

**SAMPLE QUESTION PAPER - 5**  
**PHYSICAL EDUCATION (048)**  
**SESSION (2022-23)**

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 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. Which of the following is not a part of the big five personality traits? [1]

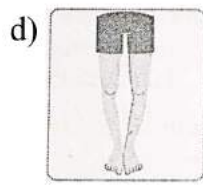
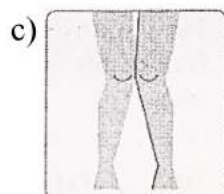
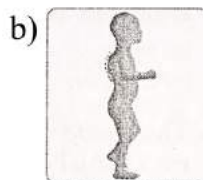
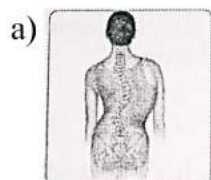
- |                  |                      |
|------------------|----------------------|
| a) Openness      | b) Helpfulness       |
| c) Agreeableness | d) Conscientiousness |

2. Identify the asana: [1]



- |                |                   |
|----------------|-------------------|
| a) Mandukasana | b) Katichakrasana |
| c) Gomukasana  | d) Pavanmuktasana |

3. Identify the bow leg figure from the given options. [1]



4. Swimming is an example of \_\_\_\_\_ exercise. [1]
    - a) Isokinetic
    - b) Isotonic
    - c) Isometric
    - d) Isolated
  5. **Assertion (A):** Vitamins are compounds of carbon that are essential for the normal growth and working of the body. [1]
 

**Reason (R):** Vitamin D is essential for the normal growth of the body. The deficiency of Vitamin A leads to night blindness and also affects kidneys, nervous system, and digestive system.

    - 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. The damage to muscles, ligaments and tendons is called \_\_\_\_\_. [1]
    - a) Physical Injury
    - b) Fracture
    - c) Soft Tissue Injury
    - d) Bone Injury
  7. **Assertion (A):** Newton's First Law of Motion is applicable in sports. like Equestrian. [1]
 

**Reason (R):** In this sports, the rider remains in motion along with the horse.

    - 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.
  8. This test helps to measure the minimum strength and flexibility of spinal and hamstring muscles. It is \_\_\_\_\_. [1]
    - a) AAHPER
    - b) Kraus-Weber Test
    - c) Back scratch test
    - d) Chair stand test
  9. Stadiometer is required for which Test in Khelo India Fitness Assessment Programme? [1]
    - a) Balance
    - b) Height
    - c) Flexibility
    - d) Weight
  10. **Assertion (A):** seeding is done to overcome the drawback of the knockout tournament [1]
 

**Reason (R):** It protects the stronger teams from the weaker teams in early rounds.

    - 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.





a) self-esteem

b) safety

c) hunger

d) attitude

17. Match the following:

[1]

(i) Carbohydrate	(a) Build internal organs
(ii) Protein	(b) Provides energy to the body
(iii) Fat	(c) Make cells soft and flexible
(iv) Water	(d) Protect the soft organs

a) (i) - (d), (ii) - (a), (iii) - (b), (iv) - (c)

b) (i) - (b), (ii) - (a), (iii) - (d), (iv) - (c)

c) (i) - (b), (ii) - (c), (iii) - (d), (iv) - (a)

d) (i) - (b), (ii) - (a), (iii) - (c), (iv) - (d)

18. Which of the following is most helpful in reducing friction?

[1]

a) Wearing shoes

b) Running slow

c) Applying greater force

d) Lubrication

### Section B

#### Attempt any 5 questions

19. State the amount of blood pumped in one ventricle beat.

[2]

20. Enlist the Fat Soluble Vitamins?

[2]

21. What do you understand by the Ardha Matsyendrasana?

[2]

22. Define aggression.

[2]

23. What is the usefulness of back scratch test for senior citizens?

[2]

24. What is law of reaction?

[2]

### Section C

#### Attempt any 5 questions

25. What is 'Bye'? What is the method of fixing Byes?

[3]

26. Explain the type of aggression in sports.

[3]

27. Discuss the advantages of physical activities for children with Special needs.

[3]

28. What is circuit training?

[3]

29. Elaborate the procedure and benefits of Tadasana.

[3]

30. Enlist two types of coordinative ability.

[3]

### Section D

31. Read the text carefully and answer the questions:

[4]

The Ganga school teams have started the practice for Basketball Cluster Tournament. One day the school secretary visited the playground and watched the practice session. He felt that the players were weak. After discussion with the coach, he arranged a dietician to rectify the players' requirements.



- (i) Which types of the nutrients are advisable for the player?
- (ii) It is recommended to drink \_\_\_\_\_ of water daily.
- (iii) Vitamins are called \_\_\_\_\_.
- (iv) What is a major component of a pre-competition diet?

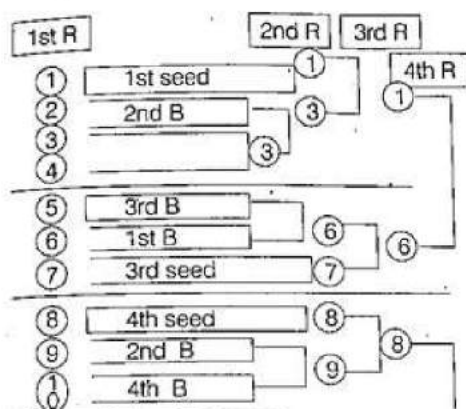
OR

Glucose, Fructose, Lactose are \_\_\_\_\_.

32. Read the text carefully and answer the questions:

[4]

Below given is the Tournament fixture procedure of a CBSE National Football competition.



- (i) What is the number of Non-Seeded Teams in the Tournament?
- (ii) The provision which places good teams in separate halves or pools so that they do not play with other good teams at earlier Rounds is known as \_\_\_\_\_.
- (iii) Which is not a Seeded Team?
- (iv) The formula for calculating number of matches in Round Robin tournament are where N is number of teams is \_\_\_\_\_.

OR

Total number of matches will be \_\_\_\_\_.

33. Read the text carefully and answer the questions:

[4]

Study the picture given below:



- (i) Both the tests shown in the picture are conducted to check \_\_\_\_\_ fitness.
- (ii) The height of the bench used in the first picture is \_\_\_\_\_ cm for women.
- (iii) Who developed the test shown in the first picture?
- (iv) What is the name of the test shown in the second picture?

### Section E

#### Attempt any 3 questions

- 34. Explain five strategies to make physical activities accessible for children with special needs. [5]
- 35. What are the main causes of bad posture? [5]
- 36. Elaborate any three physiological factors determining endurance. [5]
- 37. What is friction? Is it advantageous and disadvantageous in the field of games and sports? [5]



# SOLUTION

## Section A

1. (b) Helpfulness

**Explanation:** Helpfulness is not a part of the big five personality traits.

2. (a) Mandukasana

**Explanation:** Mandukasana

3. (d)



**Explanation:**



4. (a) Isokinetic

**Explanation:** Swimming is one of the most important examples of Isokinetic exercise.

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

**Explanation:** Both A and R are true but R is not the correct explanation of A.

6. (c) Soft Tissue Injury

**Explanation:** Soft Tissue Injury means damage to soft tissues like tendons and ligament.

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

**Explanation:** Both A and R are true and R is the correct explanation of A.

8. (b) Kraus-Weber Test

**Explanation:** Kraus-Weber Test involves a series of exercises that measure minimum strength and flexibility of the back, abdominal, psoas and hamstring muscles.

9. (b) Height

**Explanation:** Height

10. (c) A is true but R is false.

**Explanation:** It is done just because of that stronger teams do not meet each other in first round of any knockout tournament.

11. (c) Persona

**Explanation:** Personality is derived from the latin word "persona".

12. (c) 18.5-24.9

**Explanation:** According to WHO criteria the healthy BMI range of a person is in between 18.5-24.9.

13. (b) (a) - (iii), (b) - (i), (c) - (iv), (d) - (ii)

**Explanation:** (a) - (iii), (b) - (i), (c) - (iv), (d) - (ii)

14. (a) Cyclic method

**Explanation:** Cyclic method

15. (c) (i) - (b), (ii) - (c), (iii) - (d), (iv) - (a)

**Explanation:** (i) - (b), (ii) - (c), (iii) - (d), (iv) - (a)

16. (c) hunger

**Explanation:** Hunger is a biological need of a person. It exists in all humans.

17. (b) (i) - (b), (ii) - (a), (iii) - (d), (iv) - (c)

**Explanation:** (i) - (b), (ii) - (a), (iii) - (d), (iv) - (c)

18. (d) Lubrication

**Explanation:** Lubrication helps in reducing friction.

### Section B

19. The amount of blood pumped into the aorta with every heart beat is known as the stroke volume. In an untrained male, it is 70 mL /beat to 90 mL /beat.

20. The Fat soluble vitamins are A, D, E and K.

21. Ardha Matsyendrasana, a seated twist pose, is the ninth of the 12 basic poses in Hatha yoga. The name for this asana is derived from the Sanskrit, Ardha, meaning "half"; Matsya, meaning "fish"; Indra, meaning "king"; and asana, meaning "pose."

22. Aggression is a behavior with a goal harming or injuring another being to avoid such treatment.

23. The usefulness of the back scratch test for senior citizens is to assess the upper body flexibility, particularly the shoulder. This is important in performing various items of daily routine like combing one's hair, putting on garments requiring to be worn from over the head, reaching for a seat belt etc.

24. Law of reaction: According to this law 'For every action there is an equal and opposite reaction.'

### Section C

25. Bye: Bye is a privilege given to a team by drawing lots, exempting it from playing match in the first round. While drawing the fixture for teams competing if the number of teams is power two i.e.,  $2^2$ ,  $2^3$ ,  $2^4$ ,  $2^5$ , or 2, 4, 8, 16, 32, in that case Bye shall not be given.

Another case: When number of teams competing is not in the power of two i.e., 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17 etc, Byes have to be given to a specific number of teams or players.

Bye= Next highest power of 2 - No. of teams

Method of fixing byes:

(i) First Bye shall be awarded to last team of the lower half.

(ii) 2nd bye to the 1st team of first half.

(iii) 3rd bye to the upper most team of lower half.

(iv) 4th bye to the lower most team of first half.

(v) The rest are awarded in the same order.

26. There are two types of aggression in sports

1. Hostile aggression: Hostile aggression is inflicting or causing harm whether it is physical or psychological on someone else. It is sometimes referred to as reactive aggression and can be accompanied by anger. In hostile aggression, the main aim is to cause injury to another person. The intention is on causing pain and suffering.

2. Instrumental aggression: Instrumental aggression is displaying aggressive behavior in pursuit of a non-aggressive goal. It is also known as channeled aggression is not accompanied by anger. Instrumental aggression is behavior that has the intent to hurt in order to achieve money, praise or victory.



3. Assertive behavior: Assertive behavior is a different type of aggression/aggressive behavior. This is defined as behavior that involves the use of legitimate physical or verbal force to achieve one's purpose. In Assertive behavior, the intention is to establish dominance rather than to harm the opponent.
27. The advantages of physical activities for children with Special needs are:
- Reduced level of anxiety, stress and depression:** physical activities may help in reducing the level of anxiety, stress and depression of children with disabilities.
  - Improved social interaction:** physical activities provide ample opportunities for improving the social interaction among children with special needs. Social relations are developed during involvement in physical activities.
  - Better emotional and psychological health:** physical activities are beneficial for children with special needs because such activities improve psychological and emotional health.
  - Cognitive benefits:** physical activities lead to cognitive skill improvement in children with disabilities. These activities allow them to discover and access strengths that cannot be challenged in the classroom setting.
28. In this training method in which certain exercise of various kind are performed with or without apparatus with given dosage. It was developed by —Adamson and Morgan in 1957. This is considered for the development of —strength & Endurance. Circuit training method is a scientific method which is based on over coming various exercises at once. It is meant for to develop strength & endurance. It is an off-season training method. It is a form of body conditioning or resistance training using high-intensity aerobics. It targets strength building and muscular endurance. An exercise "circuit" is one completion of all prescribed exercises in the program. When one circuit is complete, one begins the first exercise again for the next circuit.
29. Procedure of Tadasana: Stand up in attention position. Lift your arms upwards. Stretch your hands upwards. Raise your heels, and come on your toes. Also pull up your body upwards. After some time breathe out slowly and come to the previous position. Repeat the same exercise for 10 to 15 times.
- Benefits of Tadasana:
1. It is helpful in developing physical and mental balance.
  2. It reduces obesity.
  3. It cures constipation.
  4. It cures digestive problems.
  5. It improves body posture.
  6. It alleviates sciatica.
  7. It is an excellent asana for those who want to enhance their height.
  8. It is beneficial in treating hypertension.
30. Orientation ability- It is the ability to determine the position of body & its parts in time & space in relation to gravity. It depends on functional capacity of sensory organs like eyes & other sense organs. Reaction ability-It is the ability to react immediately to a signal. They are of two types as simple reaction & complex reaction.

#### Section D

31. Read the text carefully and answer the questions:

The Ganga school teams have started the practice for Basketball Cluster Tournament. One day the school secretary visited the playground and watched the practice session. He felt that the players were weak. After discussion with the coach, he arranged a dietician to rectify the players' requirements.



- (i) Carbohydrates are the main source of energy in all activities performed by an organism. The elements of carbohydrates are carbon, hydrogen and oxygen. Their primary function is to provide energy to the body, especially to the brain and nervous system.
- (ii) 2-3 litres  
Water is non-nutritive but essential component of diet. It is the main component of blood that carries nutrients to various cells in the body, regulates the body temperature and is significant in the excretion of waste products. It also helps in keeping the skin moist and protect the body from shock. Due these reason 2-3 litres water is required for body.
- (iii) Protective food  
Vitamins are compounds of carbon which are essential for the normal growth and working of the body. They are required in very small quantities. Many of them can be stored in the body for months or even years but others need to be freshly absorbed every day.
- (iv) Carbohydrates are required before competitions because it fills our body with energy and improves our performance level.

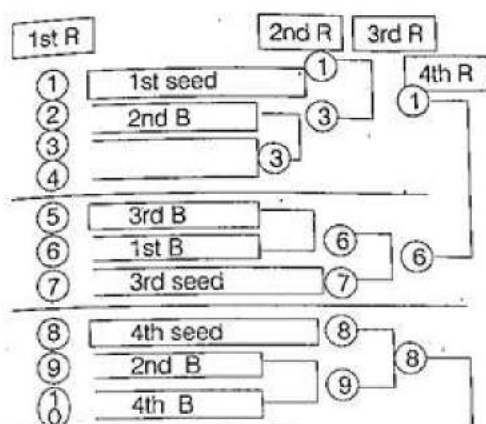
OR

Glucose, fructose, galactose, sucrose, maltose and lactose are called simple carbohydrates. They are soluble in water and are crystalline. They are sweet in taste and are called as sugar.

**32. Read the text carefully and answer the questions:**

Below given is the Tournament fixture procedure of a CBSE National Football competition.





(i) 09, In the given question, 9 teams are not seeded team and one team is seeded team. Seeded team do not play the match in the preliminary or first round.

(ii) Seeding method

Seeding method is a type of provision in which teams are separated in such a way that they do not play with other good teams in the initial rounds. This is done so that good teams play in quarter final, semi final and final rounds.

(iii) Team 10,

From the given option, team no. 10 is not a seeded team. Seeded teams do not play the match in the initial rounds of a tournament.

(iv)  $\frac{N(N-1)}{2}$

The formula for calculating the number of matches in Round Robin tournament is  $\frac{N(N-1)}{2}$ . N is the number of teams participating in the tournament.

OR

Total numbers of matches will be 34. As formula for total number of matches is : total number of teams (N-1).

### 33. Read the text carefully and answer the questions:

Study the picture given below:



- Both the tests shown in the picture are conducted to check **cardiovascular** fitness.
- The height of the bench used in the first picture is **45 cm** for women.
- The test shown in the first picture was developed by Brouha.
- The name of the test shown in the second picture is Rockport Test.

### Section E

#### 34. Strategies to make physical activities accessible for children with special needs

1. Medical check-up: if we want to make physical activities accessible for the children with special needs, we need to understand the type of disabilities of children and for this purpose complete medical check-up of the children is required. Because without a complete medical check-up, the teachers of physical education cannot come to know about the type of disability child is facing.



2. Activities based on interests: Physical activities must be based on interest, aptitudes, abilities, previous experience and limitations of children with special needs. The teachers of physical education should have deep knowledge of limitations, interest, and attitudes of children.
  3. Different instructional strategies: A variety of different instructional strategies such as verbal, visual and peer teaching should be used for performing various types of physical activities. By this children get the opportunity to learn by their own and become independent.
  4. Modification of rules: Rules can be modified according to the needs of the children. They can be provided with extra time or attempt to perform physical activity.
  5. Specific environment: For special needs children the area should be limited. In the case of children who have autism, they must be provided in a specific area because they may need some time to relax.
35. Causes of bad posture are:
- i. Injury: When bone, ligaments or muscle is injured, it weakens the support to that part. Because of the injury, faulty posture may continue for a long time.
  - ii. Disease: Disease causes the joints to lose their strength and mobility. Diseases causes partial or complete loss of function in certain muscle groups. This upsets the body control and balance which may cause deformed posture.
  - iii. Habit: One must be conscious while sitting, standing or walking. We neglect our movements in casual position and it becomes a habit which causes poor posture. This may be wrong habit of studying, lying, sitting, etc.
  - iv. Heredity: Defects like kyphosis and other genetic defects may cause poor posture.
  - v. Malnourishment: An improper diet results in various diseases due to deficiency of Vitamins and Minerals.
  - vi. Overload: Overload may develop round shoulders and problem in spine by continuously lifting heavy load on shoulders.
  - vii. Lack of exercise: Exercise tones up spinal nerves, improves coordination and reduces mental strain, improves physical ability and efficiency. Lack of exercise leads to postural deformity.
  - viii. Obesity: Overweight puts extra stress or strain on the muscular as well as Skeletal structure of the body which may results in postural deviations.
36. Aerobic capacity:-
- i. oxygen intake
  - ii. oxygen transport
  - iii. oxygen uptake
  - iv. Energy reserves,
  - v. Lactic acid tolerance,
  - vi. Movement economy,
  - vii. Muscle composition
- Oxygen Uptake:- It is highest rate at which oxygen can be taken up and consumed by the heart per minute.
- Cardiac Output: - The cardiac output is simply the amount of blood pumped by the beat per minute.
- Hydration and Endurance Exercise: - Sweating is normal physiological response to

prolonged exercise, required for the dissipation of heat produced during energy metabolism.

37. Friction is the force acting along two surfaces in contact which opposes the motion of one body over the other. It has very importance in sports. For example, when a cricket ball or hockey ball is hit, it moves very fast in the direction of force in the ground. After sometimes its motion becomes less and ultimately it comes in static position.

#### **Advantages**

Friction has a great significance in the field of sports. Many sports require more friction and others need lesser friction. In some sports we cannot give a better performance without friction. For example, in athletics, the shoes are designed to increase friction so that better speed can be generated. The spikes have small nails to create the friction. Gymnasts sometimes use lime on their palms to perform on horizontal bar, uneven bars to increase friction. In these sports friction is necessary thus regarded as advantageous.

#### **Disadvantages**

On the other hand, some games do not require friction. For example, the games like snow skiing. The skins are designed to have minimum friction. In cycling, there should not be more friction between road and tyres of the cycle. Thus the tyre should be fully inflated to reduce the force of friction. If there is more friction, it will be more wastage of energy of the cyclist. Moreover, the cyclists use pointed helmets, silk body fitted costume and bend their bodies while cycling to reduce air friction. Swimmers use goggles, cap and full body swimsuit to reduce the force of friction caused by water. In roller skating, less friction is also needed for better performance. Thus in these games friction is regarded as disadvantageous.