

Question Paper (Memory-Based)

Conducted by National Testing Agency (NTA)



General Instructions

- (i) The examination will be conducted in Computer-Based Test (CBT) mode.
- (ii) Each question carries +5 marks for correct answer and -1 mark for wrong answer.
- (iii) The total number of questions are 50.
- (iv) Duration of the exam is 1 hour (60 minutes).

1. A student has a resting heart rate of 72 beats per minute and a maximum heart rate of 196 beats per minute. According to the Karvonen Formula, what will be the target heart rate at 70% intensity?

- (A) 146.8 bpm
- (B) 158.8 bpm
- (C) 164.2 bpm
- (D) 172.4 bpm

2. Match the following sports injuries with their most appropriate description:

List I

List II

- | | |
|-----------------|------------------------------------|
| (a) Sprain | (i) Injury to muscle fibres |
| (b) Strain | (ii) Injury to ligament |
| (c) Dislocation | (iii) Bone displacement from joint |
| (d) Fracture | (iv) Break in bone continuity |

Choose the correct option:

- (A) (a)-(ii), (b)-(i), (c)-(iii), (d)-(iv)
 - (B) (a)-(i), (b)-(ii), (c)-(iv), (d)-(iii)
 - (C) (a)-(iii), (b)-(ii), (c)-(i), (d)-(iv)
 - (D) (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)
-

3. In a knockout tournament involving 27 teams: Total number of matches to be played is, and Number of byes in the first round is

- (A) 25 matches, 5 byes
 - (B) 26 matches, 5 byes
 - (C) 26 matches, 3 byes
 - (D) 27 matches, 5 byes
-

4. Which of the following correctly represents the sequence of energy systems used during a 400 m sprint race?

- (A) Aerobic → ATP-PC → Lactic Acid
 - (B) ATP-PC → Lactic Acid → Aerobic
 - (C) Lactic Acid → ATP-PC → Aerobic
 - (D) Aerobic → Lactic Acid → ATP-PC
-

5. A person consumes 3200 kcal in a day. If carbohydrates contribute 55% of total calories, approximately how many grams of carbohydrates are consumed?

- (A) 320 g
 - (B) 400 g
 - (C) 440 g
 - (D) 520 g
-

6. Which of the following is NOT correctly matched?

- (A) Kraus-Weber Test — Minimum muscular fitness
 - (B) Harvard Step Test — Cardiovascular endurance
 - (C) Sit and Reach Test — Agility
 - (D) Rikli and Jones Test — Senior citizen fitness
-

7. According to Newton's Laws of Motion in sports, a football lying stationary on the ground moves only after being kicked because of:

- (A) Law of Gravitation
 - (B) Newton's First Law
 - (C) Newton's Second Law
 - (D) Newton's Third Law
-

8. A balanced diet for endurance athletes should primarily emphasize:

- (A) High fats and low carbohydrates
 - (B) High proteins and low vitamins
 - (C) High carbohydrates with adequate proteins and fats
 - (D) High minerals only
-

9. Which of the following asanas is most effective for management of diabetes according to yoga therapy principles?

- (A) Vajrasana
- (B) Paschimottanasana
- (C) Tadasana
- (D) Chakrasana

10. Assertion (A): Circuit training improves both strength and endurance simultaneously.

Reason (R): Circuit training includes a series of exercises performed with minimal rest between stations.

- (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.
-