

SAMPLE QUESTION PAPER - 2
Physical Education (048)
Class XII (2024-25)

Time Allowed: 3 hours

Maximum Marks: 70

General Instructions:

1. The question paper consists of 5 sections and 37 Questions.
2. Section A consists of question 1-18 carrying 1 mark each and is multiple choice questions. All questions are compulsory.
3. Sections B consist 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. Sections C consist of Question 25-30 carrying 3 marks each and are short answer types and should not exceed 100-150 words. Attempt any 5.
5. Sections D consist of Question 31-33 carrying 4 marks each and are case studies. There is internal choice available.
6. Section E consists of Question 34-37 carrying 5 marks each and are short answer types and should not exceed 200-300 words. Attempt any 3.

Section A

1. Identify the asana:

[1]



- | | |
|----------------------|----------------|
| a) Bhujangasana | b) Matyasana |
| c) Uttan Mandukasana | d) Gomukhasana |

2. Name the type of tournament in which the defeated team gets eliminated and does not have another chance to play. [1]

a) Bye

b) League

c) Challenging

d) Knockout

3. _____ provide energy needed by the body and the nervous system, brain and red blood cells. [1]

a) Roughage

b) Minerals

c) Proteins

d) Carbohydrate

4. For women's what should be height of bench in Harvard step test? [1]

a) 16 inches

b) 18 inches

c) 14 inches

d) 12 inches

5. **Assertion (A):** Excessive body weight can be a contributing factor to Genu valgum. [1]

Reason (R): As extra weight puts additional strain on the legs and knees, and this can cause knock-knees to worsen.

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.

6. What is the meaning of Psyche? [1]

a) Science

b) Soul

c) Behaviour

d) Environement

7. It is defined as a decrease in the amount of RBC in blood. [1]

a) Bulimia

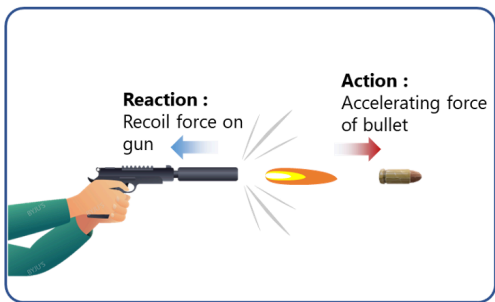
b) Amenorrhoea

c) Diabetes

d) Anaemia

8. Identify the picture given below: [1]





a) Second Law of Motion

b) First Law of Motion

c) Third Law of Motion

d) Law of Effects

9. Given below are functions of Sports Management in List-I and their Explanation in List-II: [1]

List - I	List - II
I. Planning	1. It is a function of guiding, inspiring and instructing people to accomplish organizational goals.
II. Controlling	2. Preparing a layout for the future course of action.
III. Directing	3. Ensuring that proper talent is serving that specific job.
IV. Staffing	4. Establishing performance standards, measuring actual performance and comparing them for irregularities.

Match the items of List-I with List-II and choose the correct option from the following:

a) I - 2, II - 4, III - 1, IV - 3

b) I - 1, II - 2, III - 4, IV - 3

c) I - 1, II - 2, III - 3, IV - 4

d) I - 2, II - 4, III - 3, IV - 1

10. **Assertion (A):** A league tournament is a type of tournament in which each contestant gets eliminated after being defeated in the round. [1]

Reason (R): In league tournament, there has to be sufficient time to complete the tournament.

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.



11. Which of the following is a part of external motivation? [1]

a) Hunger	b) Safety and security
c) Reward and punishment	d) Self-esteem
12. Which type of bone generally acts as a lever? [1]

a) Short bones	b) Sesamoid bones
c) Flat bones	d) Long bones
13. Maximum Carbohydrates are obtained from: [1]

a) Fish	b) Whole grain food
c) Plant oil	d) Nuts
14. Identify the beneficial non-nutritive factors of food. [1]

a) Trypsin Inhibitors	b) Oxalate
c) Artificial Sweeteners	d) Tannins
15. Knock-out tournament is also known as _____. [1]

a) League tournament	b) Challenge tournament
c) Elimination tournament	d) Round-robin tournament
16. Identify the correct option for controlling in sports management. [1]

a) Proper monitoring	b) All of these
c) Supervision to team	d) Systematic observation
17. _____ is used to test cardiovascular fitness. [1]

a) AAHPER	b) Shuttle Run Test
c) Rockport Test	d) Kraus Weber Test
18. Goiter is caused due to the deficiency of _____. [1]

a) selenium	b) iodine
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c) calcium

d) iron

Section B

Attempt any 5 questions

19. How to calculate BMR? [2]
20. Enlist the various types of problems related to menstrual dysfunction. [2]
21. How can the body fat percentage be computed? [2]
22. Why does involvement in regular exercise delay the onset of fatigue? [2]
23. What is Rockport fitness walking Test? [2]
24. What is obesity? [2]

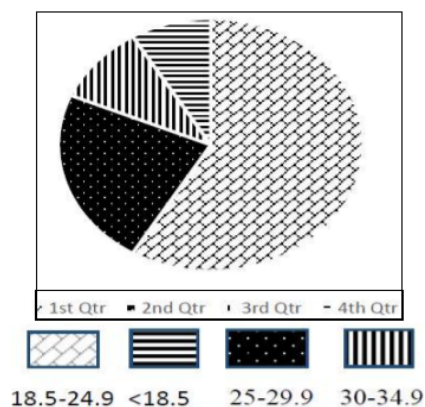
Section C

Attempt any 5 questions

25. List any four changes happening in the muscular system due to exercising. [3]
26. What are the advantages of knock-out tournaments? [3]
27. How is projectile motion used in volleyball? [3]
28. What do you mean by flexibility? Explain types of flexibility. [3]
29. What do you mean by sprain? [3]
30. A teacher ma preschool noticed that a child is not singing along with other children. [3]
She is not responding even when her name is called. Then the teacher asked the child to stand next to her and repeat the rhyme along with her, while she prompted her. With effort, the child was able to sing like other children of her age.
 - i. What do you think the child is suffering from?
 - ii. What values are shown by the teacher?
 - iii. What type of school/classroom is it?

Section D

31. **Read the following text carefully and answer the questions that follow:** [4]
Below given is the BMI data of a school's health check-up.

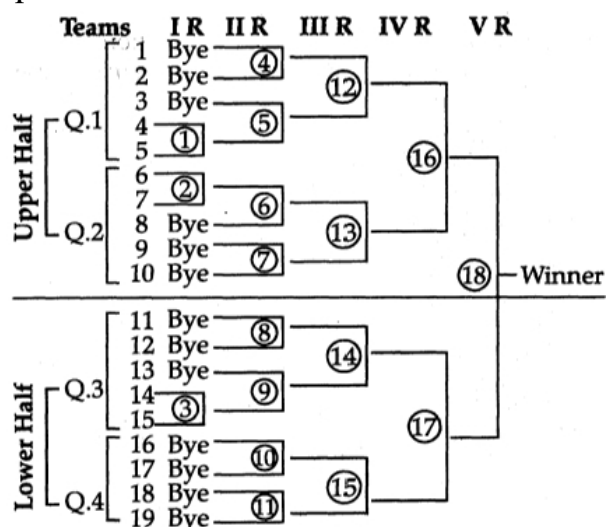


1. In which category does the major student population fall?
 - a) Underweight
 - b) Normal weight
 - c) Overweight
 - d) Obese
2. As per the pie chart given above, the school has to develop an activity-based program to decrease the number of:
 - a) Underweight
 - b) Normal weight
 - c) Overweight
 - d) Obese (Class I)
3. Which category is related to underweight?
 - a) $BMI \geq 25$
 - b) $BMI \geq 30$
 - c) $BMI < 18.5$
 - d) $BMI \geq 18.5$
4. Minerals are placed under _____ nutrient category on the basis of required quantity.
 - a) Macro
 - b) Micro
 - c) Phyto
 - d) Zoo

32. **Read the following text carefully and answer the questions that follow:** [4]

Rakesh and Rohit were given the responsibility to conduct an Inter-school boys' basketball tournament in their school. 19 teams agreed to participate in the tournament. The committee responsible for making the fixture made a knockout fixture for 19 teams. On the basis of the given fixture answer the following

questions:



1. What is a bye?

- A team that is eliminated in the first round
- A team that plays an extra match
- A team that is given a free pass to the next round
- A team that is disqualified

2. How is the number of Bye decided?

- By adding the number of teams to the next higher number, which is a power of two
- By subtracting the number of teams from the next higher number, which is a power of two
- By multiplying the number of teams by two
- By dividing the number of teams by two

3. Write the formulae for finding the total number of matches in the knock-out tournament.

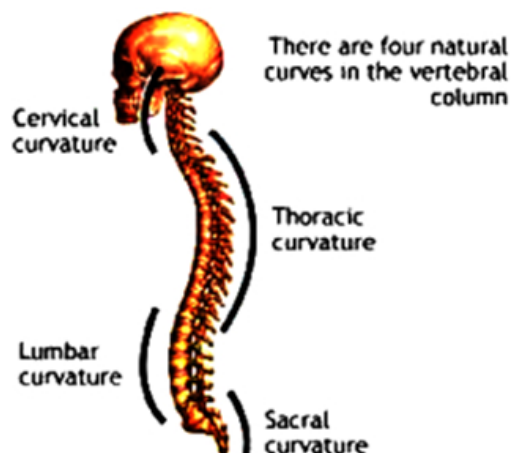
- $N - 1$
- $N + 1$
- $N \times 2$
- $N / 2$

4. Which committee is responsible for allotting accommodation to the teams participating in the tournament?

- Disciplinary Committee
- Boarding and Lodging Committee
- Organizing Committee
- Finance Committee

33. Read the following text carefully and answer the questions that follow: [4]

Physical Education teacher at XYZ School observed that Ravi a student of class VI has outward curve of vertebral column at Thoracic region. He suggested some exercises to rectify this problem.



1. What is this deformity known as?

- a) Lordosis
- b) Scoliosis
- c) Kyphosis
- d) Spinal curvature

2. Kyphosis is commonly known as:

- a) Round back
- b) Hunch back
- c) Scoliotic back
- d) Curved spine

3. Kyphosis is a deformity related to:

- a) Pelvic region
- b) Vertebral column
- c) Femur bone
- d) Rib cage

4. Adolescents are the children in which age-group?

- a) 10-12 years
- b) 19-22 years
- c) 13-18 years
- d) 23-25 years

Section E

Attempt any 3 questions

34. Elaborate the benefits of asanas of Sukhasana, Tadasana, and Shalabhasana. [5]

35. Discuss in detail the concept of inclusion in sports. [5]
36. Write in detail about strength improving methods – Isometric, Isotonic and Isokinetic. [5]
37. What are the personality traits according to the Big Five theory? [5]

Solution
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Section A

1.
(c) Uttan Mandukasana
Explanation:
Uttan Mandukasana
2.
(d) Knockout
Explanation:
The knockout tournament is the tournament in which the teams get eliminated from the tournament once defeated.
3.
(d) Carbohydrate
Explanation:
Carbohydrates provide energy needed by the body and the nervous system, brain and red blood cells
4.
(d) 12 inches
Explanation:
12 inches
5. (a) Both A and R are true and R is the correct explanation of A.
Explanation:
Excessive body weight can be a contributing factor to Genu valgum as extra weight puts additional strain on the legs and knees, and this can cause knock-knees to worsen. A person who is overweight should lose weight through a combination of diet and exercise.
6.
(b) Soul
Explanation:
Psyche means soul.
7.
(d) Anaemia
Explanation:
In anaemia, RBC count decreases which is harmful for proper functioning of the body.
8.
(c) Third Law of Motion



Explanation:

Third Law of Motion

9. (a) I - 2, II - 4, III - 1, IV - 3

Explanation:

I - 2, II - 4, III - 1, IV - 3

10.

(d) A is false but R is true.

Explanation:

A league tournament is a type of tournament in which each contestant meets all other contestants in turn. In this type of tournament, there has to be sufficient time to complete the tournament.

11.

(c) Reward and punishment

Explanation:

Reward and punishment is part of external motivation.

12.

(d) Long bones

Explanation:

Long bones

13.

(b) Whole grain food

Explanation:

Whole grain food is a very rich source of carbohydrates.

14.

(c) Artificial Sweeteners

Explanation:

Artificial sweeteners are synthetic sugar substitutes. But they may be derived from naturally occurring substances, such as herbs or sugar itself.

15.

(c) Elimination tournament

Explanation:

Elimination tournament

16.

(b) All of these

Explanation:

A manager can control his team through proper supervision, observation and feedback.

17.
(c) Rockport Test
Explanation:
Rockport Test is used to test cardiovascular fitness.
18.
(b) iodine
Explanation:
Deficiency of iodine causes the disease goiter. In this disease, the irregular growth of the thyroid gland occurs. Hence Iodine is necessary for proper functioning of thyroid gland.

Section B

19. Harris-Benedict equation is used to calculate BMR.
For men: $BMR = 88.36 + (13.4 \times \text{weight in kg}) + (4.8 \times \text{height in cm}) - (5.7 \times \text{age in years})$
For women: $BMR = 447.6 + (9.2 \times \text{weight in kg}) + (3.1 \times \text{height in cm}) - (4.3 \times \text{age in years})$
20. Menstrual dysfunction include
- a. primary amenorrhoea
 - b. secondary amenorrhoea
 - c. oligomenorrhoea
 - d. luteal phase deficiency
 - e. abnormal cramps
 - f. delay in first menstrual period
21. The body fat percentage can be computed by finding out the Body Mass Index (BMI)
Formula of BMI = $\frac{\text{Weight}}{\text{Height}(\text{m}^2)}$
22. Regular exercise delays the onset of fatigue as exercise develops the fitness levels and increases endurance thereby delaying fatigue.
23. Rockport Fitness Walking Test : This test is very good to measure Cardio-Respiratory fitness of the individual. Thus the objective of this test is to monitor the development of the athlete's maximum Cardio-Respiratory ability (VO₂).
24. Obesity is that condition of the body in which the amount of fat increases to extreme levels.

Section C

25. Changes happening in the muscular system due to exercising.
- i. Change in size and shape of Muscle.
 - ii. Increase in the Strength of Muscles.
 - iii. Increase in muscle Coordination.
 - iv. Entrance of Greater Quantity of Oxygen in the Body.



- v. Proper Blood Circulation.
- vi. Effects on Bones and Joints.
- vii. Effective Respiration.
- viii. Increase in the Resistance Power of Body.

26. The advantages of knock-out tournament are:-

- There will be an economy of expenditure.
- These are required a minimum number of officials
- Standard of the game improves as every team has to perform at the highest level to remain in the competition.
- These tournaments can be finished in less time

27. Projectile Motion describes the motion of the ball whether it's a serve, set, or dig, a volleyball will always travel in a parabolic motion. This is because the only force that acts on the ball after the ball is given an initial force of gravity assuming that there is no air resistance.

28. Flexibility is the range of movement of the joint of a sports person.

- i. **Active flexibility:-** The ability of an individual to do the joint motion for a longer range without any external help. Active flexibility is less than passive flexibility. Ex. doing any stretching exercise without external help.

It is two kinds:-

- i. **Static Flexibility:-** It is usually required by a sports person when he remains in a static position e.g. Diving, Sitting, Lying, etc.
- ii. **Dynamic Flexibility:-** It is needed for walking and running its increase by static stretching.
- ii. **Passive Flexibility:-** The ability to do a joint movement with a greater range with the external help of a partner. This flexibility is largely determined by joint structure, stretchability of the muscle and ligament. Passive flexibility helps in the development of active flexibility.

29. Sprain is a ligament injury. It may occur due to overstretching or tearing of ligaments. Many things can cause sprain. Falling, twisting, or getting hit can force a point out of its normal position. This can cause ligaments around the joints to tear. Generally, Sprain occurs at wrist and ankle joints.

- 30. i. The child is suffering from any kind of disorder that is mental in nature such as SPD (Sensory Processing Disorder).
- ii. The values shown by the teacher are compassion who thinks for all the students, kindness, observant, thoughtfulness and caring attitude for the students.
- iii. The type of school/classrooms inclusive because the children with special needs study along with the other children and are not sent to separate schools.



Section D

31. 1. b) Normal weight
2. d) Obese (Class I)
3. c) BMI < 18.5
4. b) Micro
32. 1. c) A team that is given a free pass to the next round
2. b) By subtracting the number of teams from the next higher number, which is a power of two
3. a) N - 1
4. b) Boarding and Lodging Committee
33. 1. c) Kyphosis
2. b) Hunch back
3. b) Vertebral column
4. c) 13-18 years

Section E

34. There are various benefits of these asanas

The Benefits Of Sukhasana.

1. It spreads a sense of calm and peace through your mind and body.
2. It relaxes your brain.
3. You will feel all exhaustion, stress, and anxiety leave your being.
4. Your chest and collar bones are broadened.
5. Your body alignment is improved.
6. Practising this asana helps elongate your spine.
7. Your back becomes stronger and steadier.
8. This asana gives your knees and ankles a good stretch.

Benefits of Tadasana (Mountain Pose)

1. Improves posture.
2. Strengthens thighs, knees, and ankles.
3. Increases awareness.
4. Steadies breathing.
5. Increases strength, power, and mobility in the feet, legs, and hips.
6. Firms abdomen and buttocks.
7. Relieves sciatica.
8. Reduces flat feet.

The Benefits Of The Shalabhasana (Locust Pose)

1. This pose invigorates the entire body, stimulates the internal organs, as well as enhances the circulation of blood.

2. This asana helps to regulate the acid-base balance in the body.
3. The arms, thighs, shoulders, legs, calf muscles, and hips are strengthened through this asana.
4. The back is also toned and strengthened. This asana also encourages a healthy posture.
5. It regulates metabolism and helps you lose weight.
6. It also helps reduce stress and tension.

35. **Inclusion in sports-** Inclusion in sports refers that, all children are differently abled, have the right to get respect inside and outside the school premises, they were appreciated to participate in all the activities which were organized by the schools and also interact or communicate with all the other peers to create the friendly environment or friendship with others.

Inclusion in sports helps students with differently abled in many ways-

- i. Help them to develop their motor skills.
- ii. Help them to create social networks.
- iii. They feel motivated.

Inclusion in sports also helps the students who are not disabled-

- i. They were able to understand true friendship.
- ii. Improve academic results.
- iii. Quality of brotherhood increase.

36. Strength is the capacity of the whole body or parts of to exert force. There are two types of strength - Dynamic & Static strength. Following methods are used to improve strength:-

- i. **Isometric Exercise:-** Means, where we do these exercises work is done, cannot be observed. In these exercises, work is performed but it is not seen directly. In these exercises, a group of muscles carry out tension against the other group of muscles. **For example:** Pushing against the sturdy wall, we will not be able to move it from its place. So, we should not consider it as work. Our muscle exert force, while pushing the wall, but we see that work is not done.

When we do exercise expenditure of energy is usual phenomenon. Some time body temperature may increase while performing these exercises. Muscles may feel a slight tremor if exercise is done for a prolonged time. Regular performing these exercises muscle size and shape can be changed.

- ii. **Isotonic Exercise:-** Isotonic exercise are those exercises in which movement can be seen directly. Work is done in these exercises. The lengthening and shortening of muscle can be called eccentric contraction and concentric contraction accordingly. **Examples are** - callisthenic exercises, running and jumping on the spot, lifting of weights or exercise with medicine ball. These exercises can be done with or without equipment.



iii. **Iso-kinetic exercise:-** In Iso-kinetic exercise contraction of muscle apply maximum forces throughout the complete range of movements. According to individual's capacity, the speed of contraction can be adjusted. the Iso-kinetic excise can be used effectively for the development of strength.

37. The five personality traits are also known as the Five-Factor Model of Personality and are sometimes referred to as OCEAN.

OPENNESS TO EXPERIENCE: Openness refers to the dimension of personality which ranges from being imaginative, humorous, intellectual, creative, curious, having broad interests, and open to ideas at one end to being closed to experience, suspicious, and rigid at the other. In sports, athletes or individuals scoring high on Openness are characterized by the reflection of demonstrating new ideas and skill execution initiatives along with a wide variety of ideas.

EXTRAVERSION: Extraversion refers to the dimension of personality which ranges from having enthusiasm, energy, positive emotions, talkativeness, and assertiveness at one end to being reserved, sober, and cautious at the other. An individual who scored high on extraversion is characterized by high sociability, is outgoing, and has a tendency to seek stimulation in the company of others.

CONSCIENTIOUSNESS: Conscientiousness refers to being well-organized, careful, responsible, hardworking, and dependable individuals at one end to being relaxed and easygoing, spontaneous, disorganized, and careless. Numerous studies have found a positive correlation between conscientiousness and cognition, individuals high on conscientiousness have been found to perform better in academics as well as in the sports arena wherever planning, organizing skills, and decision-making abilities are essential to the task.

AGREEABLENESS: Agreeableness refers to the compassionate behaviour of an individual. Dimensions of agreeableness ranges from being good-natured, cooperative, and trusting at one end to being suspicious, irritable, and uncooperative at the other.

NEUROTICISM: Neuroticism focuses on the emotional stability of an individual. This trait refers to dimensions of personality that range from being poised, calm, and composed at one end to nervous, anxious, and excitable at the other.

