PRACTICE PAPER 4
Class XII (2025-26)
PHYSICAL EDUCATION (048)

TIME: 3 hrs **M.M: 70**

General Instructions:

1. The question paper consists of 5 sections and 37 questions.
2. Section A consists of questions 1-18, carrying 1 mark each and are multiple choice questions. All questions are compulsory.
3. Section B consists of questions 19-24, carrying 2 marks each. Answers should not exceed 60-90 words. Attempt any 5.
4. Section C consists of questions 25-30, carrying 3 marks each. Answers should not exceed 100-150 words. Attempt any 5.
5. Section D consists of questions 31-33, carrying 4 marks each and are case studies. There is an internal choice available.
6. Section E consists of questions 34-37, carrying 5 marks each and are long answer type. Answers should not exceed 200-300 words. Attempt any 3.

SECTION A

1. A dislocation is an injury to the:

(a) Skin (b) Joint (c) Bone (d) Ligament

2. Read the following statements labelled **Assertion (A)** and **Reason (R)**. Choose one of the correct alternatives given below:

Assertion (A): Daily exercise is a desirable activity for humans.

Reason (R): Exercise improves fitness, helps stabilise weight, decreases stress and improves mood.

In the context of the above two statements, which one of the following is correct?

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).
(c) (A) is true but (R) is false.
(d) (A) is false but (R) is true.

3. Match the following:

Column I	Column II
(a) Friction	(i) Lack of appetite
(b) BMR	(ii) Height-to-weight ratio
(c) Anorexia	(iii) Static and dynamic
(d) BMI	(iv) Basal metabolic rate

I. (a) (iv), (b) (iii), (c) (ii), (d) (i)
II. (a) (i), (b) (ii), (c) (iii), (d) (iv)
III. (a) (iv), (b) (iii), (c) (i), (d) (ii)
IV. (a) (iii), (b) (iv), (c) (i), (d) (ii)

4. Which vitamin is known as the 'sunshine vitamin'?

(a) A (b) D (c) E (d) F

5. Identify the injury shown below.

(a) Fracture (b) Sprain (c) Dislocation (d) Contusion

6. In modern yoga, what is Dhayana?
(a) Posture (b) Meditative absorption (c) Sense withdrawal (d) Breathing technique

7. Kyphosis is a deformity of:
(a) Knees (b) Feet (c) Spine (d) Shoulders

8. The word yoga is derived from _____ which means 'to unite'.
(a) Yugantara (b) Yuga (c) Yukti (d) Yuj

9. In Deaflympics, athletes are cheered on by:
(a) Whistle-blowing (b) Clapping of hands (c) Waving of hands (d) Laughing loudly

10. Intellectual disability is characterised by an IQ of less than:
(a) 90 (b) 70 (c) 80 (d) 100

11. Women participated in the Olympics for the first time in the year:
(a) 1900 (b) 1904 (c) 1920 (d) 1947

12. In vakrasana, what does the word 'vakra' mean?
(a) Tree (b) Camel (c) Twist (d) Lying down

13. The range of movement at a joint is known as:
(a) Endurance (b) Hypertrophy (c) Flexibility (d) Strength

14. Which of the following is NOT an effect of exercise on muscles?
(a) Increased tone (b) Muscle atrophy (c) Better reaction time (d) Delayed fatigue

15. The acceleration in a state of equilibrium is:
(a) Slow (b) Very high (c) Zero (d) Increasing gradually

16. **Assertion (A):** Stability is important in sports and is dependent on the body weight of the athlete.
Reason (R): Body weight is directly proportional to stability.
In the context of the above two statements, which one of the following is correct?
(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).
(c) (A) is true but (R) is false.
(d) (A) is false but (R) is true.

17. Static strength of muscles is also known as:
(a) Isokinetic (b) Isometric (c) Isotonic (d) Isoclonic

18. Which of these are the correct types of training cycles:
(a) Isometric and isokinetic (b) Macro, meso and micro
(c) Voluntary and involuntary (d) Static and dynamic

SECTION B

19. What are the stages of athletic development for young sportspersons?

Ans. The three different stages of athletic development in young sportspersons are stage 1, also known as exploration or sampling, stage 2, also known as commitment or specialising, and stage 3, also known as proficiency or commitment.

20. What are the suggested ages for talent identification under the Khelo India program?

Ans. The stage of talent identification is between 10 and 14 years, followed by the stage of talent development between 13 and 17 years. The last stage is where elite juniors are created above 18 years, ultimately leading to elite athlete development.

21. What is the female athlete triad? Explain any one component.

Ans. The female athlete triad consists of three separate but interrelated entities that occur among young female athletes. The three main components are disordered eating, osteoporosis and menstrual dysfunction. Disordered eating can be anorexia nervosa, where the appetite is totally diminished or bulimia nervosa, where the athlete overeats or binges and follows it up by purging either by vomiting or by using laxatives.

22. What is a fracture? What are the common types of fractures?

Ans. A fracture is breaking of a human bone. Common types of fractures are: Greenstick in very young children; Compound, where the bone comes out through the soft tissue; Comminuted, where the bone breaks into many bits; Transverse, which is a linear break in the bone or Impacted fracture, where the two injured ends of the bone impact into each other as well as Oblique, where the break is twisted and oblique.

23. Write a brief note on Anulom-Vilom Pranayama.

Ans. Anulom-Vilom Pranayama, also known as Nadi Shodhana Pranayama, is a breathing technique in yoga that cleanses the blocked energy channels, calming the mind and reducing stress. This is done by alternate nostril breathing.

24. What are fat-soluble vitamins and why are they important?

Ans. There are four fat-soluble vitamins, namely vitamins A, D, E and K. While Vitamin A is vital to normal vision, reproduction and a strong immune system, Vitamin D increases calcium absorption at the level of the intestines, promoting bone and parathormone health. Vitamin E is an antioxidant and supports many cell functions. Vitamin K is essential for blood clotting, bone health and regulation of blood calcium levels.

SECTION C

25. What is the Rikli-Jones senior citizen fitness test?

Ans. These are a series of simple tests designed to assess the fitness of senior citizens. A series of six tests that include the chair stand test to assess lower body strength, arm curl test to look for upper body strength, chair sit and reach test for lower body flexibility, back scratch test for upper body flexibility, 8-foot up and go test for agility and 6-minute walk test for overall endurance and stamina.

26. What is BMR? What are the factors that affect BMR?

Ans. BMR is the basal metabolic rate. It is a measure of calories burned by an individual when at rest. Factors that influence it include body size, lean muscle percentage, body fat percentage, calorie intake, age, gender, genetics, hormonal status, physical activity as well as medications.

27. Explain the partial curl-up test and why it is used, along with a brief note on how to perform it.

Ans. The partial curl-up test is a measure of abdominal muscle strength. It is a part of tests recommended for children aged 9 to 18. To perform the test, lie on your back, flex your knees to 90 degrees, and place your hands by your sides. Then raise the trunk upwards at least six inches and relax back onto the ground.

28. Discuss the immediate effects of exercise on the cardiovascular system.

Ans. Exercise has a very positive, immediate impact on the cardiovascular system. It causes the heart rate to increase, enhances blood flow, along with increased stroke volume and cardiac output, and results in a rise in blood pressure. All these changes occur within a few minutes of starting to exercise, and many of these are sustained on a long-term basis.

29. What is exercise adherence? What motivates people to continue to exercise?

Ans. Exercise adherence is the ability to maintain any exercise program for an extended period of time. Among the many motivating factors that encourage the continuation of exercise are psychological, cognitive and emotional aspects. Self-worth is also a key factor, along with social and cultural support, in behaviours such as diet, sleep, smoking and alcohol use, which can lead to increased energy, diminished stress and self-discipline. Men tend to be more involved than women and obesity is negatively associated with exercise adherence.

30. Describe the challenges of periodised training.

Ans. Difficulties associated with periodisation include planning intensity and duration to avoid overtraining. Also, it is not easy to achieve multiple peaks during a training session. High emotional stressors increase the risk of injury, so training must be tailored to decrease this risk and prevent it from becoming stale. The volume of training must be adjusted to challenge the body constantly. Additionally, intensity adjustment is necessary to avoid overtraining.

SECTION D

31. Read the following text carefully and answer the questions that follow:

Strength, endurance and speed—all must be enhanced in competitive sports training. While an average person needs to be a strong competitive sportsperson, they must continually improve all three factors to strengthen their performance. Many methods exist to do so.

(i) Muscle strength is measured by:

(a) One repetition (maximum)

(b) Total weight lifted in 10 tries

(c) Amount of force produced in best of three tries

(d) None of these

(ii) Static strength is required in which sport?

(a) Basketball (b) Gymnastics

(c) Cycling (d) Marathon

(iii) When is muscle strength measured?

(a) During muscle relaxation (b) Both during contraction and relaxation.

(c) During contraction of the muscle (d) During sleep studies

(iv) How many types of dynamic muscle strength exist?

(a) Three (b) One (c) Four (d) Two

32. Based on the picture given below, answer the following questions.

(i) Identify the logo.

(a) Olympics (b) Paralympics

(c) Deaflympics (d) Special Olympics Bharat

(ii) When was the above term officially used for the first time?

(a) 1960 (b) 1976

(c) 1988 (d) 2000

(iii) In which city was it first held in the year 1960?

(a) London (b) Madrid

(c) New Delhi (d) Rome

(iv) What disability is not allowed in this event?

(a) Decreased muscle power (b) Limb deficiency

(c) Short height (d) Ataxia

33. In relation to the below-given images, answer the following questions:

(i) What does the picture represent?

(a) Genes (b) Injuries

(c) Personality traits (d) Needs

(ii) _____ relates to an outgoing person.

(a) Neuroticism (b) Extroversion

(c) Agreeableness (d) Openness

(iii) These five broad human traits are known as:

(a) Five traits of Ramsey (b) The vital five

(c) Big Five Theory (d) Success five

(iv) _____ is the acronym for this classification

(a) NOEAC (b) NOFRA

(c) FYIVE (d) OCEAN

(Question for Visually Impaired)

Vitamins and minerals are essential nutrients that protect us from various diseases and are helpful for the general development of the body.

(i) _____ is a group of eight water-soluble vitamins which are important for cellular metabolism:

(a) Vitamin A (b) Vitamin K

(c) Vitamin B (d) Vitamin D

(ii) _____ disease is caused due to lack of Vitamin B.

(a) Anaemia (b) Kwashiorkor (c) Scurvy (d) Beri Beri

(iii) Vitamin _____ is important for healthy bones and teeth.

(a) K (b) A (c) D (d) C

(iv) Vitamin_____ is needed for blood clotting.

(a) A (b) D (c) K (d) E

SECTION E

34. What do you mean by motivation? Discuss the various types of motivation.

Ans. Motivation is being eager to act or work. It encourages us to perform well. This is especially important for athletes, as it enhances performance and helps them reach their goals. There are two types of motivation: intrinsic and extrinsic. Intrinsic motivation is our internal feeling of wanting to do well without any external pressure; self-motivation is the hallmark and helps us make autonomous decisions. Extrinsic motivation, on the other hand, comes from external sources, such as coaches, parents and fellow sportspersons, who inspire us to do better and go the extra mile. This comes with some pressure and may not always be in consonance with our psyche.

35. What is Carl Jung's classification of personality? Describe each type briefly.

Ans. Carl Jung divided human personalities into three broad types. He believed the three groups to be distinct and referred to them as introverts, extroverts and ambiverts. Extroverts are people who get along well with everyone; they are sociable, enjoy partying, meeting new people and making friends. Introverts are the opposite of this and tend to keep to themselves, be solitary and aloof with a rigid, self-centred existence. Ambiverts are individuals who possess aspects of both extroverted and introverted personalities and sometimes choose to behave as either an extrovert or an introvert.

36. What is the Johnson-Metheny test? What does it measure and how?

Ans. The Johnson-Metheny test of motor educability measures the motor learning ability of students. It deduces cognitive capacity to learn new skills. It consists of four motor activities for boys and three for girls. Common to both genders are front rolls, back rolls and jumping half turns. Males get jumping full turns as an extra. This is done on a canvas that is 15 feet long and two feet wide, and is further divided into sections lengthwise, each 18 inches in width. The width is divided into ¾ inch and three inches alternatively. Then, the students perform the stunts as advised, and their performance is evaluated on a scale of 0 to 40.

37. What is a soft tissue injury? What are the different types of soft tissue injuries?

Ans. Soft tissue injuries are injuries to the human body that spare the bones. Thus, these are found in the skin, muscles, tendons and ligaments. Injury to the skin can result in a contusion, and if the skin is cut, it is referred to as a laceration. Abrasions are also found on the skin and result from the scraping or wearing away of the skin. Contusion involves rupture of skin capillaries primarily as a result of crushed muscles. A sprain is an injury to the ligaments, especially around the joints. Strain is an injury to the muscles and tendons at their points of attachment.