

PHYSICAL EDUCATION (048)

Sample Question Paper - 1

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 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 is multiple choice questions. All questions are compulsory.
3. Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.
4. Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and 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.
6. Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

SECTION A (1 Mark Each)

Q.1. Identify the Yoga Asana shown in the image below, which is highly recommended for curing obesity and digestive issues:



- (a) Vajrasana
- (b) Halasana
- (c) Chakrasana
- (d) Tadasana

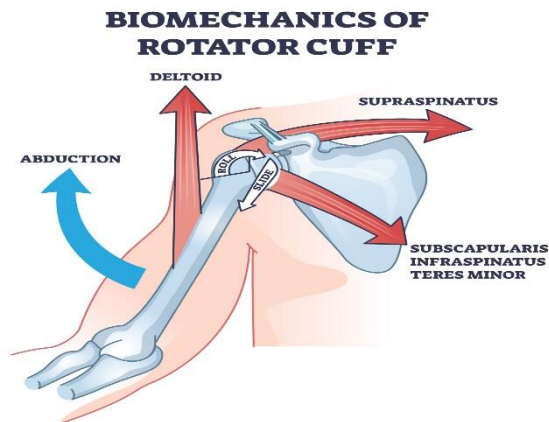
Q.2. Observe the sports injury illustrated below. In this type of fracture, the bone bends and cracks instead of breaking completely into separate pieces. Identify the fracture:

Greenstick fracture



- (a) Transverse Fracture
- (b) Comminuted Fracture
- (c) Greenstick Fracture
- (d) Oblique Fracture

Q.3. In biomechanics, the upward movement of the arm away from the midline of the body (as indicated in the figure) is known as:



- (a) Adduction
- (b) Flexion
- (c) Extension
- (d) Abduction

Q.4. If 17 teams are participating in a knock-out tournament, how many byes will be given?

- (a) 15
- (b) 1
- (c) 17
- (d) 16

Q.5. What is the main objective of 'Intramural' tournaments?

- (a) To compete with other schools
- (b) To develop mass participation within the school
- (c) To win zonal trophies
- (d) To travel to different states

Q.6. Which of the following is a water-soluble vitamin?

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

Q.7. Isotonic exercises are related to:

- (a) No change in muscle length
- (b) Visible movement of muscles
- (c) Exercises done on specially designed machines
- (d) Stretching of muscles without movement

Q.8. What does 'O' stand for in the Big Five Personality Traits (OCEAN)?

- (a) Outgoing
- (b) Openness
- (c) Optimism
- (d) Obedience

Q.9. Match List - I (Type of Tournament) with List - II (Feature) and select the correct answer:

List - I

- A. Knock-out
- B. League

C. Intramural

D. Extramural

List - II

1. Round Robin Tournament

2. Competition outside the school

3. Elimination Tournament

4. Competition within the school

(a) A-3, B-1, C-4, D-2

(b) A-1, B-3, C-2, D-4

(c) A-3, B-4, C-1, D-2

(d) A-4, B-2, C-3, D-1

Q.10. Match List - I (Lifestyle Disease) with List - II (Yoga Asana used for its cure):

List - I

A. Obesity

B. Diabetes

C. Asthma

D. Hypertension

List - II

1. Shavasana

2. Gomukhasana

3. Ardha Matsyendrasana

4. Vajrasana

(a) A-1, B-2, C-3, D-4

(b) A-4, B-3, C-2, D-1

(c) A-3, B-4, C-1, D-2

(d) A-4, B-1, C-2, D-3

Q.11. Match List - I (Sports Injury) with List - II (Affected Body Part):

List - I

- A. Sprain
- B. Strain
- C. Contusion
- D. Fracture

List - II

- 1. Broken Bone
- 2. Muscle or Tendon
- 3. Ligament (Joints)
- 4. Muscle Bruise

(a) A-3, B-2, C-4, D-1

(b) A-2, B-3, C-1, D-4

(c) A-4, B-1, C-3, D-2

(d) A-3, B-4, C-2, D-1

Q.12. Match List - I (Newton's Laws) with List - II (Alternative Name):

List - I

- A. First Law
- B. Second Law
- C. Third Law

List - II

- 1. Law of Action and Reaction
- 2. Law of Inertia
- 3. Law of Momentum / Acceleration

(a) A-2, B-1, C-3

(b) A-1, B-2, C-3

(c) A-3, B-1, C-2

(d) A-2, B-3, C-1

Q.13. Assertion (A): Fartlek training is a highly effective method for developing cardiovascular endurance in athletes.

Reason (R): In Fartlek training, the athlete continuously changes pace (speed) according to the natural terrain without a strict, pre-planned structure.

- (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.

Q.14. Assertion (A): Water makes up about 60-70% of human body weight and is required for regulating body temperature during sports.

Reason (R): Water is a macronutrient that provides a high amount of energy (calories) to the body to enhance performance.

- (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.

Q.15. Assertion (A): Kyphosis is a postural deformity characterized by an exaggerated outward curve of the thoracic spine.

Reason (R): Performing Chakrasana and Bhujangasana regularly can help in correcting the deformity of Kyphosis.

- (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.

Q.16. Assertion (A): Extrinsic motivation is always more effective and reliable than intrinsic motivation for an athlete's long-term sports career.

Reason (R): Extrinsic motivation involves tangible external rewards like cash prizes, medals, trophies, and certificates.

- (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.

Q.17. The absence of a menstrual period in a woman of reproductive age is known as:

- (a) Menarche
- (b) Dysmenorrhea
- (c) Amenorrhea
- (d) Osteoporosis

Q.18. 'Special Olympics Bharat' was established in the year:

- (a) 1987
- (b) 2001
- (c) 1995
- (d) 1968

SECTION B (2 Marks Each - Attempt Any 5)

Q.19. Define 'Seeding' in a knockout tournament.

Q.20. What do you mean by Food Myths? Write any two common food myths.

Q.21. Enlist any four Asanas used for the prevention of Obesity.

Q.22. Differentiate between fine motor development and gross motor development.

Q.23. Briefly explain the 'Plate Tapping Test' and its purpose.

Q.24. What is the concept of 'Aggression' in sports? Name its two main types.

SECTION C (3 Marks Each - Attempt Any 5)

Q.25. What is the 'Female Athlete Triad'? Briefly explain its three components.

Q.26. Differentiate between Intrinsic and Extrinsic motivation with the help of examples from sports.

Q.27. Explain any three physiological factors determining the speed of an athlete.

Q.28. What is a Projectile? Explain any two factors affecting the trajectory of a projectile.

Q.29. Write the procedure and benefits of performing 'Bhujangasana'.

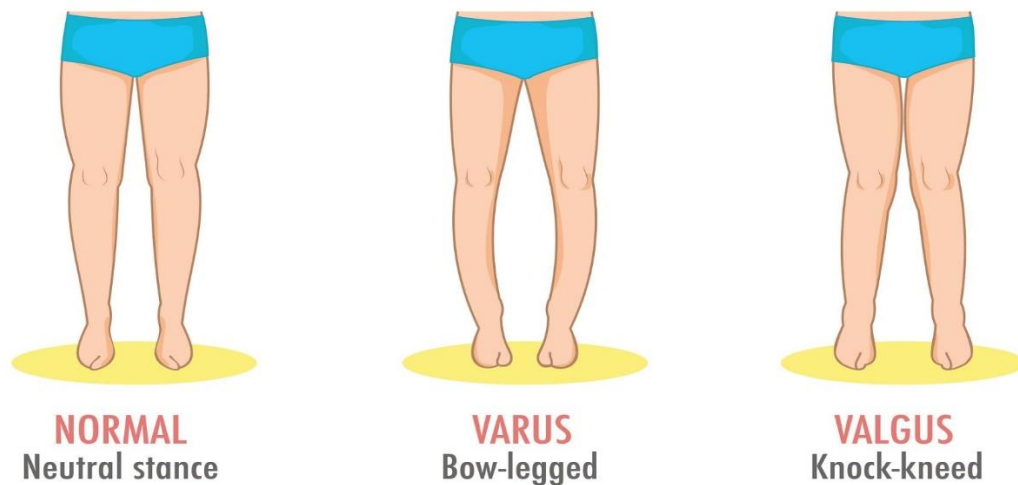
Q.30. Explain the methods to improve flexibility in sports.

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1 (Postural Deformities):

Observe the illustration below which shows a comparison of normal leg alignment with two common lower-body postural deformities. Based on the image, answer the questions:

VARUS AND VALGUS KNEE DEFORMITY



- (i) Identify the deformity shown on the extreme right, where the knees touch each other but the ankles remain apart. (1)
- (ii) Identify the deformity shown in the middle, where there is a wide gap between the knees when standing straight. (1)
- (iii) Suggest any one corrective exercise or Yoga Asana to cure the deformity shown on the extreme right. (1)
- (iv) Name any one common cause that leads to these types of lower-limb deformities in children. (1)

Q32. Case Study 2 (Fitness Tests & Measurement):

During a physical education practical, the teacher is conducting a specific balancing test from the SAI Khelo India battery. Observe the participant in the picture below:



- (i) Identify the specific fitness test being performed by the participants in the image. (1)
- (ii) What specific component of physical fitness is measured by this test? (1)
- (iii) Briefly describe the correct starting position for this test. (1)
- (iv) How is the scoring recorded if the participant loses their balance 3 times within 60 seconds? (1)

Q.33. Case Study 3 (Tournament Management - Data Based):

A physical education teacher is preparing a knock-out fixture for an Inter-Zonal Football Tournament. A total of 19 teams have registered. She divides the teams into an Upper Half and a Lower Half and calculates the byes required for the first round to ensure the second round has a perfect power of 2.

- (i) How many teams will be placed in the Upper Half of this fixture? (1)
- (ii) How many total matches will be played to decide the final winner? (1)
- (iii) Calculate the total number of byes that will be given in the first round. (1)
- (iv) Which team receives the very first bye according to the standard procedure? (1)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. Explain the five major functions of sports events management (Planning, Organizing, Staffing, Directing, and Controlling) in detail.

Q.35. Modern School, Noida is organizing an Inter-House Basketball tournament on a knock-out basis. A total of 11 teams are participating. Draw a knock-out fixture for these 11 teams. Mention all the steps, formulas, and calculations involved (Total Matches, Rounds, Byes, and distribution in Upper/Lower Halves).

Q.36. Classify soft tissue sports injuries. Explain the management and first-aid treatment for soft tissue injuries using the PRICE principle.

Q.37. Define Strength. Explain the different types of strength and describe 'Isokinetic' and 'Isometric' exercises in detail with examples.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

1. (b) Halasana
2. (c) Greenstick Fracture
3. (d) Abduction
4. (a) 15
5. (b) To develop mass participation within the school.
6. (c) Vitamin C.
7. (b) Visible movement of muscles.
8. (b) Openness.
9. (a) A-3, B-1, C-4, D-2.
10. (b) A-4, B-3, C-2, D-1.
11. (a) A-3, B-2, C-4, D-1.
12. (d) A-2, B-3, C-1.
13. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
14. (c) (A) is true, but (R) is false.

15. (b) Both (A) and (R) are true but (R) is not the correct explanation of (A).

16. (d) (A) is false, but (R) is true.

17. (c) Amenorrhea.

18. (b) 2001.

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Postural Deformities):

(i) Knock-Knees (Genu Valgum).

(ii) Bow-Leggedness (Genu Varum).

(iii) Horse-riding, using a pillow between knees while sleeping, or performing Padmasana/Gomukhasana. (Any one is correct).

(iv) Rickets (Vitamin D/Calcium deficiency), obesity, or carrying heavy loads at an early age.

Answer 32 (Fitness Tests & Measurement):

(i) Flamingo Balance Test.

(ii) It measures static balance.

(iii) The participant stands on one leg on a small wooden beam/floor, bends the free leg backwards, and holds the foot of the free leg with the hand on the same side.

(iv) The score is counted as the total number of falls/losses of balance in 60 seconds. So, the score would be recorded as 3.

Answer 33 (Tournament Management):

(i) 10 Teams. (Formula: $(N+1)/2 = 20/2 = 10$).

(ii) 18 Matches. (Formula: $N-1 = 19-1 = 18$).

(iii) 13 Byes. (Next power of 2 is 32. $\text{Byes} = 32 - 19 = 13$).

(iv) The very first bye is given to the last team of the Lower Half (Team number 19).

PHYSICAL EDUCATION (048)

Sample Question Paper - 2

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 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 is multiple choice questions. All questions are compulsory.
3. Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.
4. Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and 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.
6. Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

SECTION A (1 Mark Each)

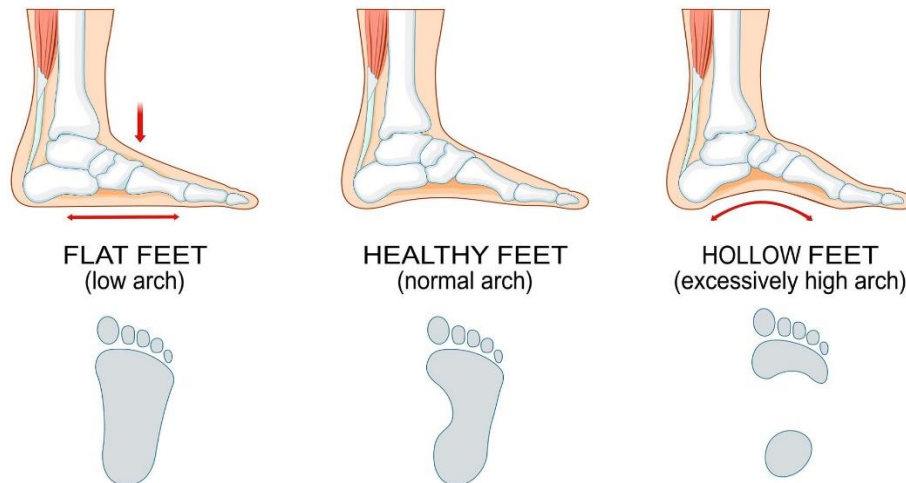
Q.1. Identify the Yoga Asana shown in the image below, which is highly recommended for curing Asthma and Diabetes:



- (a) Vajrasana
- (b) Paschimottanasana
- (c) Chakrasana
- (d) Tadasana

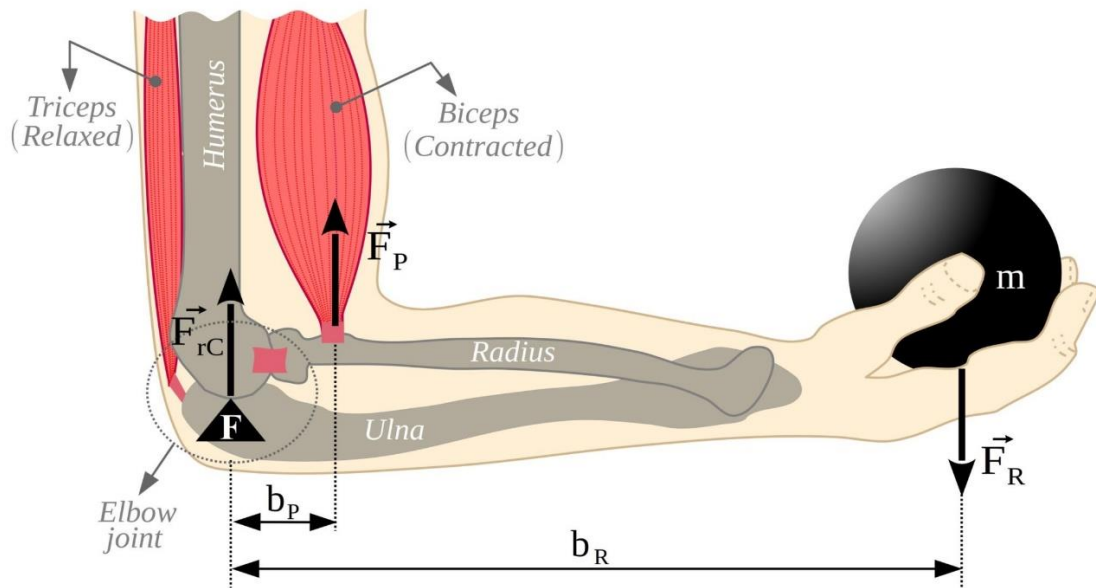
Q.2. Observe the postural deformity illustrated below. In this condition, the entire sole of the foot touches the floor when standing. Identify the deformity:

FOOT DEFORMITY



- (a) Flat Foot
- (b) Club Foot
- (c) Knock Knees
- (d) Bow Legs

Q.3. In biomechanics, the bending movement that decreases the angle between two body parts (as indicated at the elbow in the figure) is known as:



- (a) Adduction
- (b) Flexion
- (c) Extension
- (d) Abduction

Q.4. How many total matches will be played in a Single League tournament if 7 teams are participating?

- (a) 21
- (b) 42
- (c) 7
- (d) 14

Q.5. Which of the following is a fat-soluble vitamin?

- (a) Vitamin B1
- (b) Vitamin B12
- (c) Vitamin C
- (d) Vitamin A

Q.6. The motto of the Paralympic Games is:

- (a) Faster, Higher, Stronger
- (b) Spirit in Motion
- (c) Let me win
- (d) Harmony and Excellence

Q.7. Which of the following test is used to measure the upper body flexibility of senior citizens in the Rikli and Jones test?

- (a) Chair Stand Test
- (b) Back Scratch Test
- (c) Arm Curl Test
- (d) 8-Foot Up and Go Test

Q.8. The amount of blood pumped by the heart in one minute is called:

- (a) Stroke Volume
- (b) Vital Capacity
- (c) Cardiac Output
- (d) Blood Pressure

Q.9. Match List - I (Soft Tissue Injuries) with List - II (Affected Area) and select the correct answer:

List - I

- A. Strain
- B. Sprain
- C. Abrasion
- D. Contusion

List - II

1. Skin is scraped or rubbed

2. Injury of muscle or tendon
3. Blood vessels are broken (Bruise)
4. Injury of ligament

(a) A-2, B-4, C-1, D-3

(b) A-4, B-2, C-3, D-1

(c) A-1, B-3, C-2, D-4

(d) A-3, B-1, C-4, D-2

Q.10. Match List - I (Vitamins) with List - II (Deficiency Disease):

List - I

A. Vitamin A

B. Vitamin C

C. Vitamin D

D. Vitamin B12

List - II

1. Scurvy

2. Rickets

3. Night Blindness

4. Anemia

(a) A-1, B-2, C-3, D-4

(b) A-3, B-1, C-2, D-4

(c) A-4, B-3, C-1, D-2

(d) A-2, B-4, C-3, D-1

Q.11. Match List - I (Committees) with List - II (Responsibilities):

List - I

- A. Technical Committee
- B. Finance Committee
- C. Marketing Committee
- D. Logistics Committee

List - II

- 1. Budget and expenses
- 2. Officials and Referees
- 3. Transport and Accommodation
- 4. Publicity and Sponsorship

(a) A-2, B-1, C-4, D-3

(b) A-1, B-2, C-3, D-4

(c) A-3, B-4, C-1, D-2

(d) A-4, B-3, C-2, D-1

Q.12. Match List - I (Types of Speed) with List - II (Explanation):

List - I

- A. Reaction Ability
- B. Acceleration Ability
- C. Locomotor Ability
- D. Speed Endurance

List - II

1. To maintain maximum speed for maximum time/distance
2. To react quickly to a signal
3. To achieve maximum speed from a stationary position
4. To perform movements under conditions of fatigue

(a) A-2, B-3, C-1, D-4

(b) A-1, B-2, C-4, D-3

(c) A-3, B-1, C-2, D-4

(d) A-4, B-3, C-1, D-2

Q.13. Assertion (A): Interval training method is based on the principle of 'effort and recovery'.

Reason (R): It involves periods of intense work followed by periods of active or passive rest, which improves cardiovascular endurance.

(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.

Q.14. Assertion (A): Proteins are known as the body-building blocks of our diet.

Reason (R): The primary function of proteins is to provide instant energy during marathon races.

(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.

Q.15. Assertion (A): Friction is always considered an enemy in sports and must be reduced to zero.

Reason (R): Wearing spiked shoes in athletics increases friction, which helps the athlete to run without slipping.

- (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.

Q.16. Assertion (A): Goal setting is an effective psychological technique to enhance sports performance.

Reason (R): Setting realistic, measurable, and time-bound goals increases an athlete's focus and motivation.

- (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.

Q.17. Osteoporosis in female athletes is primarily characterized by:

- (a) Eating disorders
- (b) Low bone mineral density
- (c) Absence of menstruation
- (d) Muscle tear

Q.18. Which of the following is an example of Gross Motor Development?

- (a) Catching a ball
- (b) Running and Jumping
- (c) Picking up a coin
- (d) Writing with a pencil

SECTION B (2 Marks Each - Attempt Any 5)

- Q.19. What is a 'Bye' in a knock-out tournament? How is it calculated?
- Q.20. Write any two benefits of performing Gomukhasana.
- Q.21. Define BMI (Body Mass Index). Write the formula to calculate it.
- Q.22. What is the meaning of Extramural Tournaments? Give one example.
- Q.23. Differentiate between macro and micro nutrients in sports nutrition.
- Q.24. Briefly explain 'Dynamic Friction' and its two types.

SECTION C (3 Marks Each - Attempt Any 5)

- Q.25. State Newton's Second Law of Motion (Law of Acceleration) and give its application in sports.
- Q.26. Explain any three strategies to make physical activities accessible for Children with Special Needs (CWSN).
- Q.27. What is the PRICE principle? Explain its steps for managing soft tissue injuries.
- Q.28. Define coordinative abilities. Briefly explain any two types of coordinative abilities.
- Q.29. Discuss the psychological traits of 'Extroversion' and 'Conscientiousness' from the Big Five Theory.
- Q.30. List the pre-tournament responsibilities of the organizing committee.

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1 (Yoga and Lifestyle Diseases):

Observe the image of the Yoga Asana given below which is often recommended to manage hypertension and stress.



- (i) Identify the Asana shown in the image above. (1)
- (ii) For which lifestyle disease, apart from hypertension, is this Asana highly beneficial as a relaxation technique? (1)
- (iii) Write any one contraindication (who should not perform it) of this Asana. (1)
- (iv) Is this Asana generally performed at the beginning or at the end of a Yoga session? (1)

Q32. Case Study 2 (Test & Measurement):

During a physical fitness assessment in a school, the physical education teacher conducted the 'Sit and Reach Test' for the students. Observe the picture of the test below:



- (i) What specific component of physical fitness is measured by the Sit and Reach Test? (1)
- (ii) Identify the equipment/apparatus being used in the image to measure the score. (1)
- (iii) Briefly explain the correct starting position for the student in this test. (1)
- (iv) In which unit (e.g., kilograms, seconds, centimeters) is the final score of this test usually recorded? (1)

Q.33. Case Study 3 (Sports Nutrition Data):

A dietician prepared a diet plan for an endurance athlete. She allocated 65% of the total daily calories to Carbohydrates, 20% to Fats, and 15% to Proteins.

- (i) Why did the dietician allocate the highest percentage (65%) to Carbohydrates for an endurance athlete? (1)
- (ii) Which type of carbohydrates (Simple or Complex) should be consumed a few hours before the competition? (1)
- (iii) What is the main role of the 15% Protein in the athlete's diet? (1)
- (iv) Name any one mineral that is crucial for bone health in athletes. (1)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. As a Physical Education Teacher at Modern School, Noida, you are tasked with organizing an Inter-House Volleyball tournament. Draw a knock-out fixture for 13 participating teams. Show all calculations for total matches, total byes, rounds, and distribution of teams and byes in the upper and lower halves.

Q.35. Explain the physiological effects of long-term regular exercise on the Muscular System.

Q.36. What is personality? Explain the Big Five Personality Theory (OCEAN) in detail with suitable examples from sports.

Q.37. Differentiate between Continuous Training Method and Interval Training Method. Explain the advantages of the Interval Training Method in developing endurance.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

1. (b) Paschimottanasana
2. (a) Flat Foot
3. (b) Flexion
4. (a) 21 [Formula: $N(N-1)/2 = 7*6/2 = 21$]
5. (d) Vitamin A
6. (b) Spirit in Motion
7. (b) Back Scratch Test
8. (c) Cardiac Output
9. (a) A-2, B-4, C-1, D-3

10. (b) A-3, B-1, C-2, D-4
11. (a) A-2, B-1, C-4, D-3
12. (a) A-2, B-3, C-1, D-4
13. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
14. (c) (A) is true, but (R) is false (Carbohydrates provide instant energy, not proteins).
15. (d) (A) is false, but (R) is true (Friction is often necessary in sports, not an enemy to be reduced to zero).
16. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
17. (b) Low bone mineral density
18. (b) Running and Jumping

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Yoga and Lifestyle Diseases):

- (i) Shavasana (Corpse Pose).
- (ii) It is beneficial for managing Asthma, heart diseases, and reducing mental stress.
- (iii) There are generally no strict contraindications for Shavasana, but persons suffering from severe depression should practice it under guidance. (Any valid answer accepted).
- (iv) It is generally performed at the end of a Yoga session for relaxation.

Answer 32 (Test & Measurement):

- (i) Lower back and hamstring flexibility.
- (ii) Sit and Reach Box.

(iii) The student sits on the floor with legs stretched straight out in front. Shoes should be removed, and the soles of the feet must be placed flat against the box.

(iv) Centimeters (or inches).

Answer 33 (Sports Nutrition Data):

(i) Carbohydrates are the primary and most efficient source of energy required for continuous, long-duration (endurance) activities.

(ii) Complex Carbohydrates.

(iii) Repair, recovery, and maintenance of muscle tissues after strenuous exercise.

(iv) Calcium (or Phosphorus).

PHYSICAL EDUCATION (048)

Sample Question Paper - 3

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MAX MARKS: 70

GENERAL INSTRUCTIONS:

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2. Section A consists of questions 1-18 carrying 1 mark each and is multiple choice questions. All questions are compulsory.
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5. Section D consists of Questions 31-33 carrying 4 marks each and are case studies.
6. Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

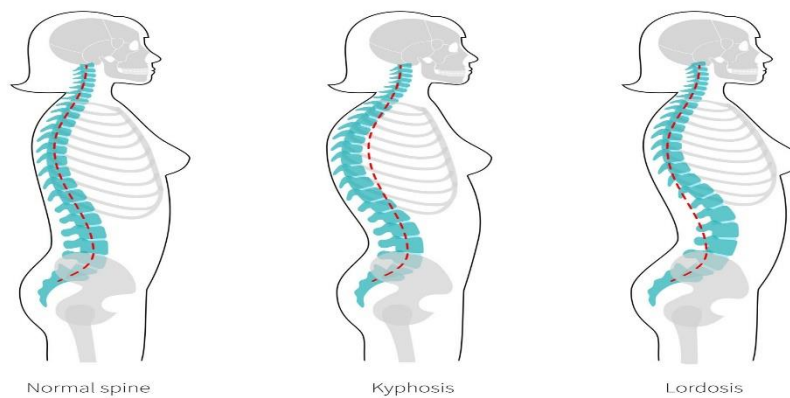
SECTION A (1 Mark Each)

Q.1. Identify the Yoga Asana shown in the image below, which is highly recommended for increasing lung capacity and curing Asthma:



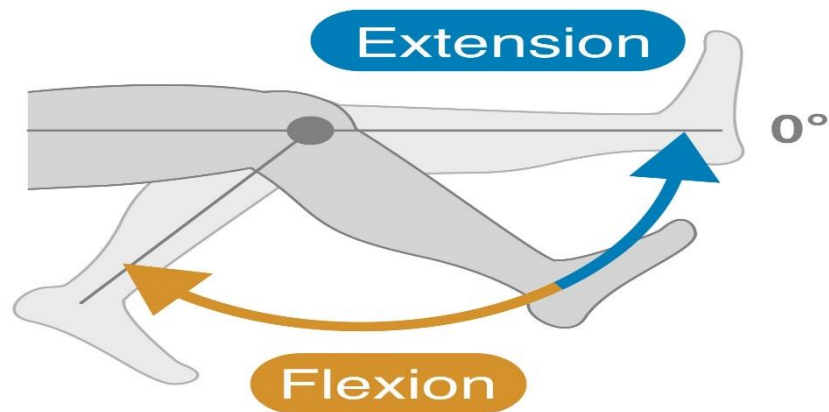
- (a) Vajrasana
- (b) Gomukhasana
- (c) Matsyasana
- (d) Tadasana

Q.2. Observe the postural deformity illustrated below. In this condition, there is an exaggerated inward curve of the lower back (lumbar region). Identify the deformity:



- (a) Kyphosis
- (b) Scoliosis
- (c) Lordosis
- (d) Flat Foot

Q.3. In biomechanics, the straightening movement that increases the angle between two body parts (as indicated at the knee joint in the figure) is known as:



- (a) Adduction
- (b) Flexion
- (c) Extension
- (d) Abduction

Q.4. How many byes will be given if 11 teams are participating in a knock-out tournament?

- (a) 5
- (b) 11
- (c) 4
- (d) 1

Q.5. The main objective of an Extramural tournament is:

- (a) To identify hidden talent within a class
- (b) To develop sportsmanship among students of the same school
- (c) To provide experience to students by competing with other schools
- (d) To keep students busy during free periods

Q.6. Which of the following is considered a Macronutrient?

- (a) Calcium

(b) Vitamin C

(c) Iron

(d) Protein

Q.7. Newton's Third Law of Motion is also known as:

(a) Law of Inertia

(b) Law of Action and Reaction

(c) Law of Acceleration

(d) Law of Momentum

Q.8. A deliberate action intended to cause physical harm to an opponent outside the rules of the game is called:

(a) Instrumental Aggression

(b) Hostile Aggression

(c) Assertive Behavior

(d) Proactive Aggression

Q.9. Match List - I (Fitness Test) with List - II (Component Measured) and select the correct answer:

List - I

A. 50m Standing Start

B. 600m Run/Walk

C. Sit and Reach Test

D. Partial Curl-up

List - II

1. Cardiovascular Endurance

2. Abdominal Strength and Endurance

3. Speed and Acceleration

4. Flexibility

(a) A-3, B-1, C-4, D-2

(b) A-1, B-3, C-2, D-4

(c) A-3, B-4, C-1, D-2

(d) A-4, B-2, C-3, D-1

Q.10. Match List - I (Postural Deformity) with List - II (Affected Body Part):

List - I

A. Knock Knees

B. Round Shoulders

C. Scoliosis

D. Flat Foot

List - II

1. Spine

2. Shoulders

3. Knees

4. Sole of the feet

(a) A-1, B-2, C-3, D-4

(b) A-3, B-2, C-1, D-4

(c) A-4, B-3, C-2, D-1

(d) A-2, B-4, C-3, D-1

Q.11. Match List - I (Tournament Formula) with List - II (Calculation):

List - I

A. Matches in Knock-out

B. Matches in Single League

C. Byes in Knock-out

D. Number of Rounds (if teams=8)

List - II

1. $N(N-1)/2$

2. $N - 1$

3. Next Power of 2 minus N

4. 3

(a) A-2, B-1, C-3, D-4

(b) A-1, B-2, C-4, D-3

(c) A-3, B-4, C-1, D-2

(d) A-4, B-3, C-2, D-1

Q.12. Match List - I (Nutrients) with List - II (Function):

List - I

A. Carbohydrates

B. Proteins

C. Vitamin D

D. Iron

List - II

1. Formation of Hemoglobin

2. Primary Energy Source

3. Muscle Repair and Growth

4. Bone Health (Calcium Absorption)

(a) A-2, B-3, C-4, D-1

(b) A-1, B-2, C-3, D-4

(c) A-3, B-1, C-4, D-2

(d) A-4, B-3, C-2, D-1

Q.13. Assertion (A): The Female Athlete Triad is a syndrome combining eating disorders, amenorrhea, and osteoporosis.

Reason (R): Excessive pressure to maintain low body weight for sports performance often triggers these interrelated conditions.

(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.

Q.14. Assertion (A): Isometric exercises involve visible movement of the joints and changing muscle lengths.

Reason (R): Pushing against a solid wall is an example of an isometric exercise.

(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.

Q.15. Assertion (A): Friction is essential for athletes to grip the ground and run without slipping.

Reason (R): Smooth and polished surfaces provide the highest amount of friction.

(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.

Q.16. Assertion (A): Consuming a high-protein diet right before a 100m sprint race gives the athlete maximum instant speed.

Reason (R): Carbohydrates are digested much faster than proteins and provide quick energy.

- (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.

Q.17. The Paralympics are organized specifically for athletes with:

- (a) Intellectual Disabilities
- (b) Physical and Visual Disabilities
- (c) Hearing Impairments
- (d) No Disabilities

Q.18. In the Rikli and Jones test, the '8 Foot Up and Go Test' is used to measure:

- (a) Upper body strength
- (b) Agility and dynamic balance
- (c) Lower body flexibility
- (d) Cardiovascular endurance

SECTION B (2 Marks Each - Attempt Any 5)

Q.19. Differentiate between 'Sprain' and 'Strain'.

Q.20. What is 'Bulimia Nervosa'?

Q.21. Name any four Asanas used for the prevention and cure of Diabetes.

Q.22. Differentiate between Hostile Aggression and Instrumental Aggression with one example each.

Q.23. What are the normal weight and overweight categories according to the BMI scale?

Q.24. Write two advantages of a Knock-out Tournament.

SECTION C (3 Marks Each - Attempt Any 5)

Q.25. Explain the procedure and benefits of performing 'Vajrasana'.

Q.26. What is Menarche? Briefly explain any two menstrual dysfunctions common in female athletes.

Q.27. Discuss any three physiological changes that occur in the human body due to aging.

Q.28. What is Newton's Third Law of Motion? Explain its application in swimming and running.

Q.29. Explain the importance of fluid replacement (hydration) before, during, and after a prolonged sports competition.

Q.30. Define Flexibility. Explain any two methods used to develop flexibility.

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1 (Children and Women in Sports):

Observe the image below showing athletes playing Wheelchair Basketball.



(i) The athletes in the image are most likely participating in which international multi-sport event? (1)

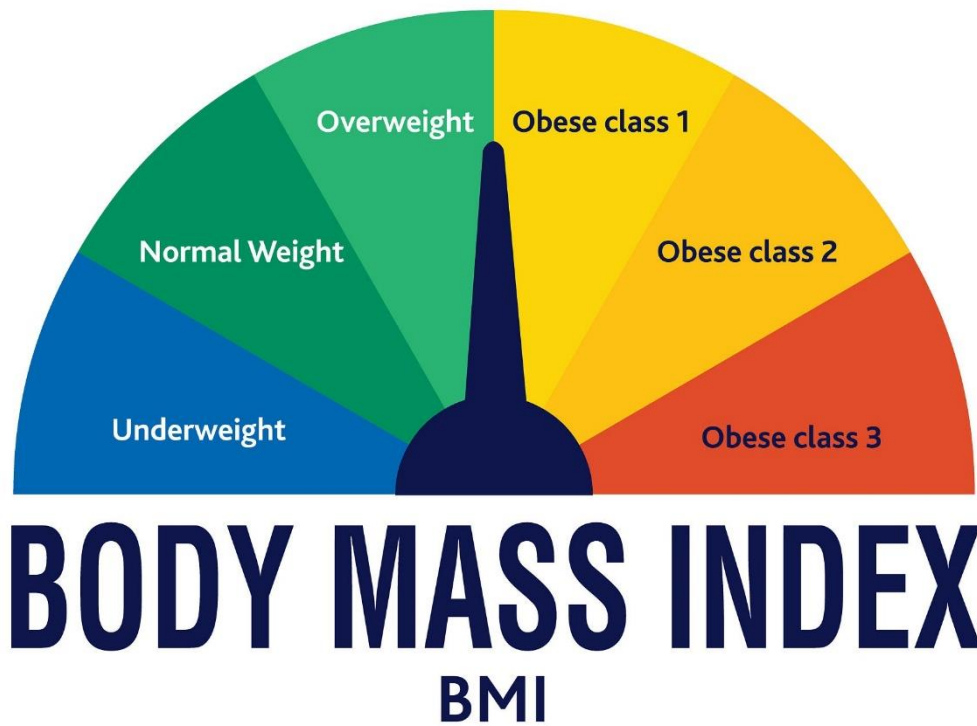
(ii) Name the international organization that governs and organizes these specific games. (1)

(iii) Mention any one objective of organizing such sports events for CWSN (Children with Special Needs). (1)

(iv) In which year and city were the first official Paralympic Games held? (1)

Q32. Case Study 2 (Sports Nutrition & Health - BMI Data):

A physical education teacher calculated the BMI of 100 students in Class XII. She represented the data using the following pie chart:

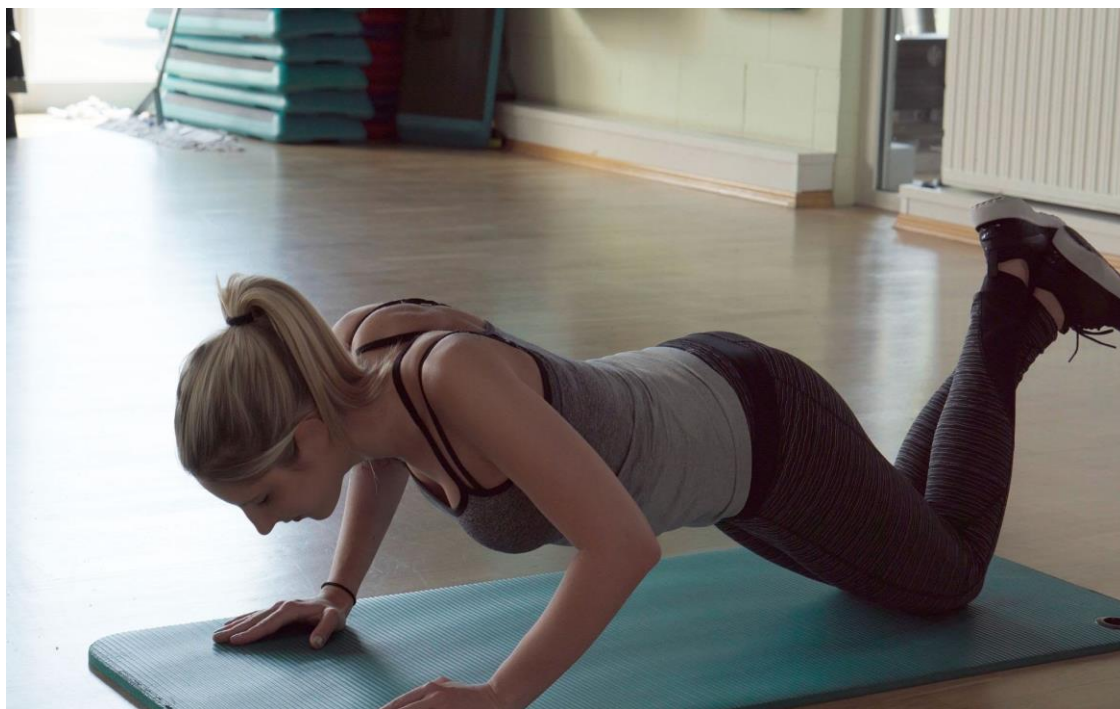


Overweight 25%, Underweight 15%, Obese 10%]

- (i) According to the pie chart, what percentage of the students fall under the 'Normal Weight' category? (1)
- (ii) What is the BMI range for the students who fall in the 'Normal Weight' category? (1)
- (iii) Write the formula the teacher used to calculate the BMI of these students. (1)
- (iv) Which category covers exactly one-fourth (25%) of the class population according to this chart? (1)

Q.33. Case Study 3 (Motor Fitness Test):

Observe the picture below showing a student performing a specific physical fitness test from the SAI Khelo India battery.



- (i) Identify the test being performed in the given image. (1)
- (ii) This specific test is primarily used to measure which fitness component? (1)
- (iii) For which specific group of students is this modified version of the test designed? (1)
- (iv) How is the final score recorded for this test? (1)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. As the Sports Incharge of Modern School, Noida, draw a knock-out fixture for 21 teams. Explain the procedure for determining the number of matches, number of rounds, byes, and the division of teams in the upper and lower halves.

Q.35. What are bone injuries? Classify the various types of fractures and explain any four of them in detail.

Q.36. Explain the physiological factors determining the strength and endurance of an athlete.

Q.37. Define 'Sports Training'. Differentiate between the Fartlek Training Method and the Interval Training Method

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

1. (b) Gomukhasana
2. (c) Lordosis
3. (c) Extension
4. (a) 5 [Next power of 2 is 16. Bytes = $16 - 11 = 5$]
5. (c) To provide experience to students by competing with other schools
6. (d) Protein
7. (b) Law of Action and Reaction
8. (b) Hostile Aggression
9. (a) A-3, B-1, C-4, D-2
10. (b) A-3, B-2, C-1, D-4
11. (a) A-2, B-1, C-3, D-4
12. (a) A-2, B-3, C-4, D-1
13. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
14. (d) (A) is false, but (R) is true (Isometric exercises have NO visible movement).
15. (c) (A) is true, but (R) is false (Smooth surfaces provide the LEAST friction).
16. (d) (A) is false, but (R) is true (Carbohydrates provide instant energy, not high-protein).
17. (b) Physical and Visual Disabilities
18. (b) Agility and dynamic balance

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Children and Women in Sports):

(i) Paralympic Games.

(ii) International Paralympic Committee (IPC).

(iii) To promote social inclusion, boost self-confidence, and provide equal opportunities for disabled athletes. (Any one valid point).

(iv) Rome, Italy in 1960.

Answer 32 (Sports Nutrition & Health - BMI Data):

(i) 50%.

(ii) 18.5 to 24.9.

(iii) $BMI = \text{Weight (in kg)} / [\text{Height (in meters)}]^2$.

(iv) Overweight.

Answer 33 (Motor Fitness Test):

(i) Modified Push-ups.

(ii) Upper body strength and endurance.

(iii) Girls.

(iv) The total number of correctly performed push-ups without stopping.

PHYSICAL EDUCATION (048)

Sample Question Paper - 4

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 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 is multiple choice questions. All questions are compulsory.
3. Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.
4. Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and 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.
6. Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

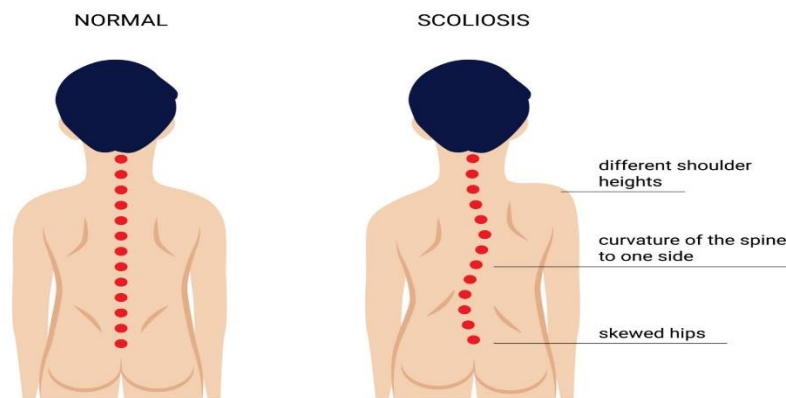
SECTION A (1 Mark Each)

Q.1. Identify the Yoga Asana shown in the image below, which is highly recommended for curing back pain and respiratory issues like Asthma:



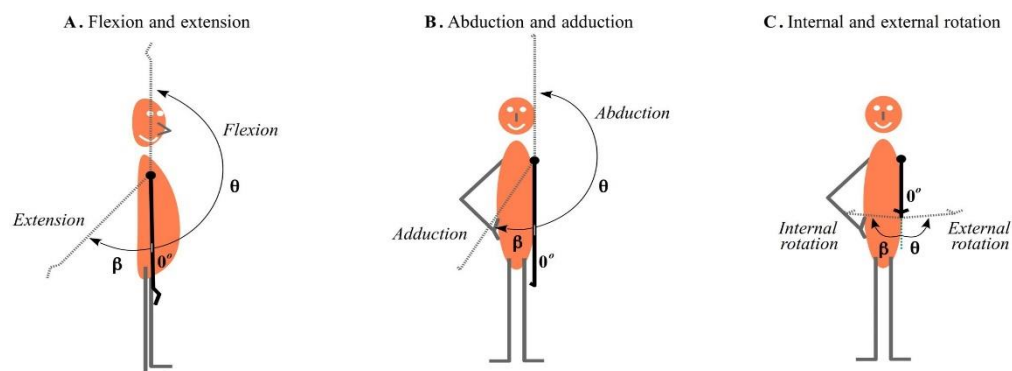
- (a) Vajrasana
- (b) Bhujangasana
- (c) Halasana
- (d) Tadasana

Q.2. Observe the postural deformity illustrated below. In this condition, the spine bends sideways in a 'C' or 'S' shape. Identify the deformity:



- (a) Kyphosis
- (b) Scoliosis
- (c) Lordosis
- (d) Flat Foot

Q.3. In biomechanics, the movement of bringing a body part (like an arm or leg) towards the midline of the body is known as:



- (a) Adduction
- (b) Flexion
- (c) Extension
- (d) Abduction

Q.4. How many total matches will be played in a knock-out tournament if 15 teams are participating?

- (a) 15
- (b) 16
- (c) 14
- (d) 7

Q.5. Which committee is responsible for preparing the grounds, courts, and arranging sports equipment before a tournament?

- (a) Finance Committee
- (b) Technical Committee
- (c) Marketing Committee
- (d) Ground and Equipment Committee

Q.6. Calcium, Phosphorus, and Sodium are examples of:

- (a) Macrominerals
- (b) Microminerals
- (c) Fat-soluble vitamins
- (d) Water-soluble vitamins

Q.7. Newton's First Law of Motion is also known as:

- (a) Law of Inertia
- (b) Law of Action and Reaction
- (c) Law of Acceleration

(d) Law of Momentum

Q.8. A person who is highly outgoing, talkative, and energetic falls under which personality trait according to the Big Five Theory?

(a) Introversion

(b) Extroversion

(c) Neuroticism

(d) Conscientiousness

Q.9. Match List - I (Vitamins) with List - II (Chemical Name) and select the correct answer:

List - I

A. Vitamin A

B. Vitamin B1

C. Vitamin C

D. Vitamin D

List - II

1. Ascorbic Acid

2. Calciferol

3. Retinol

4. Thiamin

(a) A-3, B-4, C-1, D-2

(b) A-1, B-2, C-3, D-4

(c) A-4, B-3, C-2, D-1

(d) A-3, B-1, C-4, D-2

Q.10. Match List - I (Types of Training) with List - II (Purpose):

List - I

- A. Fartlek Training
- B. Pace Runs
- C. Isometric Exercises
- D. Ballistic Method

List - II

- 1. To develop Speed
- 2. To develop Endurance
- 3. To develop Flexibility
- 4. To develop Strength

- (a) A-1, B-2, C-3, D-4
- (b) A-2, B-1, C-4, D-3
- (c) A-4, B-3, C-2, D-1
- (d) A-2, B-4, C-3, D-1

Q.11. Match List - I (Tournament Types) with List - II (Features):

List - I

- A. Knock-out
- B. League
- C. Combination
- D. Challenge

List - II

1. Defeated team is eliminated immediately
2. Zonal matches followed by National level
3. Every team plays with every other team
4. One-on-one matches (e.g., Boxing)

(a) A-2, B-1, C-3, D-4

(b) A-1, B-3, C-2, D-4

(c) A-3, B-4, C-1, D-2

(d) A-4, B-3, C-2, D-1

Q.12. Match List - I (Injury) with List - II (Classification):

List - I

- A. Abrasion
- B. Dislocation
- C. Greenstick
- D. Sprain

List - II

1. Bone Injury (Fracture)
2. Joint Injury
3. Soft Tissue Injury (Skin)
4. Soft Tissue Injury (Ligament)

- (a) A-2, B-3, C-4, D-1
- (b) A-1, B-2, C-3, D-4
- (c) A-3, B-2, C-1, D-4
- (d) A-4, B-3, C-2, D-1

Q.13. Assertion (A): Consuming excessive amounts of fat-soluble vitamins without a doctor's advice can be toxic for the body.

Reason (R): Fat-soluble vitamins (A, D, E, K) are not easily excreted in urine and get stored in the liver and fatty tissues.

- (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.

Q.14. Assertion (A): Dynamic friction is always slightly greater than static friction.

Reason (R): It is harder to start moving a heavy box from a resting position than to keep it moving.

- (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.

Q.15. Assertion (A): Isokinetic exercises are performed on specially designed computerized machines.

Reason (R): Isokinetic exercises maintain a constant speed of movement throughout the entire range of motion.

- (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.

Q.16. Assertion (A): Intramural programs help in identifying talented sportspersons within a school.

Reason (R): Intramural competitions are held between teams from different states.

(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.

Q.17. Amenorrhea is defined as:

(a) Painful menstrual periods

(b) Complete absence of menstrual periods

(c) Weakening of bones

(d) Eating disorder

Q.18. In the SAI Khelo India Fitness Test, the 600m run/walk is used to measure:

(a) Agility

(b) Upper body strength

(c) Cardiovascular Endurance

(d) Flexibility

SECTION B (2 Marks Each - Attempt Any 5)

Q.19. Differentiate between Fine Motor Development and Gross Motor Development in children.

Q.20. What is 'Seeding' and why is it used in a tournament?

Q.21. Write any two physiological factors that determine the 'Strength' of an athlete.

Q.22. Enlist any four Asanas used for the prevention and cure of Hypertension.

Q.23. What are the two types of 'Aggression' in sports? Give one example of each.

Q.24. Define 'Basal Metabolic Rate' (BMR).

SECTION C (3 Marks Each - Attempt Any 5)

Q.25. State Newton's Second Law of Motion. Explain its application in any two sports.

Q.26. Describe the procedure and any two benefits of performing 'Ardha Matsyendrasana'.

Q.27. What is Osteoporosis? How can regular exercise and a proper diet help in preventing it?

Q.28. Briefly explain the 'Fartlek Training Method'. What are its advantages?

Q.29. What is a 'Project' or 'Projectile' in sports? List three factors affecting the trajectory of a projectile.

Q.30. Explain the role of the 'Technical Committee' and 'Finance Committee' before and during a sports event.

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1 (Sports Injuries):

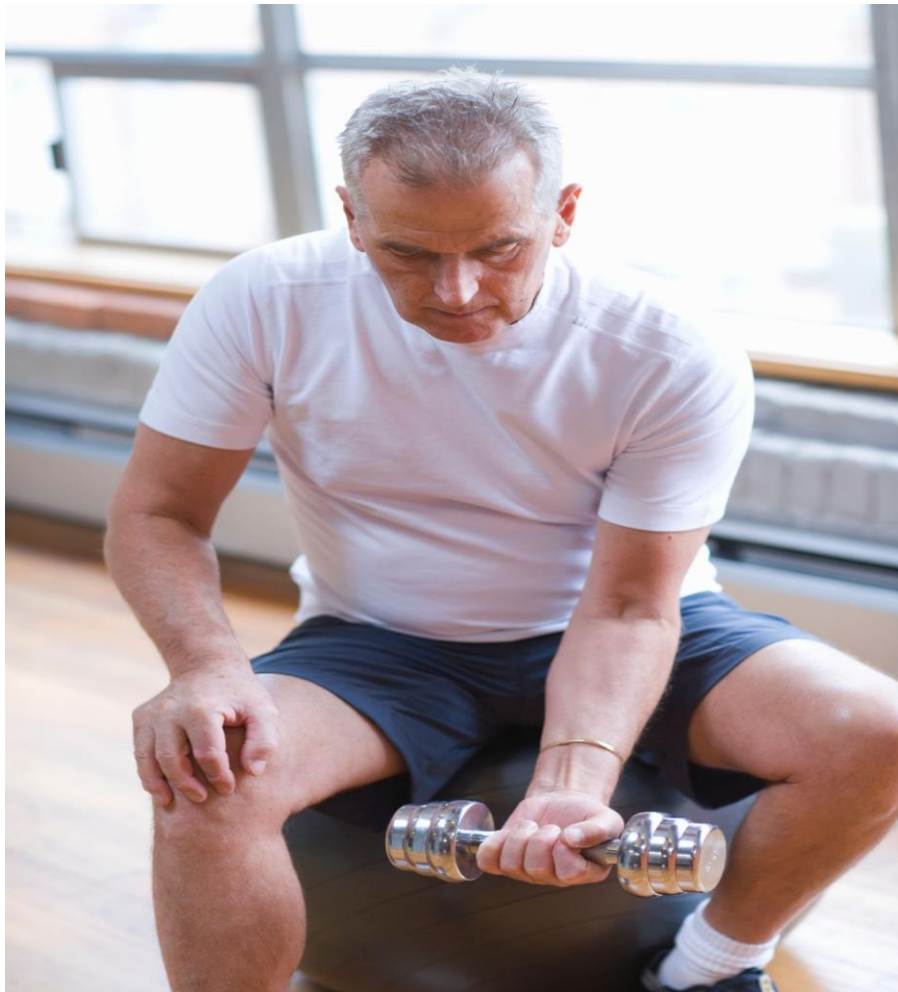
Observe the X-ray image below showing a specific type of bone fracture often seen in high-impact sports or severe accidents.



- (i) Identify the specific type of fracture shown in the image where the bone shatters into three or more pieces. (1)
- (ii) Name any one high-impact sport where such injuries are highly probable. (1)
- (iii) Categorize this injury (Is it a Soft Tissue injury, Joint injury, or Bone injury?). (1)
- (iv) What immediate first-aid immobilizing technique is generally used to stabilize any suspected fracture before reaching a hospital? (1)

Q32. Case Study 2 (Test & Measurement - Senior Citizens):

An old age home organized a fitness camp. The physical education expert conducted various tests from the Rikli and Jones battery. Observe the picture of the test below:



- (i) Identify the specific fitness test being performed by the senior citizen in the image. (1)
- (ii) This specific test is primarily used to measure which fitness component? (1)
- (iii) What is the standard weight of the dumbbell used for men and women respectively in this test? (1)

(iv) What is the total time duration given to the participant to complete maximum repetitions in this test? (1)

Q.33. Case Study 3 (Tournament Fixture - Data Based):

A physical education teacher drew a League Tournament fixture using the Cyclic Method for 6 participating teams.

(i) Calculate the total number of matches to be played in this league tournament. (1)

(ii) How many rounds will be played in this fixture since the number of teams is even (6)? (1)

(iii) In the Cyclic Method, if the number of teams is even, which team's position is usually fixed at the top right corner? (1)

(iv) What formula is used to determine the number of rounds if the number of teams (N) is odd? (1)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. Draw a Knock-out fixture for 23 teams. Show all calculations including total matches, byes, rounds, and the division of teams in the upper and lower halves.

Q.35. What is a Balanced Diet? Explain the role of Macronutrients (Carbohydrates, Proteins, and Fats) in an athlete's diet in detail.

Q.36. Classify 'Coordinative Abilities'. Explain any four types of coordinative abilities in sports.

Q.37. Define 'Motivation'. Differentiate between Intrinsic and Extrinsic motivation. Explain any three techniques to motivate an athlete for better sports performance.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

1. (b) Bhujangasana
2. (b) Scoliosis
3. (a) Adduction
4. (c) 14 [Formula: $N-1 = 15-1 = 14$]
5. (d) Ground and Equipment Committee
6. (a) Macrominerals
7. (a) Law of Inertia
8. (b) Extroversion
9. (a) A-3, B-4, C-1, D-2
10. (b) A-2, B-1, C-4, D-3
11. (b) A-1, B-3, C-2, D-4
12. (c) A-3, B-2, C-1, D-4
13. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
14. (d) (A) is false, but (R) is true (Dynamic friction is always LESS than static friction).
15. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
16. (c) (A) is true, but (R) is false (Intramural matches are within the SAME school).
17. (b) Complete absence of menstrual periods
18. (c) Cardiovascular Endurance

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Sports Injuries):

- (i) Comminuted Fracture.
- (ii) Rugby, American Football, Auto-racing, Motorcross, etc. (Any one).
- (iii) Bone Injury.
- (iv) Splinting (applying a splint to immobilize the area).

Answer 32 (Test & Measurement - Senior Citizens):

- (i) Arm Curl Test.
- (ii) Upper body strength and endurance.
- (iii) 8 pounds (approx 3.6 kg) for men and 5 pounds (approx 2.2 kg) for women.
- (iv) 30 seconds.

Answer 33 (Tournament Fixture - Data Based):

- (i) 15 Matches [Formula: $N(N-1)/2 = 6(5)/2 = 15$].
- (ii) 5 Rounds [Formula for even teams: $N-1 = 6-1 = 5$].
- (iii) Team number 1 (or the highest seeded team) is usually fixed at the top right corner.
- (iv) N (The number of rounds equals the number of teams if N is odd).

PHYSICAL EDUCATION (048)

Sample Question Paper - 5

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 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 is multiple choice questions. All questions are compulsory.
3. Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.
4. Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and 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.
6. Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

SECTION A (1 Mark Each)

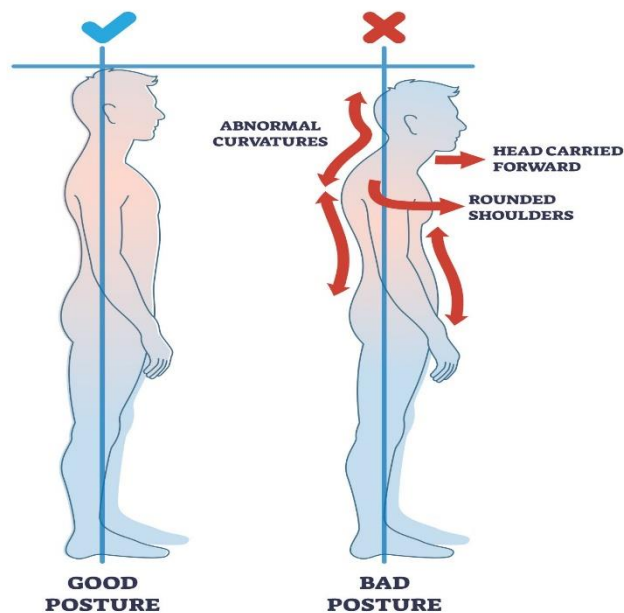
Q.1. Identify the Yoga Asana shown in the image below, which is highly recommended for respiratory disorders like Asthma and improves posture:



- (a) Vajrasana
- (b) Matsyasana
- (c) Halasana
- (d) Tadasana

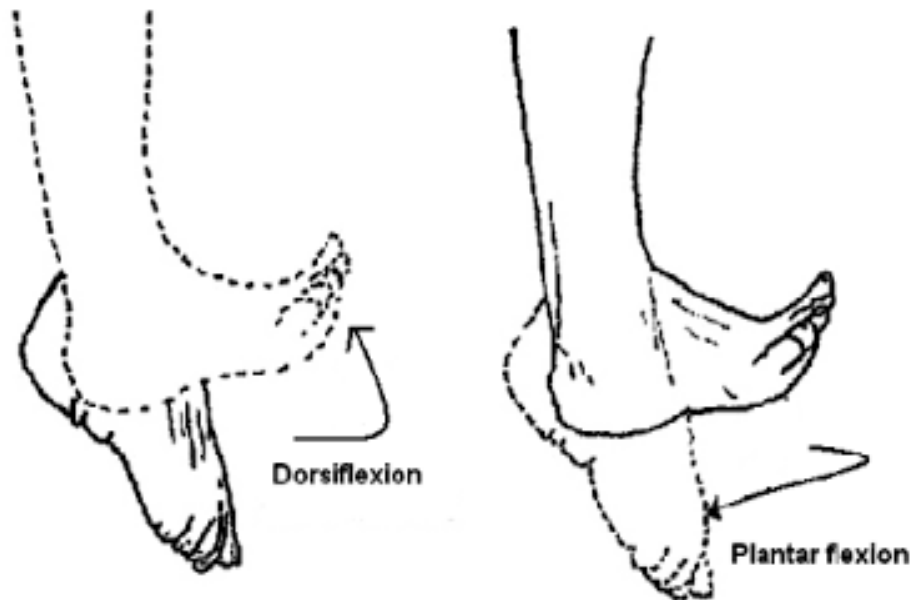
Q.2. Observe the postural deformity illustrated below. In this condition, the shoulders are drawn forward, the head is extended, and the chin points forward. Identify the deformity:

ROUNDED SHOULDERS POSTURE



- (a) Kyphosis
- (b) Scoliosis
- (c) Round Shoulders
- (d) Flat Foot

Q.3. In biomechanics, the movement of pointing the toes downward away from the shin (as indicated in the ankle joint figure) is known as:



- (a) Dorsiflexion
- (b) Plantar Flexion
- (c) Extension
- (d) Abduction

Q.4. The very first step in sports event management is:

- (a) Organizing

- (b) Directing
- (c) Planning
- (d) Controlling

Q.5. How many total matches will be played in a knock-out tournament if 22 teams are participating?

- (a) 21
- (b) 22
- (c) 11
- (d) 44

Q.6. Which of the following Vitamins is essential for the clotting of blood?

- (a) Vitamin A
- (b) Vitamin C
- (c) Vitamin E
- (d) Vitamin K

Q.7. The ability to perform a movement of similar pattern at a faster rate is called:

- (a) Speed
- (b) Agility
- (c) Endurance
- (d) Flexibility

Q.8. A person who is frequently anxious, depressed, and emotionally unstable scores high on which Big Five Personality trait?

- (a) Openness
- (b) Agreeableness
- (c) Neuroticism
- (d) Conscientiousness

Q.9. Match List - I (Event Management Committees) with List - II (Roles) and select the correct answer:

List - I

- A. Transport Committee
- B. Boarding and Lodging Committee
- C. Decoration and Ceremony Committee
- D. First Aid Committee

List - II

- 1. Arranging medical help
- 2. Opening and closing ceremonies
- 3. Arranging meals and stay
- 4. Travel arrangements for teams

- (a) A-4, B-3, C-2, D-1
- (b) A-1, B-2, C-3, D-4
- (c) A-3, B-4, C-1, D-2
- (d) A-4, B-1, C-2, D-3

Q.10. Match List - I (Vitamins/Minerals) with List - II (Deficiency):

List - I

- A. Iron
- B. Iodine
- C. Vitamin C
- D. Vitamin D

List - II

- 1. Goiter
- 2. Anemia
- 3. Rickets
- 4. Scurvy

- (a) A-1, B-2, C-3, D-4
- (b) A-2, B-1, C-4, D-3
- (c) A-4, B-3, C-2, D-1
- (d) A-2, B-4, C-3, D-1

Q.11. Match List - I (Sports Training) with List - II (Methods):

List - I

- A. Strength
- B. Endurance
- C. Speed
- D. Flexibility

List - II

1. Fartlek Training
2. Isometric Exercises
3. Pace Runs
4. Ballistic Method

(a) A-2, B-1, C-3, D-4

(b) A-1, B-3, C-2, D-4

(c) A-3, B-4, C-1, D-2

(d) A-4, B-3, C-2, D-1

Q.12. Match List - I (Soft Tissue Injuries) with List - II (Treatment Phase/Method):

List - I

- A. Sprain
- B. Abrasion
- C. Contusion
- D. PRICE

List - II

1. Cleaning with antiseptic
2. Ice application to reduce swelling
3. First-aid principle
4. Ligament tear

(a) A-4, B-1, C-2, D-3

(b) A-1, B-2, C-3, D-4

(c) A-3, B-2, C-1, D-4

(d) A-4, B-3, C-2, D-1

Q.13. Assertion (A): Consuming simple carbohydrates immediately after an intense workout helps in quick recovery.

Reason (R): Simple carbohydrates digest quickly and restore the depleted glycogen levels in muscles rapidly.

(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.

Q.14. Assertion (A): In a league tournament, every team gets a chance to play against every other team regardless of winning or losing.

Reason (R): League tournaments require less time and money compared to knock-out tournaments.

(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.

Q.15. Assertion (A): Newton's Third Law of Motion states that for every action, there is an equal and opposite reaction.

Reason (R): When a swimmer pushes the water backward (action), the water pushes the swimmer forward (reaction).

(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.

Q.16. Assertion (A): Special Olympics Bharat (SOB) focuses on providing sports training to athletes with intellectual disabilities.

Reason (R): Special Olympics Bharat was founded by Sir Ludwig Guttmann.

- (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.

Q.17. Osteoporosis in the Female Athlete Triad refers to:

- (a) Disordered eating patterns
- (b) Loss of bone mass and bone mineral density
- (c) Irregular menstrual cycles
- (d) Low iron levels in the blood

Q.18. In the SAI Khelo India Fitness Test battery for age group 5-8 years, which test measures coordination?

- (a) Plate Tapping Test
- (b) Flamingo Balance Test
- (c) 50m Dash
- (d) BMI

SECTION B (2 Marks Each - Attempt Any 5)

Q.19. Differentiate between Intramural and Extramural tournaments.

Q.20. What do you mean by 'Food Intolerance'?

Q.21. Name any four Asanas used for the prevention and management of Asthma.

Q.22. Define 'First Aid'. What is its primary objective in sports?

Q.23. What are the two types of 'Motivation' in sports psychology?

Q.24. Briefly explain 'Static Friction' with an example from sports.

SECTION C (3 Marks Each - Attempt Any 5)

Q.25. State Newton's First Law of Motion. Explain its application in sports.

Q.26. Describe the procedure and any two benefits of performing 'Tadasana'.

Q.27. What is 'Menarche'? How does intense sports training sometimes lead to Menstrual Dysfunction?

Q.28. Briefly explain the 'Continuous Training Method'. What are its advantages?

Q.29. What is 'Aggression' in sports? Differentiate between Hostile and Instrumental aggression.

Q.30. Explain the role of the 'Marketing Committee' and 'Logistics Committee' in organizing a sports event.

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1 (Tournament Fixtures):

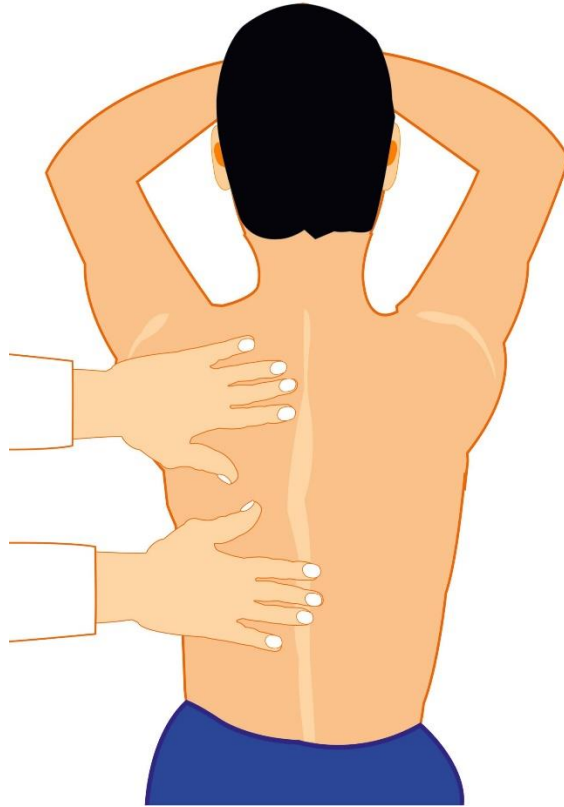
Observe the image below showing a specific method of drawing a league tournament fixture.

1-2												
1-3	2-3											
1-4	2-4	3-4										
1-5	2-5	3-5	4-5									
1-6	2-6	3-6	4-6	5-6								
1-7	2-7	3-7	4-7	5-7	6-7							
1-8	2-8	3-8	4-8	5-8	6-8	7-8						
1-9	2-9	3-9	4-9	5-9	6-9	7-9	8-9					
1-10	2-10	3-10	4-10	5-10	6-10	7-10	8-10	9-10				
1-11	2-11	3-11	4-11	5-11	6-11	7-11	8-11	9-11	10-11			
1-12	2-12	3-12	4-12	5-12	6-12	7-12	8-12	9-12	10-12	11-12		

- (i) Identify the specific method of drawing a fixture shown in the image above. (1)
- (ii) For what type of tournament is this method used? (1)
- (iii) Are 'Byes' given in this specific method of drawing fixtures? (1)
- (iv) Calculate the total number of matches if 5 teams participate in this fixture. (1)

Q32. Case Study 2 (Fitness Test - Senior Citizens):

An NGO organized a fitness assessment camp for the elderly. The physical education expert conducted a test from the Rikli and Jones battery to measure upper body flexibility. Observe the picture below:



- (i) Identify the specific fitness test being performed in the image. (1)
- (ii) This test is primarily used to measure the flexibility of which specific body part? (1)
- (iii) How is the score recorded if the fingertips of both hands just touch each other? (1)
- (iv) Name the test from the same battery that is used to measure lower body flexibility. (1)

Q.33. Case Study 3 (Motor Fitness Test Data):

A physical education teacher conducted the '50m Standing Start' test for a group of Class XII students to measure their fitness levels.

- (i) The '50m Standing Start' test is primarily used to measure which component of physical fitness? (1)
- (ii) What is the correct starting position for the athlete in this test? (1)

(iii) In which unit is the final score of this test recorded? (1)

(iv) Name the alternative test from the Khelo India battery used to measure the cardiovascular endurance of these students. (1)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. As the Physical Education Teacher (P.E.T.) at Modern School, Noida, you have to organize an Inter-House Basketball Tournament on a Knock-out basis. Draw a Knock-out fixture for 19 teams. Mention all the formulas and steps involved (Matches, Byes, Rounds, Quarters).

Q.35. Classify Vitamins into two categories. Explain the functions and sources of any two Fat-Soluble and any two Water-Soluble vitamins.

Q.36. What do you mean by 'Motor Development'? Explain the various factors affecting the motor development of children in detail.

Q.37. Define 'Endurance'. Differentiate between 'Pace Run Method' and 'Fartlek Training Method' for developing endurance.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

1. (b) Matsyasana

2. (c) Round Shoulders

3. (b) Plantar Flexion

4. (c) Planning

5. (a) 21 [Formula: $N-1 = 22-1 = 21$]

6. (d) Vitamin K
7. (a) Speed
8. (c) Neuroticism
9. (a) A-4, B-3, C-2, D-1
10. (b) A-2, B-1, C-4, D-3
11. (a) A-2, B-1, C-3, D-4
12. (a) A-4, B-1, C-2, D-3
13. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
14. (c) (A) is true, but (R) is false (League tournaments take MORE time and money).
15. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
16. (c) (A) is true, but (R) is false (SOB was founded by Eunice Kennedy Shriver, not Guttmann; Guttmann founded the Paralympics).
17. (b) Loss of bone mass and bone mineral density
18. (a) Plate Tapping Test

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Tournament Fixtures):

- (i) Staircase Method.
- (ii) League (Round Robin) Tournament.
- (iii) No, byes are not given in the Staircase method.
- (iv) 10 matches [Formula: $N(N-1)/2 = 5(4)/2 = 10$].

Answer 32 (Fitness Test - Senior Citizens):

- (i) Back Scratch Test.
- (ii) Upper body (Shoulder) flexibility.
- (iii) The score is recorded as 'Zero' (0).
- (iv) Chair Sit and Reach Test.

Answer 33 (Motor Fitness Test Data):

- (i) Speed (and Acceleration).
- (ii) Standing start position behind the starting line.
- (iii) Seconds (nearest to 1/10th of a second).
- (iv) 600m Run/Walk Test.

PHYSICAL EDUCATION (048)

Sample Question Paper - 6

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 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 is multiple choice questions. All questions are compulsory.
3. Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.
4. Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and 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.
6. Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

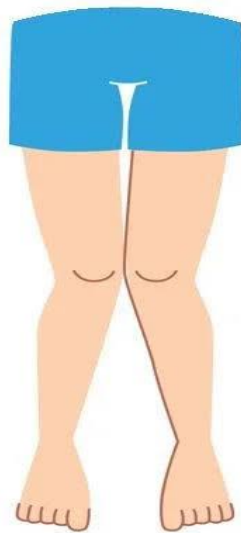
SECTION A (1 Mark Each)

Q.1. Identify the Yoga Asana shown in the image below, which is known as the 'Half Spinal Twist Pose' and is highly beneficial for diabetes management:



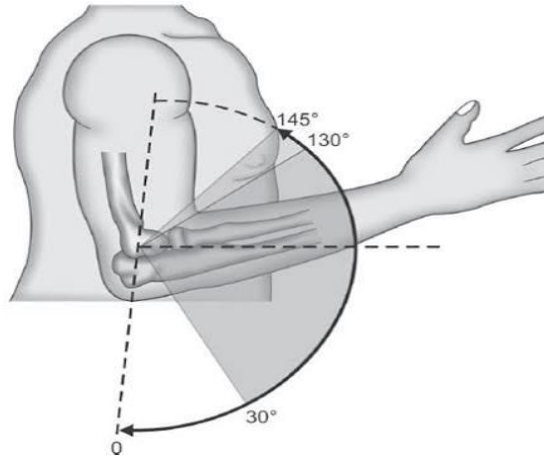
- (a) Tadasana
- (b) Ardha Matsyendrasana
- (c) Bhujangasana
- (d) Vajrasana

Q.2. Observe the postural deformity illustrated below. In this condition, the knees collide with each other while walking or standing. Identify the deformity:



- (a) Bow Legs
- (b) Knock Knees
- (c) Flat Foot
- (d) Lordosis

Q.3. In biomechanics, the movement that decreases the angle between two body parts (as bending the elbow) is known as:



- (a) Extension
- (b) Flexion
- (c) Abduction
- (d) Adduction

Q.4. Which tournament format is considered the best to determine the true winner of a sports championship?

- (a) Knock-out Tournament
- (b) League (Round Robin) Tournament
- (c) Challenge Tournament
- (d) Combination Tournament

Q.5. What is the formula to calculate the total number of matches in a Single League tournament (where N is the number of teams)?

- (a) $N - 1$
- (b) $N(N - 1) / 2$
- (c) $N(N + 1) / 2$
- (d) $N - 2$

Q.6. Which of the following is a water-soluble vitamin?

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

Q.7. The ability to overcome resistance with high speed is known as:

- (a) Maximum Strength
- (b) Explosive Strength
- (c) Strength Endurance
- (d) Static Strength

Q.8. According to the Big Five Personality Theory, a person who is disciplined, organized, and goal-oriented scores high in:

- (a) Neuroticism
- (b) Extraversion
- (c) Conscientiousness
- (d) Openness

Q.9. Match List - I (Yoga Asanas) with List - II (Targeted Health Benefits):

List - I

- A. Tadasana
- B. Gomukhasana
- C. Bhujangasana
- D. Pawanmuktasana

List - II

1. Relieves gas and improves digestion
2. Improves posture and height development
3. Cures asthma and respiratory issues
4. Strengthens shoulder muscles and cures asthma

(a) A-2, B-4, C-3, D-1

(b) A-1, B-2, C-3, D-4

(c) A-4, B-3, C-2, D-1

(d) A-3, B-1, C-4, D-2

Q.10. Match List - I (Physical Fitness Test) with List - II (Age Group / Category):

List - I

- A. Modified Push-ups
- B. Flamingo Balance Test
- C. Arm Curl Test
- D. Chair Sit and Reach Test

List - II

1. Senior Citizens (Lower body flexibility)
2. Senior Citizens (Upper body strength)
3. Girls (Sports fitness battery)
4. Children 5-8 years (Balance)

(a) A-3, B-4, C-2, D-1

(b) A-1, B-2, C-3, D-4

(c) A-4, B-3, C-1, D-2

(d) A-2, B-1, C-4, D-3

Q.11. Match List - I (Friction Types) with List - II (Examples):

List - I

- A. Static Friction
- B. Sliding Friction
- C. Rolling Friction
- D. Fluid Friction

List - II

1. A hockey puck sliding on ice
2. A ball rolling on a football field
3. A swimmer moving through water
4. Pushing a heavy heavy box from rest

(a) A-4, B-1, C-2, D-3

(b) A-1, B-2, C-3, D-4

(c) A-3, B-4, C-1, D-2

(d) A-2, B-3, C-4, D-1

Q.12. Match List - I (Sports Injuries) with List - II (Classification):

List - II

- A. Laceration
- B. Strain
- C. Dislocation
- D. Compound Fracture

List - II

1. Joint Injury
2. Soft Tissue (Skin tear/cut)

3. Bone Injury (Bone breaks through skin)

4. Muscle/Tendon Injury

(a) A-2, B-4, C-1, D-3

(b) A-1, B-2, C-3, D-4

(c) A-3, B-1, C-4, D-2

(d) A-4, B-3, C-2, D-1

Q.13. Assertion (A): Tournament planning reduces the chances of chaos and ensures smooth execution of sports events.

Reason (R): Proper delegation of duties among various committees helps in handling emergencies effectively.

(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.

Q.14. Assertion (A): Dynamic friction is generally less than static friction.

Reason (R): Once an object is in motion, fewer molecular bonds are formed between the contacting surfaces compared to when it is at rest.

(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.

Q.15. Assertion (A): Intrinsic motivation comes from within the individual, such as the joy of playing or personal satisfaction.

Reason (R): Medals, trophies, and cash prizes are examples of intrinsic motivation.

(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.

Q.16. Assertion (A): Concentric muscle contraction occurs when the muscle lengthens under tension.

Reason (R): During a biceps curl, when you lift the weight up, the biceps muscle shortens (concentric contraction).

(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.

Q.17. The first official Paralympic Games were held in the year:

(a) 1948

(b) 1960

(c) 1976

(d) 1988

Q.18. In the Rikli and Jones Senior Citizen Fitness Test, the 'Chair Stand Test' is used to measure:

(a) Lower body strength

(b) Upper body flexibility

(c) Aerobic endurance

(d) Agility

SECTION B (2 Marks Each - Attempt Any 5)

Q.19. What do you understand by 'Extramural' tournaments? State one advantage.

Q.20. Differentiate between 'Macro Nutrients' and 'Micro Nutrients' with one example of each.

Q.21. Explain any two corrective measures for 'Kyphosis'.

Q.22. Define 'Friction' and name its types in sports.

Q.23. What is the role of the 'First Aid Committee' during a sports tournament?

Q.24. Write two differences between 'Isometric' and 'Isotonic' exercises.

SECTION C (3 Marks Each - Attempt Any 5)

Q.25. State Newton's Third Law of Motion and explain its practical applications in track and field events.

Q.26. Discuss the procedure and contraindications of performing 'Bhujangasana'.

Q.27. What is 'Menstrual Dysfunction'? Explain Amenorrhea in female athletes.

Q.28. Explain the 'Interval Training Method' along with its major advantages.

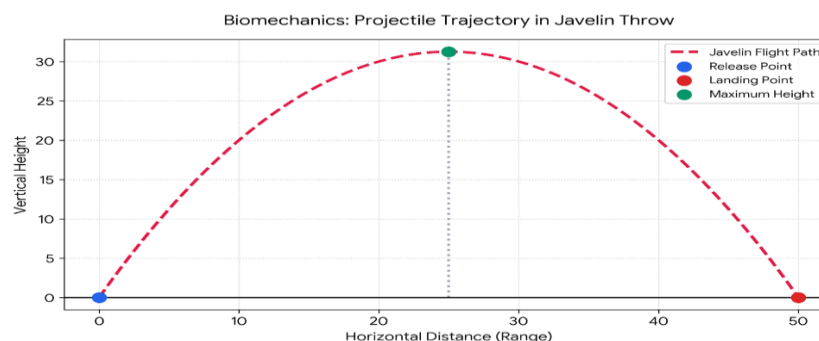
Q.29. What is 'Aggression' in sports? Differentiate between Hostile and Instrumental Aggression.

Q.30. Explain any three psychological benefits of physical exercises for children with special needs (CWSN).

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1 (Biomechanics in Sports):

Observe the image below showing an athlete throwing a javelin.



(i) The path followed by the javelin in the air is scientifically known as a _____. (1)

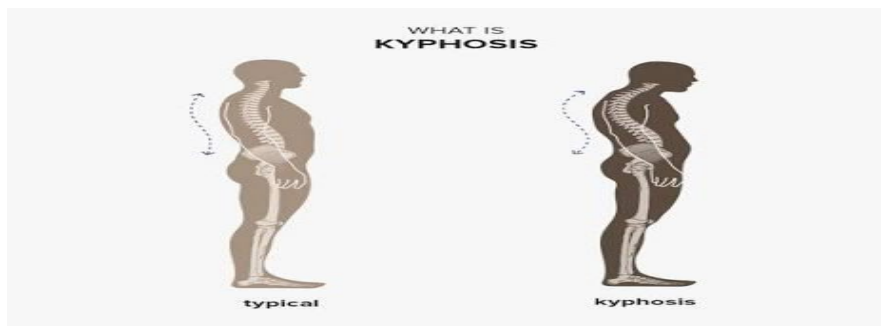
(ii) Name any two factors that affect the flight path of this projectile. (1)

(iii) At what approximate angle of projection should an object be thrown to achieve maximum horizontal distance under ideal physics conditions? (1)

(iv) State Newton's law that is primarily applied when the athlete exerts force on the ground to launch the javelin. (1)

Q32. Case Study 2 (Postural Deformities & Corrective Measures):

Observe the image below illustrating a common postural deformity in the spine.



(i) Identify the postural deformity shown in the image. (1)

(ii) This condition is commonly referred to in common language as _____. (1)

(iii) Mention any one major cause of this deformity. (1)

(iv) Suggest one yoga asana or corrective exercise to cure this deformity. (1)

Q.33. Case Study 3 (Motor Fitness Testing Battery):

A physical education teacher conducted fitness tests as per Khelo India guidelines.

Observe the student performing the test below:



- (i) Identify the physical fitness test shown in the image. (1)
- (ii) This test is primarily used to measure which component of physical fitness? (1)
- (iii) How is the score recorded in this specific test? (1)
- (iv) For which age group is this specific balance test officially included in the Khelo India battery? (1)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. Draw a Knock-out fixture for 17 teams with all necessary calculations (Total matches, Byes in upper and lower halves, Rounds, and Quarters distribution).

Q.35. What is a Balanced Diet? Explain the importance of macro and micro nutrients in maintaining optimal health and sports performance.

Q.36. Define Flexibility. Explain the different methods used for developing flexibility (Ballistic, Static Stretching, PNF, etc.).

Q.37. Explain the physiological factors determining 'Cardiorespiratory Endurance' and 'Speed' in athletes.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

1. (b) Ardha Matsyendrasana
2. (b) Knock Knees
3. (b) Flexion
4. (b) League (Round Robin) Tournament
5. (b) $N(N - 1) / 2$
6. (c) Vitamin C
7. (b) Explosive Strength
8. (c) Conscientiousness
9. (a) A-2, B-4, C-3, D-1
10. (a) A-3, B-4, C-2, D-1
11. (a) A-4, B-1, C-2, D-3
12. (a) A-2, B-4, C-1, D-3
13. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
14. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
15. (c) (A) is true, but (R) is false (Medals and prizes are extrinsic motivation).
16. (d) (A) is false, but (R) is true (Concentric contraction involves muscle SHORTENING, not lengthening).
17. (b) 1960
18. (a) Lower body strength

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Biomechanics in Sports):

(i) Projectile trajectory (or Parabola).

(ii) Angle of projection, initial velocity, gravity, air resistance, and height of release. (Any two).

(iii) 45 degrees.

(iv) Newton's Third Law of Motion.

Answer 32 (Postural Deformities & Corrective Measures):

(i) Kyphosis.

(ii) Hunchback (or round upper back).

(iii) Malnutrition, carrying heavy school bags, weak muscles, or poor sitting posture. (Any one).

(iv) Chakrasana, Dhanurasana, or Bhujangasana.

Answer 33 (Motor Fitness Testing Battery):

(i) Flamingo Balance Test.

(ii) Static Balance.

(iii) Total number of trials/losses of balance recorded during a 1-minute period.

(iv) 5 to 8 years age group.

PHYSICAL EDUCATION (048)

Sample Question Paper - 7

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 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 is multiple choice questions. All questions are compulsory.
3. Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.
4. Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and 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.
6. Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

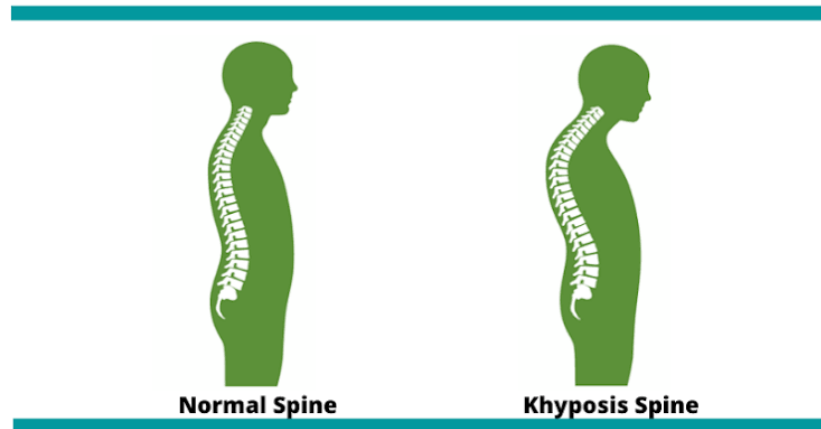
SECTION A (1 Mark Each)

Q.1. Identify the Yoga Asana shown in the image below, which is beneficial for curing Asthma:



(a) Tadasana (b) Gomukhasana (c) Pawanmuktasana (d) Vajrasana

Q.2. Identify the postural deformity shown in the illustration below where the upper back has an exaggerated outward curve:



(a) Scoliosis (b) Lordosis (c) Kyphosis (d) Knock Knees

Q.3. Which motor fitness test is being performed in the image below?



(a) 50m Dash (b) Standing Broad Jump (c) 600m Run/Walk (d) Shuttle Run

Q.4. The process of dividing the total training period into specific phases or cycles is called: (a) Motivation (b) Periodization (c) Overload (d) Recovery

Q.5. Which of the following is NOT a fat-soluble vitamin? (a) Vitamin A (b) Vitamin D (c) Vitamin C (d) Vitamin K

Q.6. The formula to determine the number of matches in a single league tournament is: (a) $N - 1$ (b) $N(N - 1) / 2$ (c) $N(N + 1) / 2$ (d) $N / 2$

Q.7. The ability to overcome resistance with maximum speed is known as: (a) Maximum Strength (b) Explosive Strength (c) Strength Endurance (d) Static Strength

Q.8. Which law of motion is also known as the Law of Inertia? (a) Newton's First Law (b) Newton's Second Law (c) Newton's Third Law (d) Law of Gravitation

Q.9. Assertion (A): Intrinsic motivation comes from within the individual. Reason (R): Winning a trophy is an example of intrinsic motivation. (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.

Q.10. Who introduced the concept of multiple intelligences, often related to sports psychology? (a) Howard Gardner (b) Sigmund Freud (c) Carl Jung (d) B.F. Skinner

Q.11. Menarche is related to: (a) End of menstrual cycle (b) Beginning of menstrual cycle (c) Pregnancy period (d) Menopause

Q.12. The primary goal of biomechanics in sports is to: (a) Improve equipment quality (b) Improve performance and reduce injury risk (c) Increase player's diet efficiency (d) Reduce psychological stress

Q.13. Fartlek training is primarily used to develop: (a) Flexibility (b) Speed (c) Endurance (d) Strength

Q.14. Which of the following minerals is essential for the formation of hemoglobin? (a) Calcium (b) Iron (c) Phosphorus (d) Sodium

Q.15. Match List - I (Sports Injuries) with List - II (Classification): List - I A. Sprain B. Strain C. Fracture D. Contusion

List - II

1. Bone Injury
2. Joint Injury

3. Muscle Injury

4. Skin/Tissue Injury

(a) A-2, B-3, C-1, D-4 (b) A-3, B-2, C-1, D-4 (c) A-1, B-2, C-3, D-4 (d) A-2, B-1, C-4, D-3

Q.16. Paralympics are organized for: (a) Normal athletes (b) Athletes with physical disabilities (c) Only for deaf athletes (d) Mentally challenged athletes

Q.17. The volume of blood pumped out by the heart in one minute is called: (a) Stroke Volume (b) Heart Rate (c) Cardiac Output (d) Tidal Volume

Q.18. What does 'O' stand for in the ODD (Oppositional Defiant Disorder)? (a) Obsessive (b) Oppositional (c) Optional (d) Optical

SECTION B (2 Marks Each - Attempt Any 5)

Q.19. Briefly explain any two responsibilities of the organizing committee during a sports event.

Q.20. List any four micronutrients essential for an athlete.

Q.21. Mention any two causes of Knock Knees (Genu Valgum).

Q.22. What is the purpose of the Push-up test for boys in the SAI Khelo India battery?

Q.23. Differentiate between internal and external motivation with one example each.

Q.24. What do you mean by Laceration? How can it be managed initially?

SECTION C (3 Marks Each - Attempt Any 5)

Q.25. Draw a fixture of 11 teams on the basis of a knock-out tournament.

Q.26. Explain the procedure and any two benefits of Bhujangasana.

Q.27. Discuss the role of physical activities in managing Autism Spectrum Disorder (ASD).

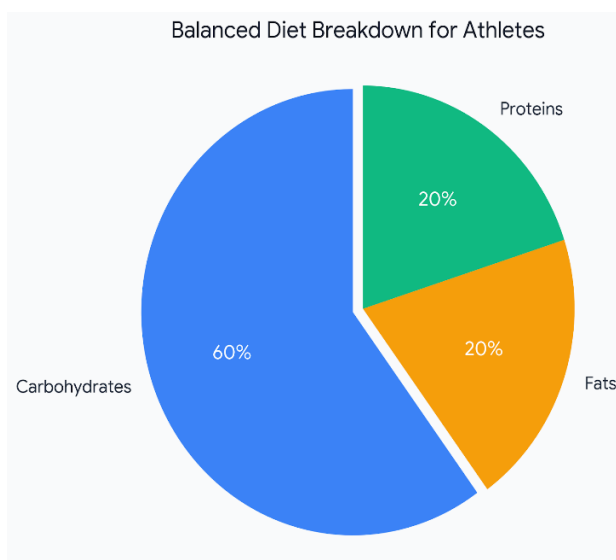
Q.28. How does regular exercise affect the respiratory system? Explain any three effects.

Q.29. Explain Newton's Second Law of Motion (Law of Acceleration) and its application in sports.

Q.30. Describe the Continuous Training method to develop endurance. Write its one advantage.

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1: Sports & Nutrition



A school organized a seminar on 'Diet and Performance'. The dietician explained that athletes need a specific ratio of macronutrients based on their sport. An endurance athlete requires a high percentage of a specific macronutrient for sustained energy.

(a) Which macronutrient should be in the highest quantity for an endurance athlete? (1)

(b) What is the main function of proteins in a sports diet? (1)

(c) Give one example of a complex carbohydrate. (2)

(OR)

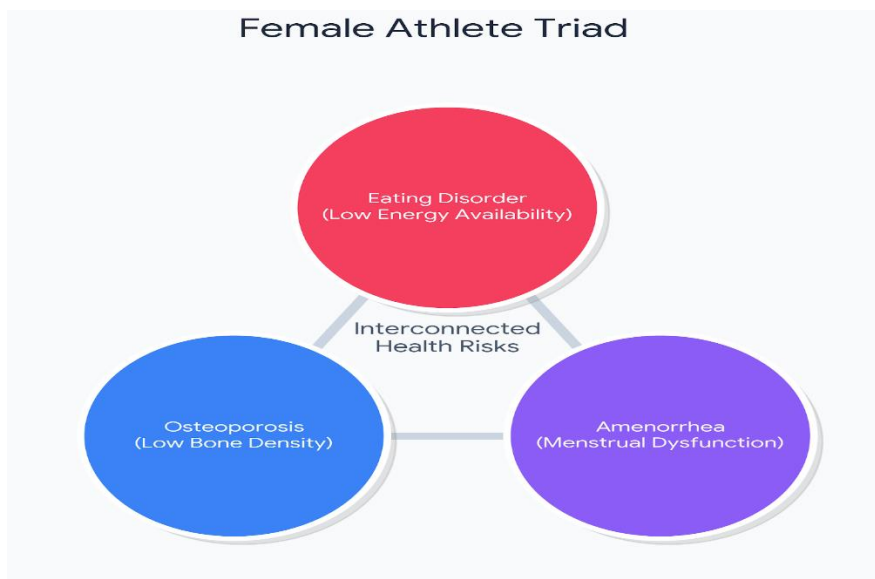
(c) Define the term 'Balanced Diet'. (2)

Q.32. Case Study 2 (Women in Sports): Ria, a 16-year-old gymnast, is heavily pressured to maintain a very low body weight. Recently, she has been missing her menstrual cycles and suffered a stress fracture during a routine landing. Observe the infographic related to her suspected condition.

[यहाँ इमेज डालें: फीमेल एथलीट ट्रायड (Female Athlete Triad) को दर्शाने वाला इन्फोग्राफिक - ऑस्टियोपोरोसिस, एमेनोरिया, ईटिंग डिसऑर्डर]

(i) Identify the syndrome Ria is likely suffering from. (1) (ii) What is the term used for the absence of menstrual periods? (1) (iii) How does an eating disorder contribute to weak bones (Osteoporosis)? (2) (OR) (iii) Suggest one preventive measure for this triad. (2)

Q.33. Case Study 3 (Biomechanics in Sports): During an athletics meet, the physical education teacher explained the concept of projectile motion using the javelin throw event. Observe the trajectory diagram below.



- (i) What is the scientific term for the parabolic path followed by the javelin in the air? (1)
- (ii) (ii) What is the ideal angle of release to achieve maximum distance in a javelin throw (assuming release height is ground level)? (1)
- (iii) (iii) Name any two biomechanical factors that directly affect a projectile's trajectory. (2)
(OR)
- (iv) (iii) Define the term 'Projectile' in the context of sports biomechanics. (2)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. Discuss in detail the various types of physical disabilities. How can physical education be made more accessible for Children with Special Needs (CWSN)?

Q.35. Define Flexibility. Explain any two methods to improve flexibility in detail.

Q.36. What are physiological factors determining speed and strength? Explain in detail.

Q.37. Define Personality. Explain the Big Five Theory (OCEAN) of personality and its relevance in sports.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

1. (b) Gomukhasana
2. (c) Kyphosis
3. (b) Standing Broad Jump
4. (b) Periodization
5. (c) Vitamin C
6. (b) $N(N - 1) / 2$
7. (b) Explosive Strength
8. (a) Newton's First Law
9. (c) (A) is true, but (R) is false (Winning a trophy is extrinsic motivation).
- 10.(a) Howard Gardner
- 11.(b) Beginning of menstrual cycle
- 12.(b) Improve performance and reduce injury risk
- 13.(c) Endurance
- 14.(b) Iron
- 15.(a) A-2, B-3, C-1, D-4

16.(b) Athletes with physical disabilities

17.(c) Cardiac Output

18.(b) Oppositional

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Sports & Nutrition):

- (i) Carbohydrates.
- (ii) Muscle repair and growth.
- (iii) Oats, sweet potatoes, whole wheat bread, etc.

(OR)

(iii) A diet that contains all essential nutrients (carbohydrates, fats, proteins, vitamins, minerals, and water) in the correct proportion.

Answer 32 (Women in Sports):

- (i) Female Athlete Triad.
- (ii) Amenorrhea.
- (iii) Eating disorders lead to inadequate intake of essential nutrients like calcium and Vitamin D, which lowers bone density and causes Osteoporosis.

(OR)

(iii) Educating athletes and coaches about proper nutrition and maintaining a healthy body weight.

Answer 33 (Biomechanics in Sports):

- (i) Trajectory or Parabola.
- (ii) 45 Degrees.
- (iii) Angle of release, velocity of release, height of release, gravity, and air resistance. (Any two).

(OR)

- (iv) An object thrown into space or air, which moves under the influence of gravity and air resistance, is called a projectile.

PHYSICAL EDUCATION (048)

Sample Question Paper - 8

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 70

GENERAL INSTRUCTIONS:

The question paper consists of 5 sections and 37 Questions.

Section A consists of questions 1-18 carrying 1 mark each and is multiple choice questions. All questions are compulsory.

Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.

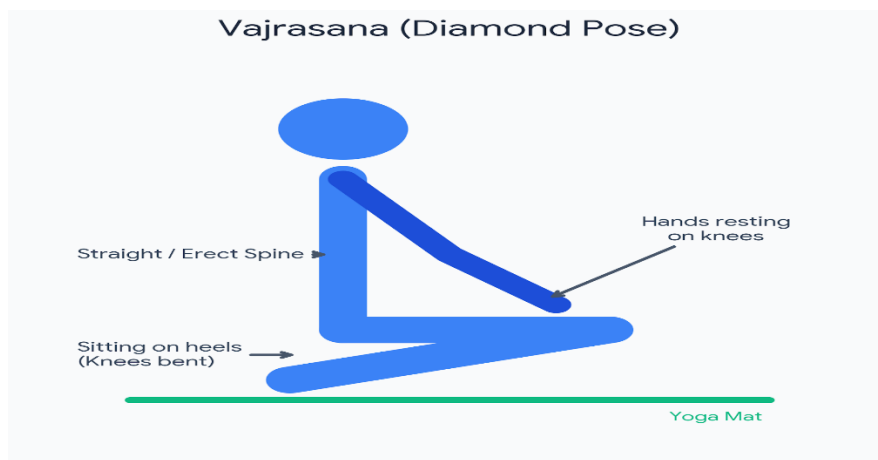
Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and should not exceed 100-150 words. Attempt any 5.

Section D consists of Questions 31-33 carrying 4 marks each and are case studies.

Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

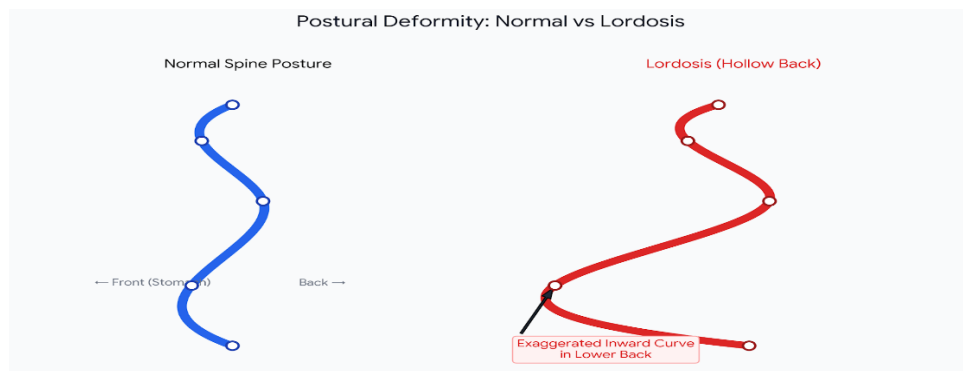
SECTION A (1 Mark Each)

Q.1. Identify the Yoga Asana shown in the image below, which is highly beneficial for controlling Obesity and is performed in a sitting position:



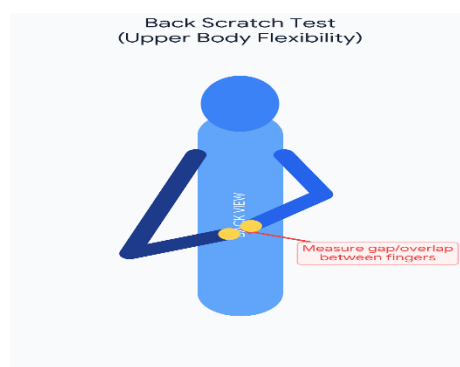
- (a) Tadasana
- (b) Vajrasana
- (c) Pawanmuktasana
- (d) Chakra Asana

Q.2. Observe the postural deformity illustrated below. In this condition, the inward curvature of the spine is exaggerated in the lower back. Identify the deformity:



- (a) Kyphosis
- (b) Lordosis
- (c) Scoliosis
- (d) Flat Foot

Q.3. Which fitness test for senior citizens is being performed in the image below to assess upper body flexibility?



- (a) Chair Stand Test
- (b) Arm Curl Test
- (c) Back Scratch Test
- (d) Eight Foot Up and Go Test

Q.4. In a knock-out tournament, if the total number of teams is 13, how many byes will be given in the first round?

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Q.5. Which of the following is a Micro Nutrient?

- (a) Carbohydrates
- (b) Fats
- (c) Proteins
- (d) Minerals

Q.6. What is the full form of ADHD, a common behavioral disorder?

- (a) Attention Deficit Hyperactivity Disorder
- (b) Attention Deficit Hyper Disorder
- (c) Active Deficit Hyperactivity Disorder
- (d) Attention Defect Hyperactivity Disease

Q.7. The amount of air inspired or expired in a normal breath is known as:

- (a) Vital Capacity
- (b) Tidal Volume
- (c) Residual Volume
- (d) Total Lung Capacity

Q.8. Newton's Second Law of Motion is also known as:

- (a) Law of Inertia
- (b) Law of Action and Reaction
- (c) Law of Acceleration
- (d) Law of Gravitation

Q.9. Match List - I (Vitamins) with List - II (Deficiency Diseases):

List - I

- A. Vitamin A
- B. Vitamin B1
- C. Vitamin C
- D. Vitamin D

List - II

Scurvy

Rickets

Night Blindness

Beri-Beri

- (a) A-3, B-4, C-1, D-2
- (b) A-1, B-2, C-3, D-4
- (c) A-4, B-3, C-2, D-1
- (d) A-3, B-1, C-4, D-2

Q.10. Match List - I (Types of Training) with List - II (Developed Fitness Component):

List - I

- A. Fartlek Training
- B. Isometric Exercises

C. Ballistic Method

D. 50m Dash

List - II

Speed

Endurance

Static Strength

Flexibility

(a) A-2, B-3, C-4, D-1

(b) A-1, B-2, C-3, D-4

(c) A-4, B-3, C-1, D-2

(d) A-2, B-1, C-4, D-3

Q.11. A fracture in which the bone bends and cracks, instead of breaking completely into separate pieces (mostly seen in children), is called:

(a) Comminuted Fracture

(b) Transverse Fracture

(c) Greenstick Fracture

(d) Impacted Fracture

Q.12. The duration of a 'Macro Cycle' in sports training is typically:

(a) 3 to 10 days

(b) 3 to 6 weeks

(c) 3 to 12 months

(d) 1 to 2 days

Q.13. Assertion (A): Consuming a diet rich in calcium and Vitamin D is essential for young female athletes.

Reason (R): It helps in preventing osteoporosis and maintaining bone density.

- (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.

Q.14. Assertion (A): Isotonic exercises involve movements where the length of the muscle changes.

Reason (R): Pushing against a solid, immovable wall is a prime example of an isotonic exercise.

- (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.

Q.15. The Paralympic Games motto is:

- (a) Citius, Altius, Fortius
- (b) Spirit in Motion
- (c) Let me win
- (d) Inspire a Generation

Q.16. Aggression in sports which is purely intended to cause physical harm to the opponent without any strategic goal is called:

- (a) Instrumental Aggression
- (b) Assertive Behavior
- (c) Hostile Aggression
- (d) Competitive Aggression

Q.17. Which of the following is NOT a component of the Khelo India Fitness Test for age group 9-18 years?

- (a) 50m Speed Test

- (b) 600m Run/Walk
- (c) Flamingo Balance Test
- (d) Sit and Reach Test

Q.18. In biomechanics, Abduction means:

- (a) Moving a body part away from the midline of the body
- (b) Moving a body part towards the midline of the body
- (c) Bending a joint
- (d) Straightening a joint

SECTION B (2 Marks Each - Attempt Any 5)

Q.19. Differentiate between Intramural and Extramural tournaments.

Q.20. What is the formula to calculate Body Mass Index (BMI)? State the BMI range for a normal, healthy weight.

Q.21. Explain any two causes of the postural deformity 'Scoliosis'.

Q.22. What is the purpose of the 'Chair Stand Test' in the Rikli and Jones Senior Citizen Fitness Test?

Q.23. Mention any two differences between Extraversion and Introversion as per personality traits.

Q.24. Write down the first-aid management for a soft tissue injury using the PRICE protocol.

SECTION C (3 Marks Each - Attempt Any 5)

Q.25. Briefly explain the procedure of drawing a knock-out fixture for 11 teams. (Only calculations required, no need to draw the full fixture).

Q.26. Explain the procedure and two main benefits of 'Tadasana'.

Q.27. What are the three main components of the 'Female Athlete Triad'? Briefly explain any one.

Q.28. Discuss any three positive effects of regular exercise on the muscular system.

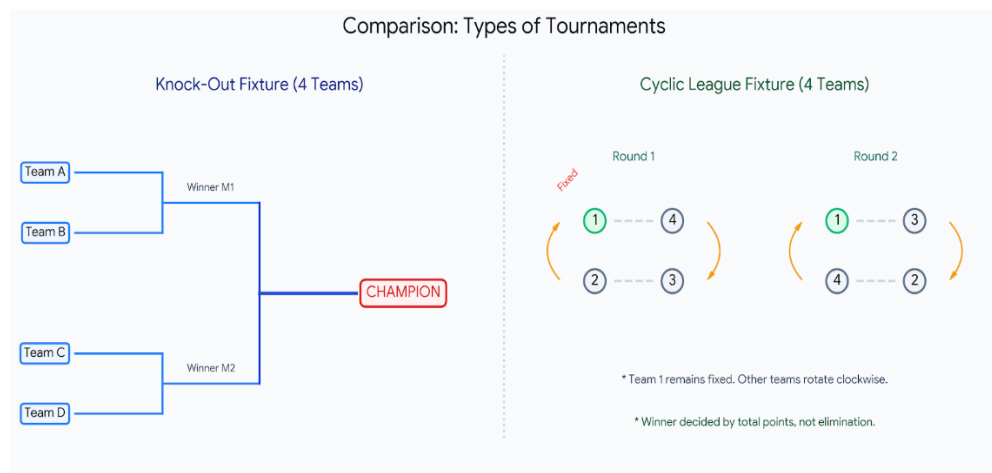
Q.29. State Newton's First Law of Motion and give one practical example from sports.

Q.30. What is 'Fartlek Training'? Write its two main advantages for an endurance athlete.

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1 (Management of Sporting Events):

A physical education teacher is explaining the types of tournaments to students. He draws the following diagrams on the board.



(i) In which type of tournament is a team eliminated after a single defeat? (1)

(ii) What is the main advantage of a League tournament over a Knock-out tournament? (1)

(iii) If 7 teams participate in a Single League tournament, how many total matches will be played? (1)

(iv) What is a 'Bye' in tournament fixtures? (1)

Q.32. Case Study 2 (Children and Women in Sports):

Sita, a school girl, always stands with her shoulders drooping forward and chest flattened. Her teacher notices this and suggests some corrective exercises.



(i) Identify the postural deformity Sita is suffering from. (1)

(ii) Name one major cause of this deformity. (1)

(iii) Suggest any two corrective exercises or yoga asanas to rectify this deformity. (2)

(OR)

(iii) How does wearing tight-fitting clothes contribute to postural deformities in children? (2)

Q.33. Case Study 3 (Physiology and Sports Injuries):

During a football match, a player falls awkwardly and suffers a severe bone injury where the broken ends of the bone pierce through the skin.



- (i) Identify the exact type of fracture shown in the scenario and image. (1)
- (ii) Why is this specific type of fracture considered highly dangerous compared to a simple fracture? (1)
- (iii) State any two general first-aid steps that should be taken immediately before medical help arrives. (2)

(OR)

- (iii) Differentiate between a Sprain and a Strain. (2)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. Explain the various committees formed for the smooth conduct of a sports event and describe the responsibilities of any three committees in detail.

Q.35. Yoga helps in the prevention and management of Diabetes. Name any three asanas used for curing diabetes and explain the procedure and contraindications of any one of them in detail.

Q.36. Define Motivation. Explain the types of motivation (Intrinsic and Extrinsic) and describe any three techniques of motivation used in sports.

Q.37. What do you mean by Strength? Explain the difference between Isometric, Isotonic, and Isokinetic exercises with suitable examples from sports.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

(b) Vajrasana

(b) Lordosis

(c) Back Scratch Test

(c) 3 Bytes (Next power of two is 16; $16 - 13 = 3$)

(d) Minerals

(a) Attention Deficit Hyperactivity Disorder

(b) Tidal Volume

(c) Law of Acceleration

(a) A-3, B-4, C-1, D-2

(a) A-2, B-3, C-4, D-1

(c) Greenstick Fracture

(c) 3 to 12 months

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).

(c) (A) is true, but (R) is false (Pushing a wall is an Isometric exercise, not Isotonic).

(b) Spirit in Motion

(c) Hostile Aggression

(c) Flamingo Balance Test (It is for 5-8 years).

(a) Moving a body part away from the midline of the body

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Management of Sporting Events):

(i) Knock-out Tournament.

(ii) Every team gets a fair opportunity to play against all other teams, showing the true winner.

(iii) 21 Matches [Using formula $N(N-1)/2 \rightarrow 7(6)/2 = 21$].

(iv) A privilege given to a team in the initial rounds, allowing them to advance to the next round without playing a match.

Answer 32 (Children and Women in Sports):

(i) Round Shoulders.

(ii) Carrying heavy school bags, weak chest muscles, or poor sitting posture.

(iii) Chakrasana, Dhanurasana, or holding a horizontal bar.

(OR)

(iii) Tight clothes restrict natural movement and breathing, forcing the body into unnatural positions leading to poor posture.

Answer 33 (Physiology and Sports Injuries):

(i) Compound Fracture (or Open Fracture).

(ii) Because the bone breaks through the skin, increasing the risk of severe infection and heavy bleeding.

(iii) Do not try to realign the bone, control bleeding with sterile cloth, and immobilize the injured area. (Any two).

(OR)

(iii) Sprain is a ligament injury (connecting bone to bone) often occurring in joints like ankles. Strain is a muscle or tendon injury (connecting muscle to bone).

PHYSICAL EDUCATION (048)

Sample Question Paper - 9

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 70

GENERAL INSTRUCTIONS:

The question paper consists of 5 sections and 37 Questions.

Section A consists of questions 1-18 carrying 1 mark each and is multiple choice questions. All questions are compulsory.

Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.

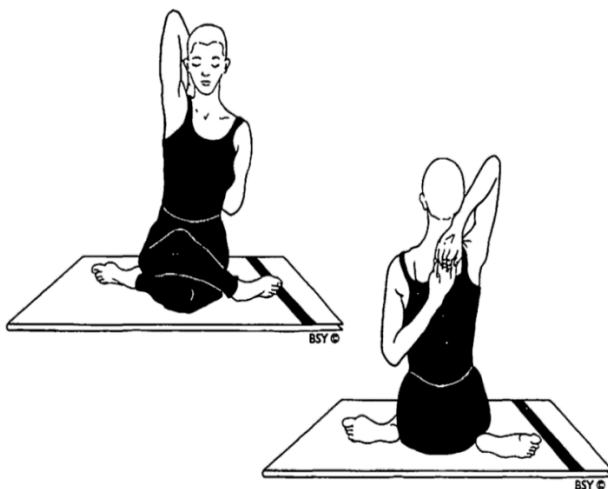
Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and should not exceed 100-150 words. Attempt any 5.

Section D consists of Questions 31-33 carrying 4 marks each and are case studies.

Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

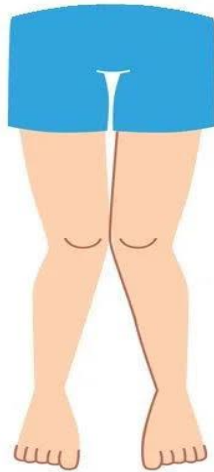
SECTION A (1 Mark Each)

Q.1. Identify the Yoga Asana shown in the image below, which is highly beneficial for curing Asthma and resembles the face of a cow:



- (a) Bhujangasana
- (b) Gomukhasana
- (c) Matsyasana
- (d) Tadasana

Q.2. Observe the postural deformity illustrated below where the knees touch or overlap each other in a normal standing position. Identify the deformity:



- (a) Bow Legs
- (b) Flat Foot
- (c) Knock Knees
- (d) Lordosis

Q.3. Which fitness test is being performed in the image below to assess static balance on a single leg?



- (a) Standing Broad Jump
- (b) 50m Dash
- (c) Flamingo Balance Test
- (d) 600m Run/Walk

Q.4. If there are 17 teams participating in a knock-out tournament, how many matches will be played in total?

- (a) 15
- (b) 16
- (c) 17
- (d) 18

Q.5. Which of the following is a water-soluble vitamin?

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

Q.6. The Special Olympics Bharat (SOB) was founded in the year:

- (a) 1987
- (b) 2001
- (c) 1995
- (d) 1978

Q.7. What is the normal resting heart rate of a healthy adult?

- (a) 50-60 beats per minute
- (b) 72-80 beats per minute
- (c) 90-100 beats per minute
- (d) 110-120 beats per minute

Q.8. The friction acting on an object when it is sliding over a surface is called:

- (a) Static Friction
- (b) Rolling Friction
- (c) Sliding Friction
- (d) Fluid Friction

Q.9. Match List - I (Biomechanics Concepts) with List - II (Examples):

List - I

- A. Class 1 Lever
- B. Class 2 Lever
- C. Class 3 Lever
- D. Projectile

List - II

Bicep Curl

Javelin Throw

Nodding the head

Push-ups

- (a) A-3, B-4, C-1, D-2
- (b) A-1, B-2, C-3, D-4
- (c) A-4, B-3, C-2, D-1
- (d) A-3, B-1, C-4, D-2

Q.10. Match List - I (Sports Injuries) with List - II (Types):

List - I

- A. Strain
- B. Sprain

C. Contusion

D. Fracture

List - II

Bone Injury

Muscle Injury

Ligament Injury

Skin/Soft Tissue Injury

(a) A-2, B-3, C-4, D-1

(b) A-1, B-2, C-3, D-4

(c) A-4, B-3, C-1, D-2

(d) A-3, B-4, C-2, D-1

Q.11. The 'Big Five Theory' of personality is also known as:

(a) Jung's Classification

(b) OCEAN Model

(c) Sheldon's Classification

(d) Type A & B Theory

Q.12. The ability of the body to work continuously for a long time without fatigue is called:

(a) Speed

(b) Strength

(c) Endurance

(d) Flexibility

Q.13. Assertion (A): Proteins are known as the building blocks of the body.

Reason (R): Proteins provide the maximum amount of direct energy for explosive sports.

- (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.

Q.14. Assertion (A): Extrinsic motivation is very effective for young children learning a new sport.

Reason (R): Awards, trophies, and praise provide immediate positive reinforcement.

- (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.

Q.15. Which committee is responsible for preparing the grounds and courts before a sports event?

- (a) Reception Committee
- (b) Ground and Equipment Committee
- (c) Finance Committee
- (d) Boarding and Lodging Committee

Q.16. Menarche is related to:

- (a) Bone density
- (b) Beginning of the menstrual cycle in females
- (c) Eating disorder
- (d) Muscle mass reduction

Q.17. The 'Sit and Reach Test' is used to measure:

- (a) Cardiovascular endurance

- (b) Upper body strength
- (c) Flexibility of the lower back and hamstrings
- (d) Agility

Q.18. In sports training, 'Meso Cycle' usually lasts for:

- (a) 3 to 10 days
- (b) 3 to 6 weeks
- (c) 3 to 12 months
- (d) 1 to 2 years

SECTION B (2 Marks Each - Attempt Any 5)

Q.19. Write the difference between Macronutrients and Micronutrients.

Q.20. Mention any two physiological factors determining the speed of an athlete.

Q.21. What do you understand by the term 'Aggression' in sports? Name its two types.

Q.22. Define 'Friction' and state its one advantage in the field of sports.

Q.23. List any two causes and two corrective measures for 'Bow Legs' (Genu Varum).

Q.24. Differentiate between Continuous Training Method and Interval Training Method.

SECTION C (3 Marks Each - Attempt Any 5)

Q.25. Enlist any three advantages of a League Tournament.

Q.26. Briefly explain the roles of any three professionals for students with special needs (CWSN).

Q.27. Discuss any three effects of regular exercise on the Respiratory System.

Q.28. What is BMI? Calculate the BMI of an individual whose body weight is 70 kg and height is 1.70 meters. Also, specify their weight category.

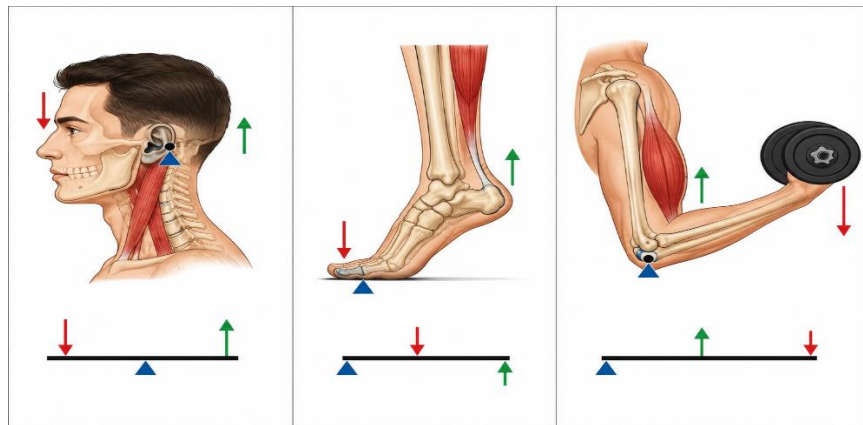
Q.29. Explain the first-aid management of a Sprain using the PRICE procedure.

Q.30. Define 'Flexibility'. Explain the Active and Passive types of flexibility.

SECTION D (4 Marks Each - Case Studies / Visual Questions)

Q.31. Case Study 1 (Biomechanics in Sports):

A physical education teacher is demonstrating the application of Levers in the human body using the images below.



(i) Which class of lever operates when an athlete performs a 'Bicep Curl'? (1)

(ii) In a Class 2 lever, what is situated between the Fulcrum and the Force (Effort)? (1)

(iii) Identify the class of lever involved when a person stands on their toes. (1)

(iv) What is the function of the Fulcrum in a lever system? (1)

Q.32. Case Study 2 (Yoga and Lifestyle):

Ramesh, a 45-year-old man, is suffering from severe back pain (Sciatica). His doctor recommended him to practice specific yoga asanas to improve his spine health.



(i) Identify the Asana shown in the given image. (1)

(ii) Name any one lifestyle disease this Asana helps to prevent. (1)

(iii) Write any two benefits of performing this Asana. (2)

(OR)

(iii) Mention any two contraindications (who should not perform it) of this Asana. (2)

Q.33. Case Study 3 (Physical Education & Sports for CWSN):

During the annual sports day, a special basketball match was organized for differently-abled athletes to promote inclusion.



(i) Which major international sporting event is organized exclusively for athletes with physical disabilities? (1)

(ii) What is the main motto of the Paralympic Games? (1)

(iii) Write any two ways in which physical activities are beneficial for children with special needs. (2)

(OR)

(iii) Mention any two strategies to make physical activities accessible for children with special needs. (2)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. Draw a knock-out fixture of 19 teams mentioning all the necessary steps and calculations (Number of matches, number of rounds, and byes in each quarter).

Q.35. State Newton's Three Laws of Motion. Explain the application of each law in different sports with suitable examples.

Q.36. What are Vitamins? Classify them into fat-soluble and water-soluble vitamins, and briefly explain the importance of Vitamin A, Vitamin D, and Vitamin C.

Q.37. Define Personality. Explain the 'Big Five Personality Theory' (OCEAN) in detail.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

Q1.(b) Gomukhasana

Q2.(c) Knock Knees

Q3.(c) Flamingo Balance Test

Q4.(b) 16 Matches (Formula: $N - 1 = 17 - 1 = 16$)

Q5.(c) Vitamin C

Q6.(b) 2001

Q7.(b) 72-80 beats per minute

Q8.(c) Sliding Friction

Q9.(a) A-3, B-4, C-1, D-2

Q10.(a) A-2, B-3, C-4, D-1

Q11.(b) OCEAN Model

Q12.(c) Endurance

Q13.(c) (A) is true, but (R) is false (Carbohydrates provide direct energy, not proteins).

Q14.(a) Both (A) and (R) are true and (R) is the correct explanation of (A).

A15.(b) Ground and Equipment Committee

Q16.(b) Beginning of the menstrual cycle in females

Q17.(c) Flexibility of the lower back and hamstrings

Q18.(b) 3 to 6 weeks

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Biomechanics in Sports):

(i) Class 3 Lever.

(ii) Resistance / Load.

(iii) Class 2 Lever.

(iv) It is the fixed point around which the lever rotates.

Answer 32 (Yoga and Lifestyle):

(i) Bhujangasana (Cobra Pose).

(ii) Obesity / Asthma / Back Pain.

(iii) It strengthens the spine, improves blood circulation, and cures backache.

(OR)

(iii) People suffering from severe hernia, peptic ulcers, or pregnant women should avoid it.

Answer 33 (Physical Education & Sports for CWSN):

(i) Paralympic Games.

(ii) Spirit in Motion.

(iii) It improves motor skills, enhances self-esteem, and promotes social interaction.

(OR)

(iii) Modifying equipment (using lighter balls), altering rules, and providing a barrier-free environment.

PHYSICAL EDUCATION (048)

Sample Question Paper - 10

Class XII (2025-26)

TIME ALLOWED: 3 HRS

MAX MARKS: 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 is multiple choice questions. All questions are compulsory.
3. Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.
4. Section C consists of Questions 25-30 carrying 3 marks each and are short answer types and 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.
6. Section E consists of Questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3.

SECTION A (1 Mark Each)

Q.1. Identify the Yoga Asana shown in the image below, which is known as the Camel Pose and is beneficial for improving spinal flexibility:



(a) Bhujangasana (b) Ustrasana (c) Tadasana (d) Pawanmuktasana

Q.2. Observe the postural deformity illustrated below where the vertebral column bends to one side (lateral curvature). Identify the deformity:



(a) Kyphosis (b) Lordosis (c) Scoliosis (d) Flat Foot

Q.3. Which fitness test for senior citizens is performed to measure lower body strength and endurance?



(a) Chair Stand Test (b) Arm Curl Test (c) 6-Minute Walk Test (d) Sit and Reach Test

Q.4. In a knockout tournament, if 11 teams are participating, how many rounds will be played? (a) 3 (b) 4 (c) 5 (d) 6

Q.5. Which of the following minerals is vital for the formation of hemoglobin in red blood cells? (a) Calcium (b) Iron (c) Phosphorus (d) Iodine

Q.6. Paralympics Games are officially organized for: (a) Intellectual disabled athletes (b) Physically challenged athletes (c) Hearing impaired athletes only (d) Senior citizens

Q.7. The volume of blood pumped out by each ventricle in one heart beat is called: (a) Cardiac Output (b) Stroke Volume (c) Tidal Volume (d) Vital Capacity

Q.8. According to Newton's Third Law of Motion: (a) Force equals mass times acceleration (b) To every action, there is an equal and opposite reaction (c) A body continues in its state of rest unless acted upon by an external force (d) Acceleration depends on gravitational pull

Q.9. Match List - I (Sport Injuries) with List - II (Descriptions): List - I A. Abrasion B. Incision C. Laceration D. Contusion

List - II

1. A clean cut caused by a sharp object
2. A scrape or graze on the skin surface
3. Direct hit causing bleeding under the skin (bruise)
4. A jagged, irregular wound caused by rough force

(a) A-2, B-1, C-4, D-3 (b) A-1, B-2, C-3, D-4 (c) A-4, B-3, C-2, D-1 (d) A-3, B-4, C-1, D-2

Q.10. Match List - I (Personality Dimensions - Big Five) with List - II (Characteristics): List - I A. Openness B. Conscientiousness C. Extraversion D. Agreeableness

List - II

1. Outgoing, energetic, and talkative
2. Compassionate, cooperative, and trusted
3. Inventive, curious, and appreciative of art
4. Efficient, organized, and dependable

(a) A-3, B-4, C-1, D-2 (b) A-1, B-2, C-3, D-4 (c) A-2, B-1, C-4, D-3 (d) A-4, B-3, C-2, D-1

Q.11. A fracture in which the broken bone segments press into each other is known as: (a) Greenstick Fracture (b) Impacted Fracture (c) Transverse Fracture (d) Comminuted Fracture

Q.12. The preparatory phase of a sports training periodization cycle is also called: (a) Transition Period (b) Competition Period (c) Preparatory Period (d) Micro Cycle

Q.13. Assertion (A): Fat-soluble vitamins (A, D, E, K) are stored in the liver and fatty tissues. Reason (R): Excessive accumulation of fat-soluble vitamins does not cause any toxicity in the human body. (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.

Q.14. Assertion (A): Isometric exercises show visible movement at the joint angles. Reason (R): In isometric exercises, muscle length remains constant and no external movement takes place. (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.

Q.15. Which committee handles lodging, transport, and food arrangements for visiting teams? (a) Technical Committee (b) Reception and Accommodation Committee (c) Publicity Committee (d) First Aid Committee

Q.16. Menarche refers to: (a) Cessation of menstrual cycle (b) Irregular periods (c) Onset of menstruation in young girls (d) Severe menstrual pain

Q.17. Which of the following tests is NOT part of the Senior Citizen Fitness Test (Rikli and Jones)? (a) Back Scratch Test (b) 50m Standing Start Test (c) Chair Sit and Reach Test (d) 8-Foot Up and Go Test

Q.18. In biomechanics, extension refers to: (a) Increasing the angle between two bones (straightening a joint) (b) Decreasing the angle between two bones (bending a joint) (c) Moving a limb towards the midline (d) Rotating a limb outward

SECTION B (2 Marks Each - Attempt Any 5)

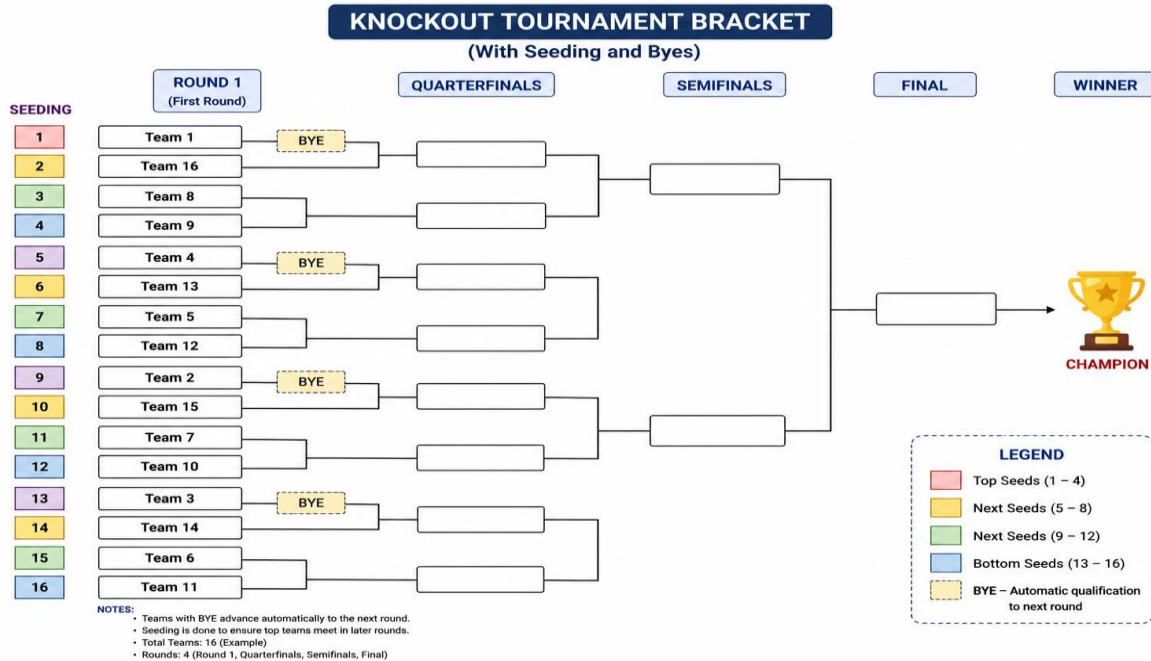
- Q.19. What do you mean by 'Bye' in tournament fixtures? Why is it given?
- Q.20. Explain any two psychological benefits of physical exercises for children.
- Q.21. State the formula for calculating Body Mass Index (BMI). What does a BMI of 28 indicate?
- Q.22. Define 'Speed' as a motor component and list its any two types.
- Q.23. Differentiate between Soft Tissue Injuries and Bone Injuries with one example of each.
- Q.24. Write down the objectives of intramural sports competitions in schools.

SECTION C (3 Marks Each - Attempt Any 5)

- Q.25. Briefly explain the procedure of drawing a League fixture using the Cyclic Method for 4 teams.
- Q.26. What is 'Asthma'? Explain any two yoga asanas helpful in its prevention.
- Q.27. Discuss the three main components of the 'Female Athlete Triad'.
- Q.28. Explain any three functions of fats in our body.
- Q.29. What is 'Fartlek Training'? How does it help in developing endurance?
- Q.30. Explain the role of a physical education teacher and counselor for Children with Special Needs (CWSN).

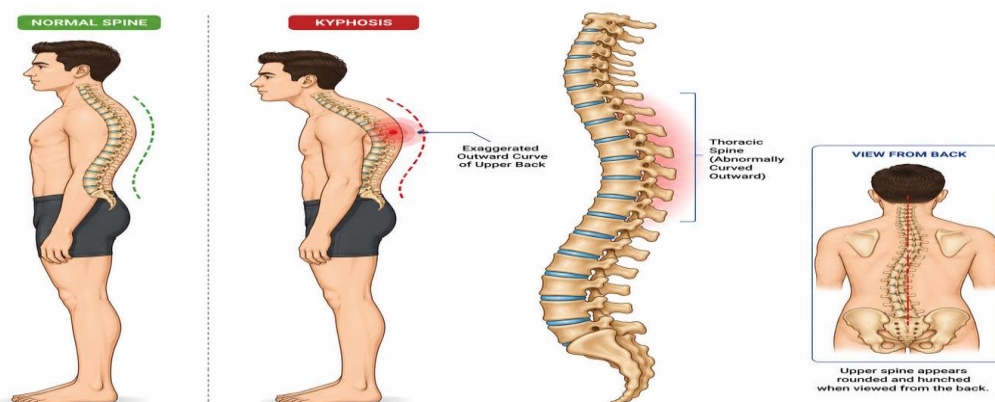
SECTION D (4 Marks Each - Case Studies / Visual Questions)

- Q.31. Case Study 1 (Tournament Fixtures & Management): A district athletic association is organizing a knockout basketball tournament. The committee decides to seed strong teams to avoid them playing each other in early rounds.



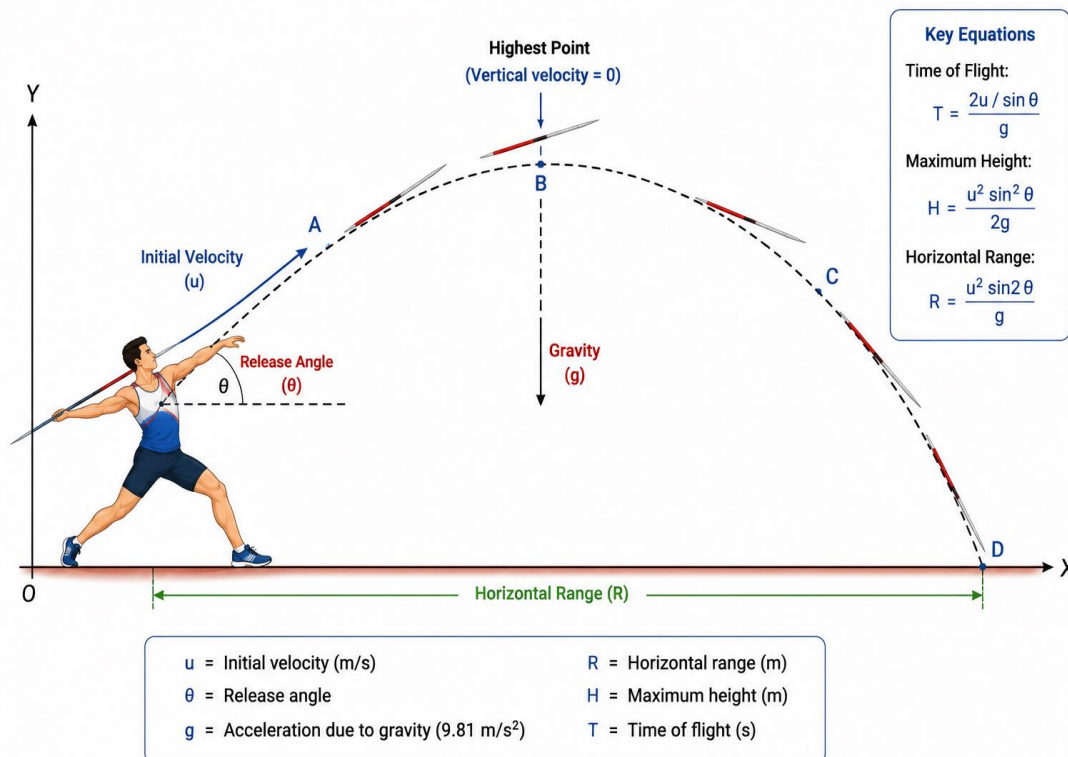
(i) What is meant by 'Seeding' in a tournament? (1) (ii) If 13 teams participate in a knockout tournament, how many total rounds will be played? (1) (iii) Calculate the number of byes if 13 teams take part. (1) (iv) State one major demerit of a Knock-out tournament. (1)

Q.32. Case Study 2 (Postural Deformities): During a routine medical check-up at school, a student was diagnosed with a spinal curvature where the upper back is abnormally rounded outward.



(i) Identify the postural deformity described above. (1) (ii) Name another common name for this deformity. (1) (iii) Mention any two major causes responsible for this condition. (2) (OR) (iii) Suggest two specific yoga asanas to correct this deformity. (2)

Q.33. Case Study 3 (Biomechanics and Sports): An athlete is performing a high jump during an athletics meet. The coach explains the physics and projectile principles behind the athlete's flight path.



- (i) Define Projectile in sports biomechanics. (1)
- (ii) What are the two primary factors that affect the flight path (trajectory) of a projectile? (1)
- (iii) Why does a projectile launched at a 45-degree angle generally achieve maximum distance? (2)
(OR)
- (iv) How does air resistance (fluid friction) affect a lightweight projectile like a shuttlecock? (2)

SECTION E (5 Marks Each - Attempt Any 3)

Q.34. Explain the various committees formed for organizing a sports tournament and describe the responsibilities of the Technical Committee, Finance Committee, and Publicity Committee in detail.

Q.35. What do you mean by Asanas? Discuss the procedure, benefits, and contraindications of 'Bhujangasana' or 'Vajrasana'.

Q.36. Define Friction. Explain the types of friction and discuss the advantages and disadvantages of friction in the field of sports and games.

Q.37. What is Strength? Explain the different types of strength and describe any three methods used for improving flexibility in sports training.

ANSWER KEY (Objective, Visual & Case Study Questions)

Answers to SECTION A (Q1 to Q18)

1. (b) Ustrasana
2. (c) Scoliosis
3. (a) Chair Stand Test
4. (b) 4 Rounds (Power of two is 16; teams = 11, rounds = $\log_2(16) = 4$)
5. (b) Iron
6. (b) Physically challenged athletes
7. (b) Stroke Volume
8. (b) To every action, there is an equal and opposite reaction
9. (a) A-2, B-1, C-4, D-3
- 10.(a) A-3, B-4, C-1, D-2
- 11.(b) Impacted Fracture
- 12.(c) Preparatory Period
- 13.(c) (A) is true, but (R) is false (Excess fat-soluble vitamins can cause toxicity / hypervitaminosis).

14.(d) (A) is false, but (R) is true (Isometric exercises do not show visible joint movement).

15.(b) Reception and Accommodation Committee

16.(c) Onset of menstruation in young girls

17.(b) 50m Standing Start Test

18.(a) Increasing the angle between two bones (straightening a joint)

Answers to SECTION D (Case Studies / Visuals)

Answer 31 (Tournament Fixtures & Management):

- (i) Seeding is placing good teams specially in fixed positions in the fixture so that they do not meet in earlier rounds.
- (ii) 4 Rounds [Since next power of 2 is 16, total rounds = 4].
- (iii) 3 Byes [16 - 13 = 3].
- (iv) Good teams can get eliminated early if they lose a single match, denying them further play.

Answer 32 (Postural Deformities):

- (i) Kyphosis.
- (ii) Hunchback or Round Upper Back. (
- (iii) Malnutrition, carrying heavy loads, weak shoulder muscles, or poor posture during studies.
(OR)
- (iv) Chakrasana and Dhanurasana.

Answer 33 (Biomechanics and Sports):

- (i) Any object thrown or projected into the air, moving under the influence of gravity and air resistance.
- (ii) Angle of projection and initial velocity.
- (iii) Because it provides an optimal balance between the vertical component (height/time) and horizontal component (distance).
(OR)
- (iv) Air resistance significantly slows down lightweight objects, reducing their horizontal range and altering their parabolic path.