

**MODEL TEST PAPER**  
**(Solutions)**  
**Class XII**  
**PHYSICAL EDUCATION (048)**

**SECTION A**

- |         |         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|
| 1. (d)  | 2. (a)  | 3. (c)  | 4. (b)  | 5. (b)  | 6. (a)  | 7. (b)  |
| 8. (a)  | 9. (c)  | 10. (b) | 11. (b) | 12. (a) | 13. (c) | 14. (d) |
| 15. (d) | 16. (a) | 17. (c) | 18. (c) |         |         |         |

**SECTION B**

19. A sports event is described as a contest in which people, machines or animals compete as a team or as individuals with the aim of winning the contest.
20. Sit comfortably in Sukhasana or the Easy Pose. Inhale deeply with both nostrils filling your lungs with air. Then pull your stomach in towards your back. Relax the contraction to exhale air followed by inhalation. Inhale and exhale in this manner for about 20 times.
21. Deaflympics are distinguished from all other IOC-sanctioned games by the fact that they are organised and run exclusively by deaf people only who are eligible to serve on the ICSD Board and executive bodies.
22. Cardiovascular endurance in 9-18 years age group is measured by 600-metre Run/Walk Test. Participants are instructed to run for 600 metres at their fastest. The objective is to cover the distance in the shortest possible time. The score is the time taken for completion (run or walk) in minutes and seconds.
23. Equilibrium is defined as a state of balance or a stable situation where opposite forces cancel each other out and where no changes are occurring. There are two types of Equilibrium—Dynamic equilibrium, which is the balance of body during movement, and Static equilibrium, which is the balance of body during rest or in a stationary position.
24. Sports psychology is about understanding the performance, mental processes and well-being of people in sports settings, taking into account psychological theory and methods.

**SECTION C**

25. Self-esteem refers to the degree of worth and competence that a sportsperson attributes to themselves. Having a positive image of one's body, physical skills and abilities leads to good self-esteem. This boosts self-confidence which, in turn, enhances performance. Low self-esteem arises if one feels the physique to be inadequate, unfit or inappropriate for the chosen sport. Thus, self-esteem has a major role to play and is important for excellence in sports performance.
26. Periodised Training refers to the concept of overload and adaptation; by stressing the body over time, allowing it to recover and then stressing it again, athletes can gradually build fitness. The athlete's training year is planned to optimise performance and reduce injury risk. These training blocks are referred to as cycles and Periodisation divides training into three cycles—the Macro cycle, mesocycle and the micro cycle. The macrocycle is a year-long plan of training, split further into 2-6 weeks training cycle called mesocycle, which is further split into weekly or microcycles.
27. There are three different ages for talent identification. First stage is between 10 and 13 years and the second is between the age of 13 and 17 years. The third stage is above 17 years.
28. Setting goals is an effective way to focus on the right activities, increase commitment and energise oneself. SMART refers to the need for goals to be Specific, Measurable, Achievable, Relevant, Time-bound (SMART). In short, the goals should be clear, realistic and possible.
29. The Line of Gravity is an imaginary vertical line from the centre of gravity to the ground the athlete is on. Line of gravity is important in sports like basketball, where centralising the line of gravity inside the support base increases stability. This is achieved by having a straight back and head which is held upright to centralise the line of gravity. A lower centre of gravity increases stability. Crouching and deep knee bend help lower the centre of gravity.

30. Specialist industry knowledge, skills and experience in sports event management help one establish a solid reputation as a successful sports event manager. A good reputation and in-depth understanding of the requirements and challenges of sports events management help one establish a wide network of contacts and boosts their career prospects.

#### SECTION D

31.

- (a) Newton's third law of motion.
- (b) A
- (c) Law of acceleration
- (d) Biomechanics

OR

Newton's third law of motion

**(Question for visually impaired)**

Equilibrium is a state of zero acceleration where there is no change in the speed or direction of the body.

**Factors of Equilibrium**

1. Broader the base, greater the stability. Stability is indirectly proportional to the distance of the centre of gravity of the body above the base. As the height of the centre of gravity (CG) increases, the stability decreases and vice versa.
  2. Lower the centre of gravity, higher the stability.
  3. When body is free in the air, if the head and feet move down, the hip moves up and vice versa.
  4. Body weight is directly proportional to stability.
  5. A body is said to be in equilibrium when its centre of gravity falls within its base and loses its equilibrium when the centre of gravity falls outside its base, for example, wrestler's lying position and dribbling low in basketball.
- 32.
- (a) These are BMI, Plate Tapping Test for coordination and Flamingo Test for balancing.
  - (b) The tests for this age group are BMI to measure body fat; strength is measured by Abdominal Curl-up and Push-ups while flexibility is measured by Sit and Reach Test. The 600-metre Walk or Run is used as a measure of cardiovascular fitness and 50-metre Dash is used to measure speed.
33. The six Rikli and Jones tests are as under:
1. Chair Stand Test: This test measures the lower body strength.
  2. Arm Curl Test: This is to test the strength of the upper body muscles.
  3. Chair Sit and Reach Test: This is designed to help lower body flexibility which is vital not only for maintenance of good posture but also for normal day-to-day movements.
  4. Back Scratch Test: This test measures the flexibility of the upper arms.
  5. Eight Foot Up and Go Test: The main purpose of this test is to find out balance, speed and agility in elderly people.
  6. Walk Test (6 minutes) or Step in Place Test (2 minutes): This is used to assess aerobic fitness.

#### SECTION E

34. This is Pawanmuktasana, also known as Wind Relieving Pose, a reclining posture. Practising this asana helps relieve constipation and gas from stomach and intestines.

To practise this asana, one should begin by lying down in resting position with arms spread on the ground. Bend knees to bring them near the stomach. With the help of the hands, keep your knees close to the chest and the upper half of the body properly stuck to the ground. Remain in this posture for four to five minutes.

**Benefits**

- Stretches the neck and back
- Helps relieve gas in the intestines
- Increases blood circulation to all the internal organs
- Improves digestive system
- Relieves constipation
- Strengthens the lower back muscles and loosens spinal vertebrae
- Decreases sterility and impotence
- Beneficial in mitigating menstrual disorders
- Reduces fat from the abdominal area, thighs and buttocks

**Contraindications**

- Must be avoided if there has been a recent abdominal surgery as there is a lot of pressure on the abdomen.
- Anyone suffering from hernia or piles should avoid this asana.
- Pregnant women should not practise this asana.
- If there is any pain, stiffness or injury to the neck, head should remain on the floor.

35. Female Athlete Triad is a syndrome which consists of osteoporosis (weak bones), amenorrhoea (no menstrual periods) and eating disorders.

Symptoms and signs of this disorder include weight loss, no periods or irregular periods, fatigue and lack of concentration and stress fractures.

Treatment includes eating a nutrient-rich, well-balanced diet, exercising in moderation, getting plenty of rest and reducing stress.

Prevention includes educating athletes, coaches, trainers and parents. Athletes should be educated about basic nutrition concepts, burnout and over-training, rest and recovery, healthy weight management, energy levels and bone health.

36. The Paralympics motto is “Spirit in Motion”. The motto was introduced in 2004 at the Paralympic Games in Athens. It represents the strong will of every Paralympian. The previous motto was “Mind, Body, Spirit”, introduced in 1994.

The Paralympic symbol emphasises the fact that Paralympic athletes constantly inspire and excite the world with their performances—always moving forward and never giving up.

37. The subject stands comfortably in front of discs placed on a table. The two yellow discs are placed with their centres 60 cm apart. A rectangle is placed equidistant between both the discs. The non-preferred hand is placed on the rectangle. The subject moves the preferred hand back and forth between the discs over the hand in the middle as quickly as possible. This action is repeated for 25 full cycles (50 taps). The time taken to do so is recorded as the score. The aim of this test is to assess the coordination of arm activity and speed by measuring the time for the dominant hand to touch the two discs.