

CBSE Class 12
Physical Education
Previous Year Question Paper 2018

Set- 4

Code no. 75

- Please check that this question paper contains **7** printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains **26** questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minutes of time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer script during this period.

PHYSICAL EDUCATION

Time Allowed: **3** hours

Maximum Marks: **70**

Instructions:

1. There are **26** questions in all.
2. **All** questions in both the sections are compulsory.
3. Marks for questions are indicated against each question.

4. Questions 1- 11 carry 1 mark each and should not exceed 10 – 20 words.
5. Question 12 – 19 carry 3 marks each and should not exceed 30 – 50 words.
6. Question 21 – 26 carry 5 marks each and should not exceed 75– 100 words.

1. What do you mean by ‘Seeding’? 1 Mark

Ans: Seeding is the Strong teams/players are selected in order to keep them at proper places in the fixture so that they do not encounter in the earlier stages. The organizers must be fully informed of the teams' prior performance in order to pick strong teams.

2. What do you mean by food intolerance? 1 Mark

Ans: Food intolerance refers to a person's inability to effectively digest certain foods. Nausea, vomiting, acidity, stomach discomfort, and other symptoms are among them.

3. What is the main physiological cause of Asthma? 1 Mark

Ans: Airway constriction and consequent airflow obstruction are the physiological causes of asthma.

4. What is Attention-Deficit/Hyperactivity Disorder (ADHD)? 1 Mark

Ans: It's a neurological disease characterized by inattention, hyperactivity, and impulsivity. It's a medical disease that impairs a person's ability to sit still, concentrate, and pay attention.

5. What do you mean by Congenital Deformity? 1 Mark

Ans: Congenital deformity refers to a deformity that is present at birth in a kid.

6. What is Bulimia ?

1 Mark

Ans: Bulimia is an eating disorder in which a person consumes a large amount of food in a short period of time. To manage body weight, people with bulimia use a number of strategies to make up for the extra calorie intake, including vomiting, fasting, and extreme activity.

7. Explain the meaning of cardiac output.

1 Mark

Ans: The cardiac output is the quantity of blood pumped by the heart in one minute. It is measured in liters/min and is a product of stroke volume and heart rate.

8. What type of sports injury can be termed as ‘Laceration’ in sports? 1 Mark

Ans: Laceration is an uneven laceration on the skin caused by a sharp instrument or sports equipment with sharp edges.

9. Which field of study in sports is called ‘Biomechanics’?

1 Mark

Ans: Internal and external forces, as well as their consequences on a living system or athlete, are studied in biomechanics.

10. What do you mean by the term ‘Aggression’ in sports?

1 Mark

Ans: Aggression in sports refers to the purpose to damage or injure a player outside of the laws of the game in order to obtain a competitive advantage, such as late tackling to prevent an opponent from scoring.

11. What is coordinative ability?

1 Mark

Ans: The capacity of the body to bring together diverse parts of a complicated action into an effective connection is known as coordination.

12. What are the advantages and disadvantages of food supplements for adolescents? Write briefly. 3 Marks

Ans: Advantages of food supplements for adolescents are:

1. Play an important part in the appropriate development and growth.
2. Booster of energy.
3. Improved athletic performance.
4. Immunity is boosted.
5. Disease and illness prevention.
6. Short-term health advantages

Disadvantages of food supplements for adolescents are:

1. Digestive issues can be caused by an excess of iron and magnesium.
2. If taken in excess, it might cause diarrhea, tiredness, and nerve damage.
3. It's possible that there will be negative consequences.
4. If the body does not require fat-soluble vitamins, they accumulate in the fat cells.
5. Supplements are less nutritious than whole foods.

13. Sushant was a good athlete. He used to practice regularly to achieve a position at the State level. But he could not get success. He got frustrated with his poor performance and started misbehaving with his teachers and friends in school. Due to depression and anxiety, he started taking drugs. The Principal counseled Sushant and called his parents.

They took him to a rehabilitation center for treatment. After a few months, he recovered and came back home.

On the basis of the above passage answer the following questions: 3 Marks

(a) Do you think that consuming drugs is a solution to emotion-focused problems?

Ans: No, using drugs is not a way to solve emotional difficulties, failure, or bad performance.

(b) What values are shown by the Principal?

Ans: The Principal is well-versed in the psychology of children. He had exhibited patience. Instead of insulting or criticizing Sushant, he concentrated on determining the root of the problem and devising the best remedy.

(c) What should be the attitude of the teachers and the parents after his recovery?

Ans: Teachers and parents should encourage Sushant to achieve his objectives. They should make an effort to persuade him that success comes after failure. As a result, he must work hard and demonstrate himself in front of everyone.

14. What are the types of disability? Explain briefly. 3 Marks

Ans: The following are types of disabilities:

- 1. Cognitive disability:** Anyone with lower-than-average intellectual performance is classified as having a cognitive impairment. A person with cognitive impairment has difficulty completing mental activities that an ordinary person can do.
- 2. Intellectual impairment:** Intellectual impairment is defined as a condition in which one's intellectual functioning (such as learning, problem-solving, and judgment) and adaptive behavior are severely limited (activities of daily life such as communication). This condition begins before the age of eighteen.

3. **Physical disability:** A physical disability is the loss or impairment of a portion of the body's physical function over time. It can cause problems with walking and movement, sitting and standing, hand and arm usage, vision, hearing, speech, muscle control, and so on.

15. What are the major muscles involved in running, jumping, and throwing? Explain. 3 Marks

Ans: The major muscles that are involved in running, jumping, and throwing are mentioned below:

1. The primary muscles involved in the running are the gluteus maximus, quadriceps, calves, and hamstrings. The glutes muscles help to keep the hips and legs in place. The quads drive you forward and assist in straightening up the front leg so that it can make excellent contact with the ground. Calves muscles function as a shock absorber and create spring motion in the steps. The hamstrings assist in dragging the leg back behind you as you move forward.
2. Jumping involves the leg, foot, and gluteus muscular groups. The gluteus maximus, hamstrings, quadriceps, and soleus muscles are all involved in leaping.
3. The pectoralis major, latissimus dorsi, anterior deltoid, and teres major are all involved in throwing. During the throw, these muscles are primarily responsible for velocity.

16. Keeping in view the Indian ideology, critically analyze the sociological aspect of participation by women athletes in sports. 3 Marks

Ans: The following are sociological elements of female athletes' engagement in sports:

1. **Family:** It is a highly important social element that is considered to play a role in early sports socialization. Males are often given greater encouragement and assistance to participate in sports. Females, on the other hand, are not

encouraged to participate in sports. Females are exclusively encouraged to participate in feminine sports, according to some sports sociologists. The majority of parents feel that their girls should not participate in sports. On the other hand, some parents see the importance of sports and make every effort to encourage their girls to engage in them.

2. **School:** If parents do not put pressure on their children to participate, it may come from coaches, classmates, and, most importantly, teachers, who are the major driving factors in the educational sector. School is crucial because it shapes the lives of our growing teens. There is still discrimination in certain schools as to whether gender (male/female) should participate in games. Many schools, in fact, do not offer volleyball or football teams for girls. Whether girls are encouraged or not depends on the school.
3. **Culture:** It has been observed that cultural beliefs can have an impact on the progression of certain aspects of life. In reality, societal beliefs have a significant influence on female participation in sports. Sports involvement is seen as a masculine activity, thus female participation is frowned upon.
4. **Society's attitudes and prejudices:** Some women shun particular sports for fear of being considered masculine. Female participation is hampered by such attitudes and prejudices in society surrounding sexuality.

17. What do you understand about 'First Aid'? Discuss briefly about the aims and objectives of First Aid. 3 Marks

Ans: The urgent treatment offered to an injured or ill individual is known as first aid. It is not a substitute for adequate medical care. It's only a stopgap measure until you can get proper medical help.

Aims and Objectives: The most obvious goal of first aid is to save a person's life before seeking medical care. The goal can be summarised using the five Points:

1. Keep life alive.
2. Keep the unconscious safe.
3. Stop an injury or illness from getting worse.

4. Encourage recovery.
5. Obtain medical assistance.

If a life-threatening emergency arises, the first responder should be aware of how to keep the victim alive. A casualty should be kept out of harm's way and placed in a position where their injury or illness will not worsen. In order to prevent complications from forming from the casualty's injury or illness, the casualty's injuries or illness should be addressed.

18. Mention briefly about the common sports injuries and their prevention.

3 Marks

Ans: The most common sports injuries are categorized into three categories:

1. Injuries to the soft tissues
2. Injuries to the bones
3. Injuries to the joints

Soft tissue injuries include:

1. Contusion
2. Strain
3. Sprain
4. Abrasion
5. Bruises

Bone Injuries include:

1. Simple fracture
2. Compound fracture
3. Complicated fracture

4. Comminuted fracture
5. Impacted fracture
6. Greenstick fracture

Joint Injuries include:

1. Dislocation of the lower jaw
2. Dislocation of shoulder joint
3. Dislocation of Hip joint
4. Dislocation of wrist

Some of the preventions measures are:

1. Use of sporting equipment and gear that is correctly suited.
2. To stay healthy and avoid cramps, drink plenty of water.
3. Warm-up and cool-down routines should be followed.
4. Perform a pre-season health and wellness assessment.
5. Conditioning of the body.
6. Techniques should be used correctly.
7. A well-balanced diet and sufficient relaxation are essential.

19. Explain the “Eight Foot Up and Go” test for measuring agility and dynamic balance. 3 Marks

Ans: The 'eight-foot up and go' exam is a coordination and agility test for senior citizens. The goal of this exam is to determine how fast, agile, and balanced you are when moving. This test's protocol is as follows:

1. Place the chair against a wall and make a mark 8 feet in front of it.
2. The patient begins by sitting fully, hands on knees, and feet flat on the ground.

3. On the order "GO," the subject stands and walks around the cone as rapidly as possible (no running), then returns to the starting position and sits in the chair.
4. The timer stops as soon as the person sits down.
5. Carry out two trials.
6. The score is based on the faster of the two trials, rounded up to the closest 1/10th of a second.

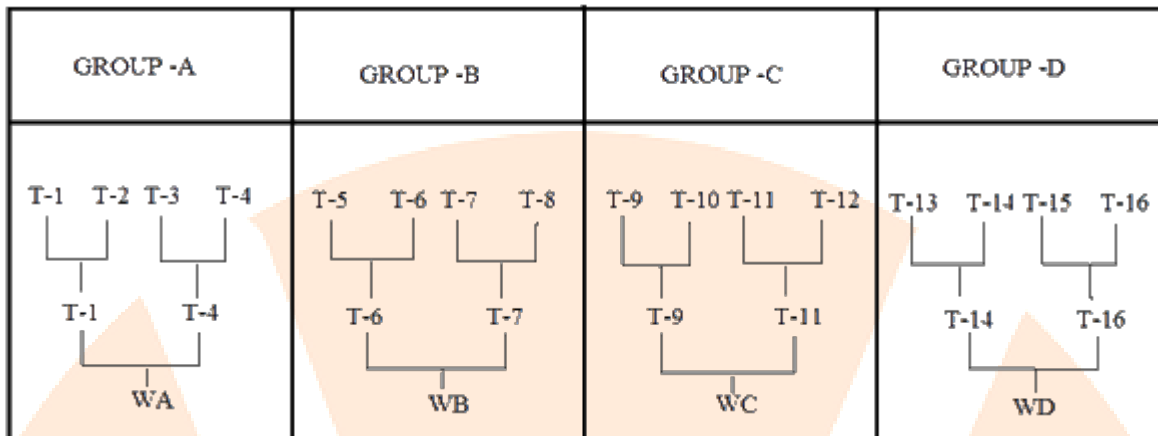
Agility and dynamic balance improve with regular exercise.

20. Define Combination Tournament. Draw a fixture of 16 teams using Knock-out cum League Method. 5 Marks

Ans: Combination tournaments are ones in which the first round is played on one basis (knock-out or league) and the rest of the tournament is played on another basis.

1. Knock out cum knock out
2. League cum League
3. Knock out cum League
4. League cum Knock out

The fixture of Knock-out cum League Tournament: Divide the number of teams into four groups, then have them compete against each other in a knock-out tournament, with the winners from the four groups competing in a league tournament. One team will be declared the winner.



The winners of each group (WA, WB, WC, and WD) will advance to the League Tournament. In addition, each team in the League Tournament competes against the other team once. The team that wins the most matches with the most points is crowned the tournament winner.

Four Teams

- (1) WA Vs WB — Winner WA — 2 Points
- (2) WC Vs WD — Winner WC — 2 Points
- (3) WA Vs WC — Winner WA — 2 Points
- (4) WB Vs WD — Winner WD — 2 Points
- (5) WA Vs WD — Winner WA — 2 Points
- (6) WB Vs WC — Winner WC — 2 Points

Final Points Tally

WA $\Rightarrow 2 + 2 + 2 = 6$ Points

WB $\Rightarrow 0 = 0$ Points

WC $\Rightarrow 2 + 2 = 4$ Points

WD $\Rightarrow 2 = 2$ Points

Here WA winning 3 matches with 6 points is the winner.

21. What are the causes of back pain? Explain the procedures, benefits, and contra-indications of two asanas recommended to cure back pain. 5 Marks

Ans: Back pain is caused by a complex network of muscles, ligaments, tendons, discs, and bones in the human back. Back discomfort can be caused by a problem with any of these components. Back discomfort is most commonly caused by

strained muscles, strained ligaments, and muscle spasms, which can occur as a result of:

1. Body posture that is incorrect
2. Attempting to lift something that is too heavy

Regular exercise, improving posture, and performing proper asanas such as Tadasana and Bhujangasana can help to relieve back discomfort.

- **Tadasana**

Tadasana (mountain pose) is an asana in which the stance resembles that of a mountain.

- 1) **Procedure:** Standing straight with your thighs slightly apart and your hands hanging across your body. As you lift your inner ankles, strengthen the inner arches. Take a slightly upward gaze. Inhale deeply and lift your shoulders, arms, and chest to the sky. Raise your heels and make sure you're standing on your toes. For a few seconds, hold the stance. After that, breathe and let go.
- 2) **Benefits:** It aids in the development of physical and mental equilibrium, as well as improving body posture.
- 3) **Contraindication:** If someone has a strong migraine, sleeplessness, or low blood pressure, it is better to avoid this stance.

- **Bhujangasana**

Bhujangasana is a basic Hatha pose that strengthens the upper back and shoulders.

- 1) **Procedure:** Lie completely flat on your stomach. Place your hands to the side and make sure your toes are touching. Then, with your hands in front of you, shift your weight to your palms. Take a deep breath and elevate your head and trunk. Your hips, thighs, and feet should all be pressed to the floor. Hold the stance for 15 to 30 seconds before slowly bringing your hands back to your sides to release it.

2) **Benefits:**

- It strengthens and stretches the spine.
- It stretches the lungs, shoulder, chest, and abdomen.

3) **Contraindication:** If you have a hernia or have had a back injury, you should avoid doing this asana. In any event, pregnant women should avoid this stance.

22. Describe exercise guidelines at different stages of growth in children. Give suitable examples for every stage. 5 Marks

Ans: Examine the following guidelines at various phases of development: Growth is a physiological shift that causes the infant to develop in size and weight. Development is a never-ending process. Individual differences and activity specificity should be considered because each person is unique.

1. **Infant activity (0–2 years):** The growth pattern at this age involves control over large muscles. In this stage, a clean, safe, and sanitary environment is required. The activities must be done under the supervision of parents and guardians at this young age. Balance practice, walking, and hearing from all directions are the most important exercises for this young age.
2. **Early childhood activity (3–8 years):** The pattern involves control over tiny muscles and bone development during this era of development. At this time, the atmosphere must be clean and safe, and parents and instructors must conduct proper checks. Running, throwing, and other sports are suggested. To avoid injuries, parents should ensure that he or she does not fall to the ground.
3. **Later childhood activities (8 to 12 years):** This stage is marked by flexibility and coordinated growth activity. During this stage of development, high-quality equipment and safety precautions should be considered. It's important to check for bad habits. 100-meter races, hanging from horizontal bars, cricket, football, tennis, judo, karate, and other sports are suggested.

23. Write in detail about the various test items and their administration of the American Alliance for Health, Physical Education and Recreation (AAHPER) Test. 5 Marks

Ans: The AAHPER is the acronym for the American Alliance for Health, Physical Education, Recreation. AAPER was established in 1965, and it resulted in the collecting of a wide range of records or data, as well as the revision of national regulations. This test battery includes the following test items.

1. Pull-ups (for boys) or flexed arm hangs (for girls).
2. Sit-ups to a maximum of 50 (for girls) and 100 for boys.
3. Shuttle Run.
4. Standing Broad Jump.
5. 50-yard dash.
6. Six hundred yard run/walk.
7. Softball throw for distance.

The AAHPER Youth Fitness Test was amended again in 1976, with the following changes:

1. The softball throw test was removed from the list.
2. The test was changed from a fixed number of straight leg sit-ups to 60 seconds of bent knee sit-ups.
3. Individuals might choose between a 600-yard run/walk, a 9-minute run/walk, or one mile (for ages 10-12) run/walk, resulting in a 12-minute run/walk (for ages 13 and above). Following items were finalized in this test battery after the revision of the AAHPER Youth fitness exam in 1976 or 1.5-mile run/walk.
4. Pull-ups (for boys) flexed arm hang (for girls)
5. Bent knee sit-ups
6. Shuttle sum

7. Standing board jump
8. 50-yard dash
9. 600 yard or 9 min run/walk

Pull-ups

1. **Purpose:** The goal of this test is to determine arm and shoulder strength.
2. **Procedure:** The boy's height is taken into account when adjusting the bar. His palms are facing away from him while he holds the bar. He is then instructed to elevate his body to the point where his chin is level with the bar. Each pull-up receives a single point. Before the test begins, one trial is provided.

Flexed Arm Hang (for girls)

1. **Purpose:** The goal of this test is to determine arm and shoulder strength.
2. **Procedure:** The girl's standing height is taken into account when the bar is adjusted. The bar is grasped with both hands. With the help of testing staff, the girl raises her body to the point where her chin reaches the bar. Her score is determined by the number of seconds she holds the bar.

Flexed leg sit-ups:

1. **Purpose:** The goal of this test is to determine abdominal strength and endurance.
2. **Procedure:** The adolescent is requested to lie on his or her back on the floor with his or her knees bent. Knees should be bent at a 90-degree angle. The partner holds the youth's feet as the youth places his hand behind his head, fingers intertwined. The young man then rolls up and touches his elbows on his knees. The score is determined by the number of sit-ups completed in 60 seconds.

Shuttle Run :

1. **Purpose:** The goal of this test is to determine how fast and agile you are.

2. **Procedure:** Two parallel lines 30 feet apart are established, and two wooden blocks are kept on one side of each designated line. The adolescent stands behind the line directly across from the line where the wooden blocks are set. When the start signal is given, a young person rushes over to the wooden blocks and takes up one of them, taking it to the starting line. The youngster then sprints and lifts the other block to the starting line in the same manner.

Standing Broad Jump:

1. **Purpose:** The purpose is to measure power.
2. **Procedure:** The teen is instructed to stand behind the restraining line with his or her feet apart, bend his or her knees, and swing his or her arm before jumping. The adolescent lands on both feet at the same time. Inches are used to measure the distance from the take-off line to the heel. The final score is based on the best of three trials.

50-yard dash:

1. **Purpose:** The purpose is to measure speed.
2. **Procedure:** The teen is asked to sprint 50 yards and the timing is recorded to the closest tenth of a second.

600-yard run/walk:

1. **Purpose:** To measure endurance
2. **Procedure:** The kid is instructed to run/walk for 600 yards while recording their time in minutes and seconds.

24. What are the long-term effects of regular exercise on the cardiovascular system? Explain. 5 Marks

Ans: Long term effects of regular exercise on the cardiovascular system:

1. **Cardiac output rises:** As a result of frequent exercise, cardiac output tends to rise.

2. **Resting heart rate decreases:** The resting heart rate lowers as a result of regular activity. After a 10-week training program, the resting heart rate may drop by up to 10 beats per minute, compared to the normal 72 beats per minute.
3. **Stroke volume increases during rest:** In untrained persons, the stroke volume at rest can be as low as 50-70 ml/beat, whereas, in trained individuals, it can be as high as 70-90 ml/beat.
4. **Blood volume increase:** Regular exercise causes blood volume to increase. In fact, as the volume of blood increases, so does the volume of plasma. In addition, the body creates more red blood cells.
5. **Blood flow increases:** As a result of the need to give more oxygen to the muscles during activity, the body expands its capillary network. Capillaries that already exist open wider as well.

25. What is aerodynamics? Describe the various forces of aerodynamics.

5 Marks

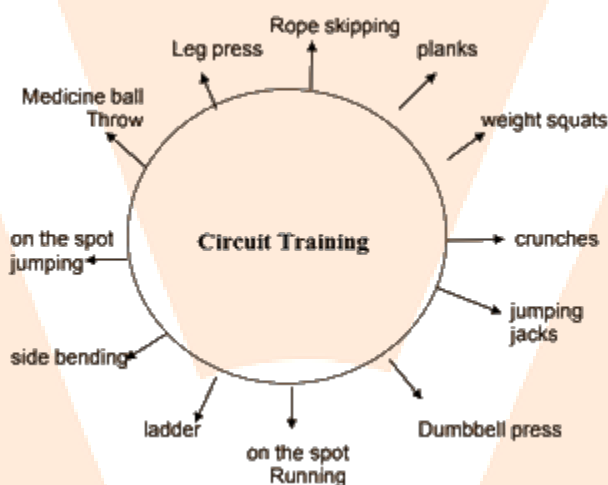
Ans: Aerodynamics is derived from the Greek words aero, which means air, and dynamics, which means motion. As a result, aerodynamics refers to the study of air movement as a whole. It's the way air circulates around objects. Aerodynamics, in simple terms, is concerned with the flow of air around a projectile, which can affect the object's speed and direction.

Aerodynamic fundamental forces are:

1. **Lift or air resistance:** The force that pushes the thing upward.
2. **Weight/Head Wind:** This is the force created by the earth's gravitational attraction.
3. **Drag/Tail Wind:** This is a force that attempts to slow down an object.
4. **Thrust:** The force that acts in the opposite direction of drag.

26. What is circuit training? Draw a diagram of 10 stations to improve general fitness. How can the load be increased in circuit training? 5 Marks

Ans: Circuit training is a type of structured training in which an athlete completes a set of exercises arranged in a circuit with 5 to 10 stations. Several exercises are performed one after the other in circuit training. One round is defined as the completion of one set of each exercise in rotation. It was created in 1953 by GT Anderson and RE Morgan. It is an extremely effective approach for increasing strength, speed, and endurance.



(write any 10)

The load can be increased in circuit training in different ways:

1. The number of repetitions of each exercise can be increased.
2. Frequency can be increased.
3. The additional load can be increased.
4. The time between workouts can be shortened.
5. It is possible to increase the number of rounds.