CBSE Class 12 Physical Education

Sample Paper 03 (2020-21)

Maximum Marks: 70

Time Allowed: 3 hours

General Instructions:

i. The question paper consists of 30 questions and all are compulsory.
ii. Question 1-12 carries 01 mark each and are Multiple Choice Questions.
iii. Questions 13-16carry 02 marks each and shall not exceed 40-60 words.
iv. Questions 17-26 carry 03 marks each and shall not exceed 80 -100 words.
v. Questions 27 - 30 carry 05 marks each and shall not exceed 150-200 words.

Section A

1. To calculate the total no of team teams is upper half for knock out tournament when total no of teams are odd, which formula is used.

   a. $\frac{N+1}{2}$

   b. $\frac{N^2+1}{2}$

   c. $\frac{(N+1)^2}{2}$

   d. N - 1

   OR

   Which of the following is NOT a type of tournament?

   a. Challenge Tournament

   b. Knockout

   c. Fixture

d. League

2. Nutrients are _____ substances present in food.

   a. Irrelevant
   b. Essential
   c. Harmful
   d. Dangerous

3. The word 'YOGA' is derived from Sanskrit word

   a. Yud

   b. Yuj

   c. Yug

   d. Yum

OR

Blood pressure is the force of blood in the arteries. When this pressure becomes abnormally high then it is called _____.

   a. Heart Attack

   b. Blood sugar

   c. Hypertension

   d. Cardiac arrest

4. Any kind of impairment or permanent reduction in the physical or mental capacity is called _____.

   a. Disease

   b. Disorder

   c. Discomfort

d. Disability

5. In this deformity, there is no arch in the foot and the foot is completely flat. It is _____.

   a. Short foot
   b. Plain foot
   c. Normal foot
   d. Flat foot

6. Which of the following is assessed by an eight-foot up-and-go test?

   a. Walking speed, Coordination and agility
   b. Physiology fitness
   c. Upper body strength
   d. Lower body flexibility

7. Bone density _____ with increasing age.

   a. Do not change
   b. Either increase or decrease
   c. Decreases
   d. Increases

OR

The amount of blood pumped into the aorta with every heartbeat is known as _____.

   a. Heart Pressure
   b. Stroke Volume
   c. Blood Pressure
   d. Blood Flow

8. Biomechanics Deals units.

a. To understand the physiology of the body

b. To understand Time & Distance concept of Various Movements

c. Muscles involved in Movement

d. Effect of force on Different Movements done by the human body

9. Which of the following in part of external motivation?

a. Hunger

b. Safety and security

c. Rewards and punishments

d. Self-esteem

10. Swimming is an example of _____ exercise.

a. Isokinetic
b. Isotonic
c. Isometric
d. None of these

11. Given below are the two statements labeled Assertion (A) and Reason (R).
A. Assertion (A): During later childhood girls are temporarily taller and heavier than boys.
B. Reason (R): Sexual maturation process begins in this period.

a. Assertion and reason both are correct statements and reason is the correct explanation for the assertion.

b. Assertion and reason both are correct statements but reason is not correct explanation for assertion.

c. The assertion is a correct statement but the reason is the wrong statement.

d. Assertion is wrong statement but reason is correct statement.

12. Maximum Carbohydrates are obtained from

    a. Fish

    b. Whole grain food

    c. Plant oil

    d. Nuts

13. Identify the below-given Asanas and write their names.

	_____
	_____
	_____
	_____

14. Identify the below-given Postural Deformities and write their names.

	_____
	_____

	_____
	_____

15. What do you understand by Physical disability?

16. What are gliding movements?

OR

What do you mean by trajectory?

17. Jatin is a weightlifter in the 96 kg category. He has to participate in a weightlifting competition next week so he takes care of his health a lot. For this, he includes all the essential nutrients in his diet. Based on this case, answer the following questions.

    i. What do you think would be the most important component of Jatin's diet?
        a. Proteins
        b. Carbohydrates
        c. Vitamins
        d. Minerals

    ii. What do you think Jatin requires the most?
        a. Flexibility
        b. Strength
        c. Speed
        d. Endurance

    iii. Which of these is known as body-building food?
        a. Calcium
        b. Proteins
        c. Minerals
        d. Vitamins

18. Sneha, a student of class 12th, is a very lazy girl. She wakes up late in the morning and also avoids physical exercises. Now, on the eve of Yoga Divas, yoga classes are arranged for the students in her school. She doesn't want to participate in that but her mother somehow convinced her explaining the benefits of yoga.
    Based on the above case, answer the following questions.

    i. The word 'Yoga' is derived from the Sanskrit word
        a. Yuk
        b. Yud
        c. Yuj
        d. Yum
    ii. June 21, 2020 was celebrated as
        a. 3rd International Yoga Day
        b. 4th International Yoga Day
        c. 5th International Yoga Day
        d. 6th International Yoga Day
    iii. Which of the following is a benefit of doing Yoga?
        a. Prevents diseases
        b. Reduces stress
        c. Improves posture
        d. All of these

19. Define Projectile and enlist the factors which affect the projectile trajectory.

    OR

    Enlist the major muscles involved in running and explain any one.

20. Explain AAHPER physical fitness test.

21. What do you understand by First-Aid? How will you manage joint injuries? Explain.

22. What is correct posture of sitting?

23. Differentiate isometric and isotonic exercises.

24. Write a brief note on bow legs and suggest few exercises for correcting this postural

deformity.

25. Suggest different ways to improve reaction ability of a player.

26. Write briefly about some considerations of fluid intake pre, during and post competition, that affect the sportsperson's performance.

OR

Discuss any three pitfalls of dieting?

27. What do you understand by a fracture? How can fractures be classified? Explain.

28. Explain the soft tissue injuries in detail.

OR

What are the aims and scope of sports medicine?

29. While specifying all calculations, prepare a 'knock-out fixture' for 17 teams.

OR

Describe the various committees for the organization of sports events.

30. Explain the administration of the AAPHER Test.

12 Physical Education Sample Paper - 03

Class 12 - Physical Education

Solution

Section A

1. (a) $\frac{N+1}{2}$

   OR

   (c) Fixture
2. (b) Essential Explanation: Essential
3. (b) Yuj. OR

   (c) Hypertension
4. (d) Disability
5. (d) Flat foot
6. (a) Walking speed, Coordination and agility
7. (c) Decreases OR

   (b) Stroke Volume
8. (d) Effect of force on Different Movements done by the human body
9. (c) Rewards and punishments
10. (a) Isokinetic
11. (b) Assertion and reason both are correct statements but the reason is not the correct explanation for the assertion.
12. (b) Whole grain food
13. i. Sukhasana
    ii. Matsyasana
    iii. Ardh Matsyendrasana
    iv. Tadasana
14. i. Lordosis
    ii. Scoliosis
    iii. Bow Legs
    iv. Flat Foot

15. Physical disability is a long-term loss or impairment of a body part that limits the

body's physical function. A person with a physical disability cannot perform many actions independently.

16. Gliding movements is the simplest kind of movement that can take place in a joint, one surface gliding or moving over another without any angular or rotator movement.

    OR

    The path followed by a projectile is called trajectory.

17. i. (a) Proteins
    Exp- Because proteins contain amino acids which help in building muscles and increases the strength necessary for weightlifting.
    ii. (b) Strength
    Exp- Because strength is the basic and most important requirement for weightlifting.
    iii. (b) Proteins
    Exp- Proteins are known as body-building food as they help in building muscles and the whole body.

18. i. (c) Yuj
    Exp- Yoga is derived from the Sanskrit word 'Yuj' which means to unite individual soul with the soul of divine.
    ii. (d) 6th International Yoga Day
    Exp- 1st International Yoga Day was celebrated on 21 June 2015.
    iii. (d) All of these
    Exp- Yoga helps in prevention of diseases, reduces stress, and also improves posture.

19. Projectile: an object thrown into space either horizontally or at an acute angle under the action of gravity is called a projectile. In the field of games and sport, there are many examples of projectiles such as putting the shot, throwing a hammer, discus and javelin in athletics. Three factors affecting projectile trajectory or parabola are follows:
    1. Angle of Projection
    2. Projection height relevant to the landing surface

3. Spin

OR

The major muscles involved in running are described below:

a. Glutes
b. Quads
c. Calves
d. Hamstrings
e. Core muscles
f. Biceps: biceps also play a vital role in running. Biceps maintain a bent arm and help in swinging your arms back and forth while running.

20. The AAHPER (American Alliance for Health, Physical Education and Recreation) youth fitness test was formed in 1965 in United States, but was revised in 1976. This test was administered to school students of 17 years of age. The students are advised to warm up before they participate in the test. All the students must be medically fit, This test has the following six items (D Pull-ups (for boys) / Flexed arm hang (for girls) to measure arm and shoulder strength.

i. Flexed leg sit-ups to measure abdominal strength and endurance.
ii. Shuttle run to measure speed and agility.

21. First aid is the assistance given to any person suffering from a sudden illness or injury, with care provided to preserve life, prevent the condition from worsening and / or promote recovery. Following are the measures to manage joint injuries

- Stop bleeding and apply pressure to the wound with a sterile bandage, a clean cloth or a clean piece of clothing.
- Immobilise the injured area and do not try to re-align the bone or push back in a bone that is sticking out. If you have been trained in how to apply splints and professionals help is not readily available, apply a splint to the area above and below the fracture sites.
- Apply icepacks to limit swelling and help relieve pain until medical help arrives. Do not apply ice directly to the skin, but wrap the ice in a towel, piece

of cloth or some other material.

22. Posture is the position in which you hold your body upright against gravity while standing, sitting or lying down. Good posture involves training your body to stand, walk, sit and lie in positions where the least strain is placed on supporting muscles and ligaments during movement or weight-bearing activities.

23. **ISOMETRIC EXERCISE**

    Isometric exercises are those exercises, which are not visible. In fact, there are no direct movements, hence they can't be observed. In these exercises, work is performed but is not seen directly. In these exercises, a group of muscles carries out tension against the other group of muscles. For example, pushing against a study wall.

    ISOTONIC EXERCISE

    The literal meaning of the word isotonic is constant tension i.e., iso means constant ant tonic means tension. In this exercise the length of muscles changes (shortens or lengthens) during action along with the tension in them. An isotonic exercise is a form of active exercise in which muscles contract and cause movement. There is no significant change in resistance throughout the movement, so the force of contraction remains constant. Such exercise greatly enhances joint mobility and helps improve muscle strength and tone.

S.NO.	Isometric Exercises	Isotonic Exercise
(i)	Less equipment required.	Sometimes equipment is required to perform them.
(ii)	In develops static strength.	It develops dynamic strength.
(iii)	It needs less time.	it needs a long time

24. Bow legs: In this postural defect lower are more common in children, adults and football players. There is an unnatural gait between knees while walking and running. The main cause of this deformity is a deficiency of calcium and phosphorus in the bones which results in the softening of the bones. In the case of football, legs

have to bear a lot of strain because of which this deformity occurs. This bending or curvature of the long bones of the legs is called Rickets.

Some corrective measures:

i. Give children extra calcium and never forces infants to make them stand or walk too early in life. Growing children automatically learn to stand or walk when their muscles and bones develop the proper strength to do so.
ii. Never stand for long hours. This puts a strain on the legs. Therefore, (avoid it).
iii. Put a pillow between the legs and try to walk.

25. Improved reaction ability is a performance prerequisite to do motor actions under given conditions m minimum time. There are two methods for improving this. They are

    1. Acceleration runs– It is the ability to increase speed from jogging to running and finally sprinting. It depends on explosive strength, the frequency of movement & to attain maximum speed from a stationary position this is practiced after learning proper technique.
    2. Pace run or races– A competitive pace race is a timed race in which the objective is not to finish in the least time, but to finish within the prescribed time and in the best physical condition. In some races, the prescribed time is very narrowly defined and the winner is the competitor who finishes closest to the prescribed time. Complete recovery is ensured between two repetitions. This means to run the whole distance of a race at a constant speed. In this, the athlete runs the race with the uniform.

26. **Fluid Intake Before or Pre Competition** Fluid intake should consist of water, sports drinks or juices. Drinking about 500 ml of liquid 2 hours before the competition is recommended. However, avoid carbonated drinks like soda etc. An exception is of consuming carbohydrates immediately prior to the start of a game in the form of a sports drink 5 or 10 minutes before competition.

    Fluid Intake During Competition During the competition, the meal mostly consists of fluids. For a competition that's less than one hour long, the main focus should be on hydration, so consume plenty of water like 180-240 ml every 15 minutes. Sports

drinks may be useful since they have electrolytes that help speed hydration and recovery. If you are exercising intensely for longer than two hours, especially in the heat, then drink fluids that contain carbohydrates and eat tight foods. During any intervals, drink upto 300-500 ml. In hot climates, try to drink 150-250 ml every 20 minutes or so. Such drinks contain 6 to 8 % of carbohydrate.

Fluid Intake After Competition After any competition, we need to pay good attention to eating and drinking right. There arises a need to replenish the carbohydrates, salts and water that are lost during the activity. Fluid consumption, containing carbohydrates, salts and water, must continue up to 5-6 hours after the activity. For rehydrating the body, drink plenty of water and fruit juices.

OR

i. **Restriction on some nutrients**: Generally, some nutrients like carbohydrates and fats are restricted in dieting. If we don't take all the nutrients in required amounts our proper functioning will be impaired.
ii. **Skipping Meals;** it is a fact that if we have good metabolic rate, we can maintain or lose weight. If it is low we gain weight very easily. So, if we skip meals, it will lower or metabolism to conserve energy.
iii. **Underestimating the calories:** It is a fact that most of the persons who go on dieting usually underestimate the number of calories they consume. So, it is essential to be more aware of the number of calories we take in our diet.

27. Fracture: Broken or cracked bone is known as Fracture. It is a very common injury in games and sports.
Classification of Fracture:

i. Simple Fracture
ii. Compound Fracture
iii. Greenstick Fracture
iv. Impacted Fracture
v. Communicated Fracture
vi. Stress Fracture
vii. Complicated Fracture

viii. Transverse Fracture

28. Soft tissue injuries are the injuries in which there is localized inflammation caused due to some damage to skin or muscle tissues. These injuries are caused by overuse of the affected part and sometimes there is a lot of the soft tissue injuries are as follows.

    i. Sprain
    ii. Strain
    iii. Abrasion
    iv. Contusion
    v. Laceration

    In the case of abrasion and laceration, the following treatment is suggested.

    i. Clean the surface of the affected part with some antiseptic cream.
    ii. Stop bleeding at the earliest by compression bandages.
    iii. Anti-tetanus injection should be taken as precautionary measures till it heals up.
    iv. Repeat the dressing completely.

    Sprain: When ligaments are stretched or torn but not with enough force to dislocate the joints. A sprain is caused directly or indirectly by a fall or a blow or knock or jump or slip or slide while walking or running. It is an injury to a joint which results in tearing of ligaments. It is associated with pain and discoloration. swelling and tenderness. In case of a severe sprain, you are unable to move the affected body part or movement at joint.
    Strain: It is an injury to muscles, generally known as 'muscle pull'. The strain causes tearing and overstretching of muscle fibres. It happens mostly to athletes (sudden overstretching of hamstring and quadriceps muscles) and are common in basketball.
    Contusion: It is a muscle injury because of a direct blow against skin or selling and part of it becomes red then blue-black.
    Abrasion: It is a soft tissue injury. Abrasion is caused by friction with some equipment or fall. Abrasion is a scraping injury to the skin and part of the skin is lost.
    In the case of sprain and strain, we follow the treatment of R.I.C.E.
    R: Rest to the injured part.
    I: Apply ice for the first two days.

C: Compress with a bandage.
E: Elevate the injured part to avoid swelling and pain.

OR

The scope of sports medicine is very wide. It is not a single area of a specialist. It is an area that involves healthcare professionals, researchers, and educators from a wide variety of disciplines. Other than the prevention and treatment of sports-related injuries, sports medicine also looks after a diverse area.

In the field of physical education and sports, the fields of various sub-disciplines of sports medicine are utilizing. Without the knowledge of the scope of sports medicine, it is difficult to carry a sportsperson performance at the apex level. There are the following scope of sports medicine:-

1. Sports and first aid
2. Human anatomy and physiology
3. Female and sports
4. Study of optimal load for different age groups
5. Scientific promotion of games and sports
6. Sports injury rehabilitation
7. Fitness for games and sports

29. No. of teams = 17,

Total No. of matches = N-1 = 17-1 = 16

No. of teams in upper half N+1/2 = 17+ 1 = 9

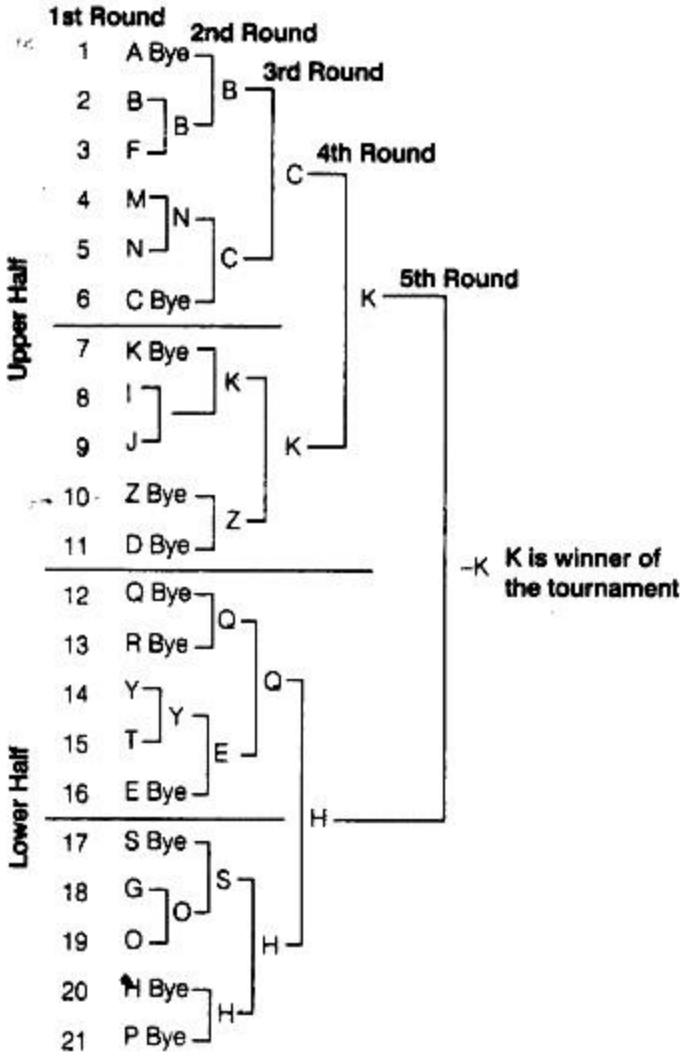
No. of teams in lower half N-1/2 = 17 - 1 = 8

Total no. of byes = 32- 17 =15 byes,

No. of byes in upper half = NB-1/2 = 15 - 1 = 7

No. of byes in lower half = NB + 1/2 = 15 + 1 = 8

Total rounds = 4



OR

The organization of sports events requires a lot of planning. The planning is executed Properly when Different committees work together for the smooth conduct of the sports events. The various committees are:

i. Technical Committee: This committee is responsible for the technical conduct or the Emmis. This committee selects various officials such as referees, judges, starters, umpires, timekeepers etc.
ii. Transport Committee; This committee is responsible for providing the facilities regarding the transportation of various teams If the venue of sports events.
iii. Reception Committee: The members of this committee are responsible to welcome the Chief Guest and spectators at the opening and closing ceremonies.
iv. Boarding and Lodging Committee: This committee is responsible for making

necessary arrangements for providing accommodation and serving meals to the sportspersons Abel other officials,

v. Ground and Equipment Committee: This committee makes necessary arrangements of equipment related to events.
vi. Medical and First Aid Committee: This committee i5 Formed to provide medical assistance. e to participants round the clock
vii. Protest Committee: it's a protest against a judgment, the members of this committee decide about it.
viii. Publicity Committee: All the press releases and press conferences are conflicted by Who's the committee.
ix. Finance Committee: This committee is assigned to make the budget for the event and handle the expenses.
x. Refreshment Committee: This committee is formed to profile refreshment to the participants.

30. This test consists of the following six items

Administration of Tests: these tests can be conducted in a gymnasium or outdoors. The only apparatus required in these tests is a horizontal bar having a diameter of approximately 1½ inches for pull-ups and flexed arm hang for girls. However, the arrangement has to be made for the timing and recording of all scores with the help of timers and recorders.

Item No.1—Pull-ups: This item has to be done from a hanging position on the bar by using the overhead grasp (with palms facing outwards). The arms and legs of a subject should be fully extended. In form the hanging position, the subject should raise his body with his arms until his chin is placed over the bar. Then, he should lower his body to a full hanging position. In doing so, the knees should not be bent and the pull should not be jerky or snap pull. (The number of completed pull-ups is the score of the subject.)

Item No. 1 (Girls)—Flexed-arms hung: In this test item for girls, the subject is required to hang from the bar with flexed arms and overhead grasp. She should raise her body to a position where the chin is above the bar, the elbows are flexed and the chest is close to the bar. The stopwatch is started as soon as a subject assumes such a hanging

position and is stopped when the subject's chin falls below the level of the bar. (The time recorded in seconds for which a subject holds the hang position is her score)

Item No. 2—Sit-ups: For this test meant for boys and girls, the subject should lie on his or her back with knees flexed and kept not more than 12 inches from the buttocks. The hands of the subject should be placed at the back of the neck, fingers clasped and elbows touching the mat. From this position, the subject should raise his or her head and elbows forward upwards till the elbows touch the knees. This constitutes one sit-up. (The number of correctly performed sit-ups in 60 seconds from the start of the first sit-up is the score of a subject).

Item No. 3—Shuttle Run: For this test item, two parallel lines are drawn at a distance of 30 feet from each other and two blocks of wood are placed behind one of the lines. The subject has to stand behind the other line and on the signal —Ready‖, —Go‖ should run to pick up one block, run back to the starting line and place the block behind the line. He should again turn back to pick up the second block and bring it also behind the starting line. Two such trials are given. (The better time of the two trials to the nearest 10th of a second is the score of the subject).

Item No. 4—Standing Long Jump: In this test, a subject is required to stand behind a take-off line, with feet apart. He takes a jump forward by extending his bent knees and swinging the arms forward. The best jump recorded, out of the three trials given, is the score of the subject. (The jump should be recorded in feet and inches).

Item No. 5—50 Yard Dash: Two lines are drawn at a distance of 50 yards from each other. The subject is made to run from the start line to the finish line and his time taken is recorded in seconds (nearest to the tenth of a second.) This indicates his score.

Item No. 6—600 Yard Run: This run can be organized on a track, on a football field or in an open area marked for this purpose. In this test item, a subject runs a distance of 600 yards. The subject takes a standing start from the start line. The subject may walk in between. However, the objective is to cover the distance in the shortest time. When he crosses the finish line, he is informed of his time. (The time taken to run the distance is recorded in minutes and seconds).