

SAMPLE QUESTION PAPER 1
CLASS XII
PHYSICAL EDUCATION (048)
TERM 1





Maximum Marks: 35

Time: 90 Minutes

General Instructions:

1. There are three sections in the Question Paper namely Section A, Section B and Section C.
2. Section A consists of 24 questions out of which 20 questions have to be attempted.
3. Section B consists of 24 questions out of which 20 questions have to be attempted.
4. Section C consists of 12 questions out of which 10 questions have to be attempted.

Section A

1. Which committee looks after arranging money to hold the tournaments?
(i) Medical Committee (ii) Finance Committee (iii) Publicity Committee (iv) Awards Committee
2. Which pre-tournament committee sets up the tournaments?
(i) Organising Committee (ii) Transport Committee
(iii) Medical Committee (iv) Reception Committee
3. Ascorbic acid is which vitamin?
(i) Vitamin B₁₂ (ii) Vitamin D (iii) Vitamin C (iv) Vitamin B₆
4. Which of these is calorie-free?
(i) Fat (ii) Calcium (iii) Protein (iv) Carbohydrates
5. Which of the following are not selected by the Technical Committee?
(i) Referees (ii) Chief Guest (iii) Umpires (iv) Linesmen
6. Which of the following is a micronutrient?
(i) Water (ii) Fat (iii) Selenium (iv) Protein
7. Which of these deformities is known as Pes Planus?
(i)  (ii) 
(iii)  (iv) 
8. Each gram of fat has how many calories?
(i) 3 (ii) 4 (iii) 9 (iv) 11
9. Which years are treated as late childhood?
(i) 3-5 years (ii) 7-9 years (iii) 11-12 years (iv) 16-18 years
10. When did women first participate in the Olympics?
(i) 1886 (ii) 1908 (iii) 1900 (iv) 1948

11. How many distinct components does motor fitness have?

- (i) Three (ii) Four (iii) Five (iv) Seven

12. What does Rockport test measure?

- (i) Cardiovascular fitness (ii) Respiratory fitness (iii) Running ability (iv) Weightlifting

13. Lower body flexibility is measured by which test?

- (i) Sit & Reach Test (ii) Harvard Step Test (iii) 600-metre run (iv) Push-up

14. Name the most abundant component in human body.

- (i) Fat (ii) Muscle (iii) Water (iv) Carbohydrates

15. Which of these has no calories?

- (i) Fat (ii) Water (iii) Protein (iv) Carbohydrates

16. Which of these movements is predominantly used by a pace baller at their shoulder and is called circumduction?

(i)



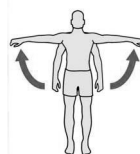
(ii)



(iii)



(iv)



17. What is Newton's second law of motion also known as?

- (i) Law of acceleration (ii) Law of inertia (iii) Law of attraction (iv) Law of friction

18. Using laws of physics and mechanics to improve sports performance is a part of what science?

- (i) Anatomy (ii) Physiology (iii) Biomechanics (iv) Quantum Physics

19. Rikli and Jones tests for fitness are meant for which group of people?

- (i) Young adults (ii) Senior citizens (iii) Adolescents (iv) Infants

20. Head-turning, a motor activity, starts at what age?

- (i) Infant (ii) Early childhood (iii) Middle childhood (iv) Late childhood

21. Body Mass Index (BMI) measures body fat based on what?

- (i) Age to weight (ii) Age to height (iii) Height and weight (iv) Gender to height

22. What percentage of fat in Indians is termed as obesity?

- (i) Less than 20 (ii) 20-23 (iii) More than 25 (iv) Less than 18

23. Which of these is not a fat-soluble vitamin?

- (i) Vitamin A (ii) Vitamin B (iii) Vitamin D (iv) Vitamin E

24. The movement at the knee to sit down on the ground is called?

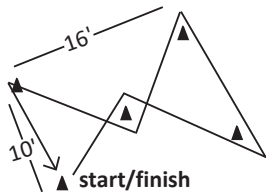
- (i) Extension (ii) Flexion (iii) Adduction (iv) Abduction

Section B

25. Sugar in our diet is classified as?

- (i) Fat (ii) Protein (iii) Mineral (iv) Carbohydrate

26. Identify the following test used for agility testing.



- (i) 60-metre Run (ii) Zig Zag Test (iii) Cone Test (iv) Harvard Run

27. Match the following diseases to the lack of nutrient which causes them.

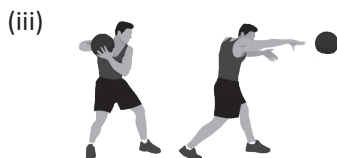
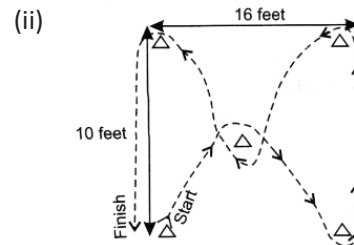
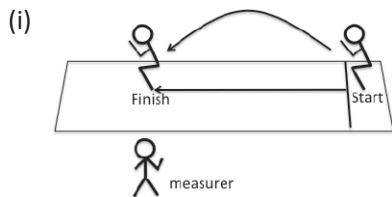
List I		List II	
A.	Vitamin C	1.	Bleeding disorders
B.	Vitamin B	2.	Scurvy
C.	Vitamin A	3.	Beri Beri
D.	Vitamin K	4.	Night Blindness

- (i) A1 + B3 + C4 + D2 (ii) A2 + B3 + C4 + D1 (iii) A4 + B3 + C2 + D1 (iv) A3 + B4 + C1 + D2

28. During exercise, what are muscles first fuelled by?

- (i) Fat (ii) Protein (iii) Carbohydrates (iv) Water

29. Which of these is not a part of the Barrow Three Test?



30. What is the weight of a medicine ball put for boys?

- (i) 1 kg (ii) 2 kg (iii) 3 kg (iv) 6 kg

31. What is the movement called when the leg comes towards the centre of the body?

- (i) Abduction (ii) Adduction (iii) Flexion (iv) Extension

32. Look at the images of various nutrients and choose the right answer.



- (i) Protein, Calcium, Fat, Carbohydrates
 (ii) Fat, Calcium, Protein, Carbohydrates
 (iii) Calcium, Carbohydrates, Protein, Fat
 (iv) Fat, Carbohydrates, Calcium, Protein

33. Flexibility of the body is tested by which of these tests?

(i)



(ii)



(iii)



(iv)



34. What is the study of the structure of human body called?

(i) Physiology

(ii) Biomechanics

(iii) Anatomy

(iv) Kinematics

35. Name the scientist who defined the laws of motion?

(i) Einstein

(ii) Pascal

(iii) Newton

(iv) Galileo

36. Protein is not considered useful in which of the following?

(i) Electrolyte balance

(ii) Muscle-building

(iii) Hormones

(iv) Hair and nails

37. **Assertion (A):** If an Indian weighs 70 kg and is 160 centimetres tall, they are absolutely healthy.

Reason (R): This is because their BMI is 20 which is in the acceptable range for Indians.

(i) A is correct but R is wrong.

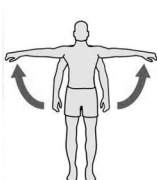
(ii) A is wrong but R is correct.

(iii) Both A and R are wrong.

(iv) Both A and R are correct.

38. Look at the various body movements and pick the right answer.

(a)



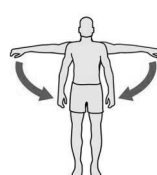
(b)



(c)



(d)



(i) Adduction, Abduction, Flexion, Extension

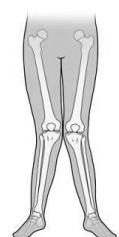
(ii) Abduction, Flexion, Extension, Adduction

(iii) Flexion, Adduction, Abduction, Extension

(iv) Adduction, Extension, Flexion, Abduction

39. Dhanurasana is useful for which of these deformities?

(i)



(ii)



(iii)



(iv)



40. Strong bones, teeth and muscle contraction are predominantly aided by?

- (i) Selenium (ii) Magnesium (iii) Calcium (iv) Vitamin C

41. Hand-eye coordination is best developed at what age?

- (i) Early Childhood (ii) Middle childhood (iii) Late childhood (iv) Adolescence

42. **Assertion (A):** Everyone, especially sportspersons, need all macronutrients and micronutrients in the correct ratio.

Reason (R): The reason for this is that adequate nutrient intake ensures proper growth, repair as well as maintenance of the body.

- (i) A is true but R is incorrect. (ii) Both A and R are correct.
(iii) A is false but R is true (iv) Both A and R are incorrect.

43. What is development of movement in large muscles of the body such as hips and arms called?

- (i) Fine motor development (ii) Gross motor development
(iii) Kinetic development (iv) Biomechanics

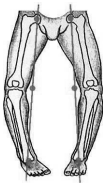
44. Match List I and List II and select the correct option.

List I		List II	
A.	sprain	1.	bone
B.	dislocation	2.	skin
C.	laceration	3.	joint
D.	fracture	4.	soft tissues

- (i) A4 + B3 + C1 + D2 (ii) A4 + B3 + C2 + D1 (iii) A3 + B1 + C2 + D4 (iv) A1 + B4 + C2 + D3

45. Match the deformities with their correct names.

A.



1. Scoliosis

B.



2. Flat foot

C.



3. Bow legs

D.



4. Rounded shoulders

- (i) A2 + B3 + C4 + D1 (ii) A3 + B2 + C4 + D1 (iii) A3 + B4 + C1 + D2 (iv) A4 + B3 + C4 + D1

46. Given below is the BMI classification as applied to Indian adults. Match List 1 and 2 correctly to get the answer.

List I		List II	
A.	BMI less than 18	1.	Normal
B.	BMI 18-23	2.	Overweight
C.	BMI 23-25	3.	Obese
D.	BMI over 25	4.	Underweight

(i) A3 + B2 + C4 + D1 (ii) A3 + B4 + C1 + D2 (iii) A4 + B2 + C3 + D1 (iv) A4 + B1 + C2 + D3

47. **Assertion (A):** We should not eat the yellow portion of an egg because it is unhealthy.

Reason (R): This is because the yellow of an egg has only fat and it is the unhealthy fat which increases cholesterol in the body.

- (i) A is correct and so is R.
(ii) Both A and R are incorrect.
(iii) A is correct but R is incorrect.
(iv) A is incorrect but R is correct.

48. **Assertion (A):** Macronutrients in food are those that are required in large quantities on a daily basis for growth and development as well as for maintenance of the body.

Reason (R): Calcium, iron and iodine are the most important macronutrients we need on a daily basis.

- (i) A is correct and R is incorrect.
(ii) Both A and R are incorrect.
(iii) Both A and R are correct.
(iv) A is incorrect while R is correct.

Section C Case Study Based Questions

49. Your school has been tasked with organising an extramural cricket tournament in your city. Over 40 teams have sent in their participation request.

The Organising Committee needs to prepare a format for the tournament to be over reasonably quickly. What format would you suggest?

- (i) Knock out (ii) Round robin (iii) Staircase (iv) Challenge

50. Due to poor nutrition during childhood and manual labour involving lifting heavy load, a person has developed deformities in his knees where his knees touch each other and is now unable to walk fast and run. What deformity do you think he has developed?

- (i) Knock knees (ii) Bow legs (iii) Long legs (iv) Scoliosis

51. Which test is illustrated below?



- (i) Harvard Step Test (ii) Push-up Test
(iii) Modified Push-up Test (iv) Sit & Reach Test

52. Ram, your classmate, suffers from low energy and obesity. He weighs 80 kg and is always tired and has a poor attention span. He wants to go on a diet to lose fat and gain energy.


- (i) What should be the proper ratio of macronutrients for him with reference to fat, carbohydrates and proteins?

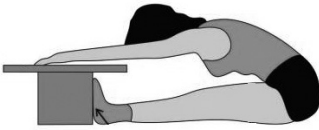
- (a) 30/50/20 (b) 20/40/40 (c) 30/40/30 (d) 10/80/10

- (ii) How much water should he drink daily?
 (a) At least 2 litres (b) At least 4 litres (c) Minimum 6 litres (d) As thirsty as he feels
- (iii) He feels if he eats fat in his diet, his weight would go up. What does this signify?
 (a) Food myth (b) Food intolerance (c) Food allergy (d) All of the above
- 53.** In rearranging the gymnasium for the forthcoming tournament, you and your classmates have to shift all the heavy tables and benches by pushing them to the side. You find it very difficult to do. Why is it so?
 (i) Laws of attraction (ii) Dynamic friction (iii) Static friction (iv) Poor technique
- 54.** In your biomechanics class, the teacher taught Newton's laws of motion and explained their application to you as a sports person.
- (i) When the batsman hits the ball, what law is exemplified?
 (a) Law of acceleration (b) Law of inertia
 (c) Law of reaction
- (ii) Swimmer pushing against the wall of the pool to take off is example of what law?
 (a) Law of acceleration (b) Law of inertia
 (c) Law of reaction
- (iii) Why would the cyclist move only when they start pedalling?
 (a) Law of acceleration (b) Law of inertia
 (c) Law of reaction
- (iv) What law is followed when the starter's gun recoils on firing?
 (a) Law of acceleration (b) Law of inertia
 (c) Law of reaction
- 55.** Kapil Dev is amongst the foremost fast ballers India has ever produced. During his initial training, he was not able to bowl so fast. His coach then focussed on developing a proper technique and movement of the shoulder. This movement is known as?
 (i) Adduction (ii) Circumduction (iii) Gliding (iv) Throwing
- 56.** You as the school head girl are tasked with assessing the fitness of senior citizens in your colony as part of social service.
- (i) What test are you likely to carry out?
 (a) Kraus-Weber Test (b) AAHPER Fitness Test
 (c) Rikli & Jones Test (d) Rockport Test
- (ii) How many tests in all are done under this?
 (a) Six (b) Five (c) Four (d) Seven
- (iii) Which of these tests would be done?
 (a) Zig-zag Run (b) Medicine Ball Put (c) Standing Broad Jump (d) 8 foot Up & Go Test
- 57.** Fat in food is necessary. A sports nutritionist in his talk explained why this is so despite most people believing in the myth that fat in food, even in appropriate quantities, is harmful.
- (i) What role of fat was explained by the teacher?
 (a) It buffers internal organs (b) It helps in absorption of certain vitamins
 (c) It helps the skin regulate body temperature (d) All of the above
- (ii) Which of these is a fat-soluble vitamin?
 (a) Vitamin E (b) Vitamin B₁₂ (c) Vitamin C (d) Vitamin B₆
- (iii) Vitamin D, one of the four fat-soluble vitamins, is important. Why?
 (a) Improves bone health (b) Boosts immunity
 (c) Helps lose fat (d) All of the above

- 58.** Sportspersons need to pay special attention to their diet. In addition to regular food, most sportspersons need supplements for optimum performance. Your school nutritionist helped the class understand nutrition by dividing nutrients into various groups based on function and dosage needs.
- Which of these was not included in essential nutrients as part of food?
 (a) Tea (b) Butter (c) Eggs (d) Water
 - What is the most important group of foods for building muscles?
 (a) Fat (b) Carbohydrates (c) Vitamins (d) Proteins
 - Which of these foods helps clean the digestive tract and stabilise sugar and cholesterol?
 (a) Protein (b) Vitamin C (c) Roughage (d) Vitamin B Complex
- 59.** As the school sports captain, you are tasked with organising an extramural competition.
- Which of these would you not do?
 (a) Invite only classes of your school (b) Invite all the schools in your city
 (c) Invite all the schools in your state (d) Send invites all over the country
 - What committee would you not need to set up?
 (a) Transport Committee (b) Parliamentary Committee
 (c) Organising Committee (d) Finance Committee
 - What should be the first committee to be set up?
 (a) Finance committee (b) Organising Committee
 (c) Lodging Committee (d) Ceremonies Committee
- 60.** On a visit to your native village you notice a lot of residents have a prominent swelling in the front of their throat below the chin. On studying further, you realise that they suffer from a particular deficiency.
- What is this condition likely to be?
 (a) Diabetes (b) High blood pressure (c) Goitre (d) Obesity
 - This points to deficiency of which micronutrient in food and water?
 (a) Calcium (b) Magnesium (c) Zinc (d) Iodine
 - What measures would you suggest to help improve this?
 (a) Adding fat to diet (b) Regular exercise
 (c) Addition of iodine to table salt (d) Eating carrots and raw vegetables

ANSWERS (SAMPLE QUESTION PAPER 1)

1. (ii) Finance Committee 2. (i) Organising Committee 3. (iii) Vitamin C
 4. (ii) Calcium
 5. (ii) Chief Guest 6. (iii) Selenium 7. (iii) Pes Planus or flat foot 8. (iii) 9
 9. (iii) 11-12 years 10. (iii) 1900 11. (iii) Five 12. (i) Cardiovascular fitness
 13. (i) Sit & Reach Test
 14. (iii) Water 15. (ii) Water 16. (iii)  17. (i) Law of acceleration

18. (iii) Biomechanics 19. (ii) Senior citizens 20. (i) Infant 21. (iii) Height and weight
 22. (iii) More than 25 23. (ii) Vitamin B 24. (ii) Flexion 25. (iv) Carbohydrate 26. (ii) Zig Zag Test
 27. (ii) A2 + B3 + C4 + D1 28. (iii) Carbohydrates 29. (iv) 50-metre standing start
 30. (iii) 3 kg 31. (i) Abduction 32. (iv) Fat, Carbohydrates, Calcium, Protein
 33. (ii)  34. (iii) Anatomy 35. (iii) Newton

36. (i) Electrolyte balance 37. (iii) Both A and R are wrong.
 38. (ii) Abduction, flexion, extension, adduction 39. (iii) Round shoulder syndrome 40. (iii) Calcium
 41. (ii) Middle childhood 42. (ii) Both A and R are correct.
 43. (ii) Gross motor development 44. (ii) A4 + B3 + C2 + D1 45. (ii) A3 + B2 + C4 + D1
 46. (iv) A4 + B1 + C2 + D3 47. (ii) Both A and R are incorrect.
 48. (i) A is correct and R is incorrect. 49. (i) Knock out 50. (i) Knock knees
 51. (iii) Modified Push-up Test 52. (i) (c) 30/40/30 (ii) (b) At least 4 litres (iii) (a) Food myth
 53. (iii) Static friction 54. (i) (c) Law of reaction (ii) (a) Law of acceleration (iii) (b) Law of inertia (iv) (c) Law of reaction
 55. (ii) Circumduction 56. (i) (c) Rikli & Jones Test (ii) (a) Six (iii) (d) 8 foot Up & Go Test
 57. (i) (d) All of the above (ii) (a) Vitamin E (iii) (d) All of the above 58. (i) (a) Tea (ii) (d) Proteins (iii) (c) Roughage
 59. (i) (a) Invite only classes of your school (ii) (b) Parliamentary Committee (iii) (b) Organising Committee
 60. (i) (c) Goitre (ii) (d) Iodine (iii) (c) Addition of iodine to table salt

SAMPLE QUESTION PAPER 2
CLASS XII
PHYSICAL EDUCATION (048)
TERM 1

Maximum Marks: 35

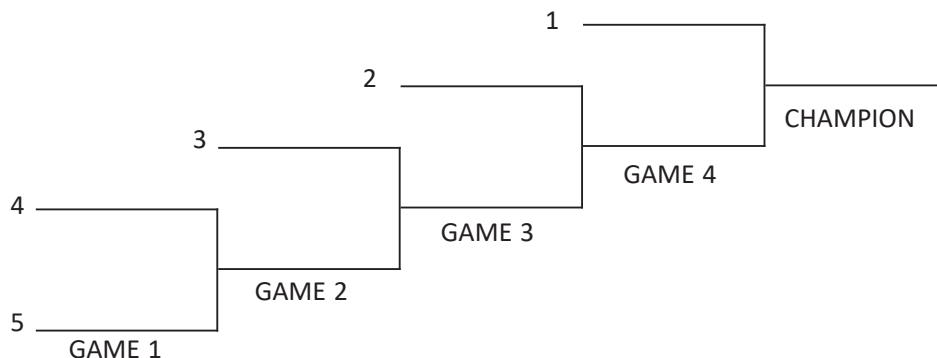
Time: 90 Minutes

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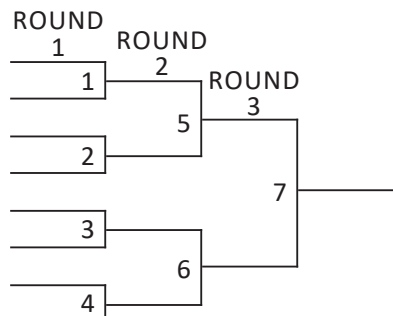
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Section A

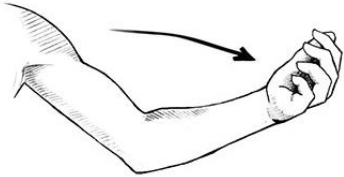
1. Which tournament is also known as Round Robin tournament?
 (i) Knock out (ii) League (iii) Challenge (iv) Combination
2. Which tournament is drawn below?



- (i) Ladder Tournament (ii) Knock-out Tournament
- (iii) Round Robin Tournament (iv) Combination
3. What is the other name of riboflavin?
 (i) Vitamin B₁₂ (ii) Vitamin B₂ (iii) Vitamin D (iv) Vitamin B₆
4. Which of these has most calories per gram?
 (i) Fat (ii) Water (iii) Protein (iv) Carbohydrates
5. What is this type of tournament known as:



- (i) Step Ladder Tournament (ii) Knock-out Tournament
- (iii) League or Round Robin Tournament (iv) Combination Tournament
6. Which of the following is a fat-soluble micronutrient?
 (i) Vitamin A (ii) Copper (iii) Vitamin B₁₂ (iv) Iron

7. Which of these deformities occurs in the foot?
 (i) Knock knees (ii) Pes Planus (iii) Lordosis (iv) Bow legs
8. Height-to-weight ratio is used to calculate what?
 (i) Muscle strength (ii) Flexibility
 (iii) BMI (iv) Cardiovascular fitness
9. Growth spurts and puberty occur at what age group?
 (i) Early childhood (ii) Middle childhood (iii) Adolescence (iv) Late childhood
10. Now from 2021, the Olympics Motto has how many words?
 (i) Six (ii) Three (iii) Four (iv) Five
11. Seeding in a sport is based on?
 (i) Gender (ii) Age (iii) Past record (iv) Nationality
12. Harvard Test is a measure of what?
 (i) Cardiovascular fitness (ii) Respiratory fitness (iii) Running ability (iv) Weight lifting
13. Lung capacity is most benefitted by which asana in yoga?
 (i) Sukhasana (ii) Tadasana (iii) Kalmegh asana (iv) Shavasana
14. 'Egg yolk consumption is bad for cholesterol levels' is an example of:
 (i) Intolerance (ii) Allergy (iii) Food myth (iv) Indigestion
15. Which of these has no calories?
 (i) Fat (ii) Water (iii) Protein (iv) Carbohydrates
16. Identify the movement below.


 (i) Flexion (ii) Circumduction (iii) Adduction (iv) Extension
17. Newton described which laws?
 (i) Laws of motion (ii) Laws of suspension (iii) Laws of buoyancy (iv) Laws of floatation
18. Biomechanics is used to study:
 (i) Structure of human body
 (ii) Functioning of human body
 (iii) Laws of physics and mechanics to improve sports performance
 (iv) How heart functions
19. Which test is most commonly used to determine fitness for senior citizens?
 (i) Jogging Tests (ii) Rikli & Jones Tests (iii) Harvard Step Test (iv) Rockport Tests
20. Cholecalciferol is the alternative name of which vitamin?
 (i) Vitamin A (ii) Vitamin B₁₂ (iii) Vitamin C (iv) Vitamin D
21. Body Mass Index is a ratio of?
 (i) Age to weight (ii) Age to height (iii) Height to weight (iv) Gender to height
22. For an Indian, a BMI of 20 denotes that the person is:
 (i) Underweight (ii) Overweight (iii) Normal (iv) Obese

23. Match the following vitamins with the food they are rich in.

- | | |
|----------------------|---------------------|
| A. Vitamin A | 1. Oranges |
| B. Vitamin B | 2. Chicken |
| C. Vitamin D | 3. Mango |
| D. Vitamin C | 4. Fatty fish |
| (i) A1, B4, C3, D2 | (ii) A3, B4, C1, D2 |
| (iii) A3, B2, C4, D1 | (iv) A4, B1, C3, D2 |

24. The movement where we bend forward to touch our toes is called?

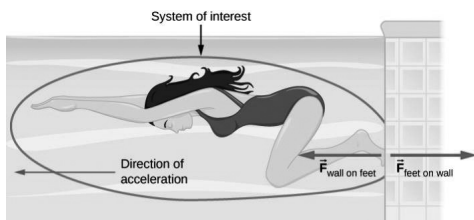
- (i) Extension (ii) Flexion (iii) Adduction (iv) Abduction

Section B

25. Our healthy muscles are predominantly made up of:

- (i) Fat (ii) Protein (iii) Minerals (iv) Carbohydrates

26. What law of motion is aiding the swimmer in the picture below?



- (i) Law of attraction (ii) Law of floatation
(iii) Law of acceleration (iv) Law of inertia

27. Match the following vitamins to their respective names:

List A		List B	
A.	Vitamin C	1.	Pyridoxine
B.	Vitamin B ₁₂	2.	Ascorbic Acid
C.	Vitamin A	3.	Cobalamin
D.	Vitamin B ₆	4.	Retinol

- (i) A1 + B3 + C4 + D2 (ii) A2 + B3 + C4 + D1
(iii) A4 + B3 + C2 + D1 (iv) A3 + B4 + C1 + D2

28. Assertion (A): Micronutrients are the major components of human diet and we need them on a daily basis.

Reason (R): Our body has a lot of chemical reactions taking place and these are mediated by the micronutrients.

- (i) A is wrong but R is correct. (ii) Both A and R are correct.
(iii) Both A and R are wrong. (iv) A is correct but R is wrong.

29. What is the height of step in Harvard Step Test for men and women respectively?

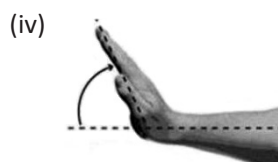
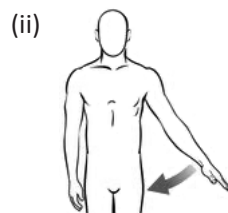
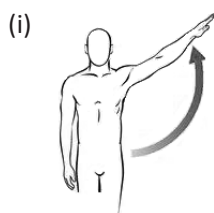
- (i) 16 inches and 22 inches (ii) 14 inches and 20 inches
(iii) 18 inches for both (iv) 20 inches and 16 inches

30. Assertion (A): Tasked with organising an intramural badminton tournament, the first committee to be set up is the finance committee.

Reason (R): Without money, it is not possible to do publicity, put up outstation sportspersons, arrange for their stay as well as food and also purchase equipment, trophies, etc.

- (i) Both A and R are correct. (ii) Both A and R are wrong.
(iii) A is correct but R is wrong. (iv) A is wrong but R is correct.

31. Identify the movements below.



(i) Abduction, Adduction, Flexion, Extension

(ii) Extension, Adduction, Abduction, Flexion

(iii) Flexion, Abduction, Extension, Adduction

(iv) Adduction, Flexion, Extension, Abduction

32. Assertion (A): The athlete needs to eat all three macronutrients in adequate and correct ratio.

Reason (R): Too much of carbohydrates in diet is not good enough for muscle building.

(i) Both A and R are correct.

(ii) A is wrong but R is correct.

(iii) Both A and R are wrong.

(iv) A is correct but R is wrong.

33. Assertion (A): The study of the function of the human body is called physiology and is very important especially from a sportsperson's point of view.

Reason (R): Because once we understand the functioning of all the body organs, we can aim for peak performance and enhance cardiovascular endurance and muscle stamina.

(i) Both A and R are correct.

(ii) A is wrong but R is correct.

(iii) Both A and R are wrong.

(iv) A is correct but R is wrong.

34. Assertion (A): The study of the structure of human body is called anatomy and is very important especially from the point of sports injuries and use of protective gear.

Reason (R): Because we understand the functioning of all the body organs in the body, we can aim for peak performance and also avoid sports injuries.

(i) Both A and R are correct.

(ii) A is wrong but R is correct.

(iii) Both A and R are wrong.

(iv) A is correct but R is wrong.

35. Assertion (A): Friction is important in sports as it aids the performance in certain sports.

Reason (R): In sports like swimming, the friction offered by water helps the swimmer swim more gracefully and look beautiful. Also, friction from the spikes in sports shoes helps get a better grip on the ground and prevent injuries.

(i) A is wrong but R is correct.

(ii) A is correct but R is wrong.

(iii) Both A and R are wrong.

(iv) Both A and R are correct.

36. Assertion (A): Protein is the most useful of all macronutrients for sportspersons especially for sports where muscle strength and bulk is important. Adequate protein in diet, thus, ought to be encouraged at all levels in sports.

Reason (R): Protein is the main component of all muscles. Besides increasing muscle size, it also contributes to better muscle quality. Protein aids recovery of muscles from injuries and is also a component of all hormones that aid performance.

(i) Both A and R are correct.

(ii) A is wrong but R is correct.

(iii) Both A and R are wrong.

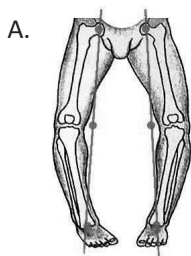
(iv) A is correct but R is wrong.

- 37. Assertion (A):** Being overweight or obese can be a challenge for humans but more so for sportspersons. BMI is one of the methods to assess this in humans. BMI can be improved by paying attention to diet and regular exercise. BMI is a ratio of age to height and is easy to calculate.

Reason (R): Obesity hampers performance, decreases muscle strength and efficiency and leads to poor health as well. Besides, it increases the risk of getting diseases like diabetes and high blood pressure which, in turn, hampers performance. Thus, close attention should be paid to normalising BMI.

- (i) A is wrong but R is correct. (ii) Both A and R are wrong.
(iii) A is correct but R is wrong. (iv) Both A and R are correct.
- 38. Food intolerance does not cause:**
(i) Nausea (ii) Abdominal pain (iii) Nervous behaviour (iv) Overeating
- 39. Most abundant mineral in human body is:**
(i) Selenium (ii) Magnesium
(iii) Calcium (iv) Iron
- 40. Development of secondary sexual characteristics marks what age?**
(i) Early childhood (ii) Middle childhood (iii) Late childhood (iv) Adolescence
- 41. Hand-eye coordination is best developed at what age?**
(i) Early Childhood (ii) Middle childhood (iii) Late childhood (iv) Adolescence
- 42. In a tournament, placing the player in schedule may lead to them being placed in a pattern called seeding. What is seeding useful for?**
(i) Making sure a weak player meets only a strong opponent
(ii) Trying to prevent placing weak players with strong players in early rounds
(iii) Making sure that weak players never play with strong players
(iv) Preventing players of opposite gender from playing with each other
- 43. To be able to play aggressive fast games such as football and volleyball, which is the most important component to enhance performance?**
(i) Fine motor development (ii) Gross motor development
(iii) Kinetic development (iv) Biomechanics

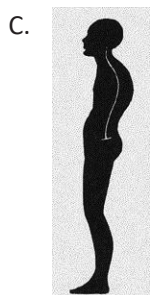
- 44. Match the following deformities to their correct body area.**



1. foot

2. knees

B. 



3. spine

4. shoulders

D. 

- (i) A2 + B3 + C4 + D1 (ii) A2 + B1 + C4 + D3 (iii) A3 + B4 + C1 + D2 (iv) A4 + B3 + C4 + D1

45. What injury is illustrated below?



- (i) Sprain (ii) Fracture (iii) Laceration (iv) Dislocation
46. Believing that having oils, ghee and butter even in small quantities causes fat gain is an example of what?
- (i) Food allergy (ii) Food intolerance
(iii) Food myth (iv) Food hypersensitivity
47. Not having the yellow portion of an egg thinking it is unhealthy is:
- (i) Food allergy (ii) Food intolerance
(iii) Food myth (iv) Food hypersensitivity
48. Most widely suggested food macronutrient combinations for Fat, Protein & Carbohydrates are?
- (i) 20/20/60 (ii) 20/30/50 (iii) 30/30/40 (iv) 10/40/50

Section C

49. Human digestive system is designed for the digestion of different food components at different stages and in different organs of the digestive system. Digestion of food starts in the mouth with the saliva starting the digestion of starch and carbohydrates. Fat digestion is done by the liver and gall bladder. The absorption of minerals and vitamins is completed in the large and small intestines. The small intestine is responsible for the absorption of all simpler food particles. Roughage is the solid material that consists of cellulose which is excreted as such from the body as we cannot digest it. The most abundant element of human body is water.
- (a) Where in the body are the salts and water absorbed?
- (i) Blood (ii) Large intestine
(iii) Both A and B (iv) Cells
- (b) The indigestible material in food is also known as:
- (i) Roughage (ii) Fats
(iii) Minerals (iv) Vitamins
- (c) Which of the following are involved in regulation of metabolism and the chemical reactions taking place in our bodies?
- (i) Carbohydrates (ii) Proteins
(iii) Vitamins (iv) Fats
- (d) The amount of water in an average human being is about?
- (i) 15% (ii) 35%
(iii) 85% (iv) 60%
50. An erroneous idea regarding dieting is that skipping a few meals will decrease total calorie intake and lead to weight loss. However, what it mostly leads to is overeating at next meal or increased snacking throughout the day. Skipping meals can slow down one's metabolism, which is contrary to what we ought to strive for if one is focused on fat loss.
- (a) What is the meaning of the term pitfalls of dieting?
- (i) Importance (ii) Drawbacks
(iii) Need (iv) Outcome

(b) What is advisable for weight control?

- | | |
|---------------------------------|-----------------|
| (i) Skipping of meals | (ii) Exercising |
| (iii) Taking more carbohydrates | (iv) Fat diet |

(c) Disadvantages of dieting include:

- | | |
|-----------------------------|----------------------|
| (i) Acne and skin infection | (ii) Good health |
| (iii) Weight control | (iv) Good metabolism |

51. On the playground in your school during the sports class for primary children, some children are involved in running, throwing and hopping. Others are, however, playing games like Football and Handball.

On the basis of the above, answer the following questions.

(a) Children who are involved in running, throwing and hopping belong to which stage of growth and development?

- | | |
|--------------------------------------|-------------------------------------|
| (i) Infanthood (0 – 1 yr.) | (ii) Early childhood (2 – 6 yrs.) |
| (iii) Middle childhood (7 – 10 yrs.) | (iv) Later childhood (11 – 12 yrs.) |

(b) Children who are playing ball games like Football and Handball represent which group?

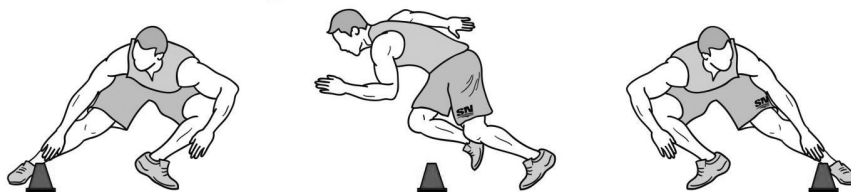
- | | |
|-----------------------|------------------|
| (i) Early childhood | (ii) Adolescence |
| (iii) Later childhood | (iv) Infancy |

52. Your classmates have been asked to undergo AAHPER tests by the school PE instructor.

(a) How many tests will each student have to undergo?

- | | |
|------------|------------|
| (i) Six | (ii) Four |
| (iii) Five | (iv) Seven |

(b) Identify the test below.



- | | |
|--------------------------|-------------------|
| (i) Pull up | (ii) 600-yard run |
| (iii) Standing long jump | (iv) Shuttle run |

53. Amit's grandmother who is 68 years of age has knee pain. The orthopaedic surgeon he consulted for her suggested some exercises to the grandmother. Three months later, Amit wanted to ascertain if the exercises had been effective for the lower body strength of his grandmother.

(a) What test should be performed to check the lower body strength of his grandmother?

- | | |
|------------------|-----------------------|
| (i) Back stretch | (ii) Arm curl test |
| (iii) Push-ups | (iv) Chair stand test |

(b) How will the grandmother place her arms to perform the test?

- | | |
|---|-------------------------------------|
| (i) Right arm placed on the chest | (ii) Left arm placed on the chest |
| (iii) Parallel arms placed on the chest | (iv) Cross arms placed on the chest |

54. The Food Pyramid has been designed by scientists as a suggestion to ensure healthy eating choices and patterns. It shows the different food groups and how much of each we need to have a healthy diet. Eating the right amount from each food group is called eating a "balanced diet". This ensures optimum health for all. Below is the food pyramid recommended for Indians.



- (a) The bottom-most part of the food pyramid is occupied by _____, indicating large quantities of intake.
- | | |
|-------------------|---------------|
| (i) Carbohydrates | (ii) Vitamins |
| (iii) Minerals | (iv) Fats |
- (b) Major portion of an individual's diet will have _____ nutrients.
- | | |
|---------------------------|---------------|
| (i) Macro | (ii) Micro |
| (iii) Vitamins & Minerals | (iv) Roughage |
- (c) Fat-soluble vitamins are _____.
- | | |
|----------------------|---------------------------|
| (i) Vitamins A & D | (ii) Vitamins A & K |
| (iii) Vitamins E & D | (iv) Vitamins A, D, E & K |
- (d) The body-building nutrient is _____.
- | | |
|---------------|---------------|
| (i) Fat | (ii) Vitamin |
| (iii) Protein | (iv) Minerals |
- (e) Ghee, butter, cheese and oils are rich sources of _____.
- | | |
|---------------------|---------------|
| (i) Fibre | (ii) Fats |
| (iii) Carbohydrates | (iv) Proteins |

55. Biomechanics and Newton's laws of motion find tremendous application in modern sports. Not only is their knowledge important to enhance performance, it also helps prevent sports injuries.

- (a) In cricket, the ball is hit by the batsman; the ball after being struck by the bat goes away from the batsman. What law explained by Newton is working between the ball and the bat?



- | | |
|----------------------------------|---------------------------------|
| (i) Newton's 2nd law of motion | (ii) Newton's 1st law of motion |
| (iii) Newton's 3rd law of motion | (iv) None of the above |
- (b) Which Newton's law is applied when an athlete is in the running position?



- | | |
|----------------------------------|---------------------------------|
| (i) Newton's 2nd law of motion | (ii) Newton's 1st law of motion |
| (iii) Newton's 3rd law of motion | (iv) None of the above |

- (c) Jumping jacks exercise is related to which movement?

JUMPING JACKS



- (i) Adduction-Abduction
(ii) Flexion-Extension
(iii) Supination-Pronation
(iv) None of the above
- (d) While walking, our legs and hands move forward and backward. Which movement is this?



- (i) Adduction-Abduction
(ii) Flexion-Extension
(iii) Supination-Pronation
(iv) Adduction-Flexion
- (e) Which Newton's law is applied when the ball was placed in the penalty spot and kicked by the player towards the goal?



- (i) Newton's 2nd law of motion
(ii) Newton's 1st law of motion
(iii) Newton's 3rd law of motion
(iv) None of the above
- 56.** Biomechanics involves understanding various movements that take place at the joints. Each movement serves a specific function and in many sports the movements are combined to go from one to the other. Basic understanding of joint mobility is important to get the best from the athletes.
- (a) The type of movement in which the angle between joint decreases is called:
- (i) Flexion
(ii) Extension
(iii) Gliding
(iv) Sliding
- (b) Straightening parts of a joint so that the angle increases is known as:
- (i) Flexion
(ii) Extension
(iii) Abduction
(iv) Adduction
- (c) Moving a part away from mid line is:
- (i) Flexion
(ii) Extension
(iii) Abduction
(iv) Adduction

- (d) Moving a part towards the mid line is:
- (i) Flexion
 - (ii) Extension
 - (iii) Abduction
 - (iv) Adduction
- (e) Flexion and extension come under _____ movement.
- (i) Gliding
 - (ii) Angular
 - (iii) Rotation
 - (iv) Circumduction
57. Ms. Malini, your maths teacher, about 55 years of age, was advised by the school doctor to exercise regularly and take care of her dietary habits. This advice was given keeping in view her age and sedentary working profile. Considering her lifestyle, answer the following questions:
- (a) The most commonly seen change in the cardiovascular system due to regular exercise is:
- (i) Stable BP
 - (ii) Pulse rate
 - (iii) Both (i) & (ii)
 - (iv) No change
- (b) Due to regular exercising, the viscosity of the blood temporarily _____.
- (i) Increases
 - (ii) Decreases
 - (iii) Remains unchanged
 - (iv) Both (i) & (ii)
- (c) Changes in the chemical composition of blood due to exercises are:
- (i) Increase in RBCs
 - (ii) Increase in plasma
 - (iii) Increase in the number of platelets
 - (iv) All of the above
- (d) This refers to the highest rate at which oxygen can be taken up and consumed by body during intense exercise.
- (i) VO_2 max
 - (ii) HbO_2 max
 - (iii) $HgNO_2$ max
 - (iv) O_2 max
- (e) With regular exercise, the tidal volume and vital capacity of lungs _____.
- (i) Increases
 - (ii) Decreases
 - (iii) Remains unchanged
 - (iv) Either (ii) or (iii)
58. The school sports teacher, Mr Ramchand, was tasked with selecting the school athletics team from students of 11th and 12th standards. He drew up a schedule of tests which all aspirants were asked to undergo.
- (a) How many motor fitness tests did he want to do?
- (i) Six
 - (ii) Seven
 - (iii) Four
 - (iv) Eight
- (b) Boys had only one different test from the girls. Which was it?
- (i) Push up
 - (ii) Sprint
 - (iii) Tug of war
 - (iv) Broad jump
- (c) One test was 4 x 10 metre shuttle run. What is this done for?
- (i) Flexibility
 - (ii) Muscle strength
 - (iii) Agility
 - (iv) Upper body strength
59. As part of family involvement in the school sports and fitness program, the Principal decided to invite all parents and grandparents for a fitness test which was received with great enthusiasm by all.
- (a) Who devised the senior fitness tests?
- (i) Isaac Newton
 - (ii) Rikli & Jones
 - (iii) Rikli & Eisenstein
 - (iv) Jones and Jill
- (b) How many series of tests were administered?
- (i) Two
 - (ii) Four
 - (iii) Six
 - (iv) Eight

- (c) How long did the step test last?
- (i) One minute
 - (ii) Two minutes
 - (iii) Three minutes
 - (iv) Four minutes
- (d) In the up and go test, at how many feet is the marker kept?
- (i) Six
 - (ii) Eight
 - (iii) Ten
 - (iv) Twelve
- 60.** In a talk by a renowned nutritionist at school, children were amazed to know that food also has non-nutritive components that are very important for good health.
- (a) What are the nutritive components of food?
- (i) Those that supply energy and have calories
 - (ii) Those that have no calories but supply energy
 - (iii) Those that have calories but supply no energy
 - (iv) None of the above
- (b) What are the non-nutritive components of food?
- (i) Those that supply energy and have calories
 - (ii) Those that have no calories but supply energy
 - (iii) Those that have calories but supply no energy
 - (iv) None of the above
- (c) How many nutritive components of food are there?
- (i) One
 - (ii) Two
 - (iii) Three
 - (iv) Four
- (d) What component of the food is water?
- (i) None
 - (ii) Both
 - (iii) Non-nutritive
 - (iv) Nutritive

ANSWERS (SAMPLE QUESTION PAPER 2)

1. (ii) League
2. (i) Ladder tournament
3. (ii) Vitamin B₂
4. (i) Fat
5. (ii) Knock-out tournament
6. (i) Vitamin A
7. (ii) Pes Planus
8. (iii) BMI
9. (iii) Adolescence
10. (iii) Four
11. (iii) Past record
12. (i) Cardiovascular fitness
13. (i) Sukhasana
14. (iii) Food myth
15. (ii) Water
16. (iv) Extension
17. (i) Laws of motion
18. (iii) Laws of physics and mechanics to improve sports performance
19. (ii) Rikli & Jones Tests
20. (iv) Vitamin D
21. (iii) Height to weight
22. (iii) Normal
23. (iii) A3, B2, C4, D1
24. (ii) Flexion
25. (ii) Protein
26. (iii) Law of acceleration
27. (ii) A2 + B3 + C4 + D1
28. (i) A is wrong but R is correct.
29. (iv) 20 inches and 16 inches
30. (iv) A is wrong but R is correct.
31. (i) Abduction, Adduction, Flexion, Extension
32. (i) Both A and R are correct.
33. (i) Both A and R are correct.
34. (iv) A is correct but R is wrong.
35. (ii) A is correct but R is wrong.
36. (i) Both A and R are correct.
37. (i) A is wrong but R is correct.
38. (iv) Overeating
39. (iii) Calcium
40. (iv) Adolescence
41. (ii) Middle childhood
42. (ii) Trying to prevent placing weak players with strong players in early rounds
43. (ii) Gross motor development
44. (ii) A2 + B1 + C4 + D3
45. (iii) Laceration
46. (iii) Food myth
47. (iii) Food myth
48. (iii) 30/30/40
49. (a) (ii) Large intestine (b) (i) Roughage (c) (iii) Vitamins (d) (iv) 60%
50. (a) (ii) Drawbacks (b) (ii) Exercising (c) (i) Acne and skin infection
51. (a) (iii) Middle childhood (7–10 yrs.) (b) (iii) Later childhood
52. (a) (i) Six (b) (iv) Shuttle run
53. (a) (iv) Chair stand test (b) (iv) Cross arms placed on the chest.
54. (a) (i) Carbohydrates (b) (i) Macro (c) (iv) Vitamins A, D, E & K (d) (iii) Protein (e) (ii) Fats
55. (a) (iii) Newton's 3rd law of motion (b) (i) Newton's 2nd law of motion (c) (i) Adduction – Abduction (d) (ii) Flexion – Extension (e) (ii) Newton's 1st law of motion
56. (a) (i) Flexion (b) (ii) Extension (c) (iii) Abduction (d) (iv) Adduction (e) (ii) Angular
57. (a) (iii) Both (i) & (ii) (b) (i) Increases (c) (iv) All of the above (d) (i) VO₂ max (e) (i) Increases
58. (a) (ii) Seven (b) (i) push up (c) (iii) Agility
59. (a) (ii) Rikli & Jones (b) (iii) Six (c) (ii) Two minutes (d) (ii) Eight
60. (a) (i) Those that supply energy and have calories (b) (ii) Those that have no calories but supply energy (c) (iii) Three (d) (iii) Non-nutritive