	1.30	1.20	10.50	2.00	7.00	5.50	16.00	26.00
3	3.50	3.00	1.20	1.10	10.00	1.75	6.00	4.50	13.00	23.00
2	3.00	2.50	1.10	0.95	9.50	1.50	5.00	3.50	10.00	20.00
1	2.99	2.00	1.00	0.94	9.49	1.25	4.99	3.49	9.98	19.98

PERFORMANCE TABLE - PHYSICAL EDUCATION SPECIALISATION TESTS

ATHLETICS - TRACK EVENTS

Marks	100 m (s and tenths)		200 m (s and tenths)		400 m (s and tenths)		800 m (s and tenths)		1500 m (min and s)
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
10	11.5	13.6	24.0	25.0	56.0	68.0	2.10	2.45	4.40
8	11.8	14.4	25.1	26.1	56.1	68.1	2.15	2.50	4.45
6	12.4	15.2	26.1	27.1	58.1	71.1	2.20	2.55	4.50
4	13.2	16.0	27.1	30.1	60.1	74.1	2.30	3.05	5.00
3	14.0	16.8	28.1	33.1	62.1	77.1	2.40	3.15	5.10
2	14.8	17.6	29.1	36.1	64.1	80.1	2.50	3.25	5.20
1	15.6	18.5	30.1	39.1	66.1	83.1	3.00	3.35	5.30

PERFORMANCE TABLE - PHYSICAL EDUCATION SPECIALISATION TESTS

SWIMMING

Marks	50m free style (s and tenths)		100m free style (min and s)		200m free style (min and s)		400m free style (min and s)	50m breast-stroke (min and s)		75m breast-stroke (min and s)	100m breast-stroke (min and s)
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Boys	Girls	Girls	Boys
10	45.0	55.0	1:30	1:50	3.00	3.40	6.00	1.05	1.20	2:00	2:15
9	46.3	56.3	1:32.5	1:53	3.05	3.46	6.10	1.07	1.22.5	2:03.5	2:17.5
8	47.5	57.5	1:35	1:55	3.10	3.50	6.20	1.10	1.25	2:07.5	2:20
7	50.0	60.0	1:40	2:00	3.20	4.00	6.40	1.12	1.27.5	2:10.5	2:25
6	52.5	62.5	1:45	2:05	3.30	4.10	7.00	1.15	1.30	2:15	2:30
5	55.0	65.0	1:50	2:10	3.40	4.20	7.20	1.17	1.32.5	2:18.5	2:35
4	57.5	67.5	1:55	2:15	3.50	4.30	7.40	1.20	1.35	2:22.5	2:40
3	58.7	68.7	1:57.5	2:17.5	3.55	4.35	7.50	1.22	1.37	2:25.5	2:42.5
2	60.0	70.0	2:00	2:20	4.00	4.40	8.00	1.24	1.39	2:28.5	2:45
1	61.2	71.2	2:02.5	2:22.5	4.00.5	4.45	8.10	1.26	1.41	2:30.5	2:47

Note: For timings in between or higher than those indicated in the table the lower mark should be given.

PERFORMANCE TABLE - PHYSICAL EDUCATION SPECIALISATION TESTS

SWIMMING (continued)

Marks	50m back stroke		75m back stroke	100m butterfly stroke	50m butterfly stroke		75m butterfly stroke	100m butterfly stroke	Diving
	(min and s)		(min and s)	(min and s)	(min and s)		(min and s)	(min and s)	
	Boys	Girls	Girls	Boys	Boys	Girls	Girls	Boys	Description of action
10	0:55	1:10	1:45	2:00	0:55	1:05	1:37.5	1:50	Vertical, erect body, arms and legs together
9	1:00	1:15	1:52	2:00.5	0:57	1:10	1:45	1:52.5	
8	1:02.5	1:17.5	1:56	2:05	1:00	1:12.5	1:49	1:55	Poor angle (either backward or forward)
7	1:05	1:20	2:00	2:10	1:02.5	1:15	1:53	2:00	
6	1:07.5	1:22.5	2:07.5	2:15	1:05	1:17.5	1:58	2:05	Poor angle opening of arms in front, side, etc.
5	1:10	1:25	2:07.5	2:20	1:07.5	1:20	2:01	2:10	
4	1:12.5	1:27.5	2:11	2:25	1:10	1:22.5	2:07	2:15	Poor angle opening of arms and legs
3	1:14	1:29	2:14	2:27.5	1:12.5	1:24	2:04	2:17.5	
2	1:15	1:30.5	2:16	2:30	1:14	1:25	2:09	2:20	Poor angle opening of arms and legs and flights.
1	1:16	1:31	2:18	2:32.5	1:16	1:26	2:11	2:25	

Note: For timings in between or higher than those indicated in the table the lower mark should be given.