

CBSE Class 12 Physical Education
Sample Paper 04 (2019-20)

Maximum Marks:

Time Allowed: 3 hours

General Instructions:

- i. The question paper consists of 34 questions
 - ii. All questions are compulsory.
 - iii. Question 1-20 carry 1 mark and are multiple choice questions.
 - iv. Question 21-30 carry 3 marks each and should not exceed 80 -100 words each.
 - v. Question 31-34 carry 5 marks and should not exceed 150-200 words.
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Section A

- 1. What are intramural competitions?
 - a. Competition within students of same institute
 - b. Competition among citizens of different countries
 - c. Inter-institute competitions
 - d. Competition within same country
- 2. Which of the following is NOT an objective of planning in sports?
 - a. Finding out the causes of failure
 - b. Distribution of work
 - c. Timely achievements of the targets
 - d. Training of empires and coaches

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3. Almost _____ part of our body is made up of water.
- a. One forth
 - b. One-third
 - c. Three-fourth
 - d. Two-third
4. Vitamin makes _____ strong.
- a. Muscles
 - b. Lungs
 - c. Bones
 - d. Heart
5. This test helps to measure the number of different muscle groups with regard to their strength and flexibility. It is _____.
- a. AAHPER
 - b. Krous-Weber Test
 - c. Back scratch test
 - d. Chair stand test
6. _____ is used to test cardiovascular fitness.
- a. AAHPER
 - b. Shuttle Run Test
 - c. Rockport Test
 - d. Kraus Weber Test
7. Swimming is an example of _____ exercise.
- a. Isokinetic
 - b. Isotonic
 - c. Isometric

d. None of these

OR

Ballistic method is related to

- a. Strength development
- b. Coordination development
- c. Speed development
- d. Flexibility development

8. Which of the following is NOT part of strategies to make physical activities accessible to Children with special needs?

- a. Assistive technology
- b. Creating special classrooms
- c. Inclusive classrooms
- d. Professional courses

9. Which of the following is NOT a disorder?

- a. Having only one leg
- b. Hyper activity
- c. Too much sensitivity to cleanliness
- d. Overeating

10. Which of the following is part of external motivation?

- a. Hunger
- b. Safety and security
- c. Rewards and punishments
- d. Self-esteem

11. The intention to cause mental or physical harm to a person is called _____ in sports.

- a. aggression

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- b. support
 - c. attitude
 - d. strength

12. Asanas that can help to control Asthma is _____.

- a. Sukasana
- b. Vajrasana
- c. Pawanpuktasana
- d. Trikonasana

OR

Obesity and Diabetes are _____.

- a. Uncommon diseases
- b. Incurable diseases
- c. Lifestyle diseases
- d. Psychological diseases

13. Which of the following is NOT part of four stages of motor development in children?

- a. Later childhood
- b. Infanthood
- c. Adulthood
- d. Early childhood

OR

Which of the following is NOT part of female athlete triad?

- a. Osteoporosis
- b. Amenorrhoea

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- c. Menarche
 - d. Anaemia

14. Our hamstrings are made up of _____ muscle parts on the back of our thighs.

- a. Two
- b. Four
- c. Five
- d. Three

15. One of the best examples of the third law of motion in sports is _____.

- a. Swimming
- b. Soccer
- c. Walking
- d. Basketball

16. Which of the following is not a long-term effect of the exercise?

- a. Increase in heart rate
- b. Decrease in cholesterol level
- c. Increase in heart size
- d. Increase in height

17. _____ is the ability of a muscle to exert force in a single muscle contraction or to overcome resistance.

- a. force
- b. flexibility
- c. strength
- d. acceleration

OR

Which of the following is NOT part of General Motor Fitness Test?

- a. Medicine Ball Put
- b. Zig-zag Run

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- c. Standing Broad Jump
 - d. 600 Yard Run-Walk

18. Bone density _____ with increasing age.

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

19. _____ is a postural deformity in which both the knees touch or overlap each other in normal standing position.

- a. Shock Knee
- b. Lock Knee
- c. Weak Knee
- d. Knock Knee

20. _____ is a type of movement which takes place when the angle decreased between the two bones attached to a joint.

- a. Flexion
- b. Extension
- c. Adduction
- d. Abduction

Section B

21. Briefly explain different types of coordinative abilities.

OR

Explain the meaning of training.

22. Explain the law of inertia?

23. Explain goal setting as a technique of motivation in brief.

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24. What is meant by motivation? Explain the different techniques of motivation for higher achievement in sports.
 25. What is the factor that causes hindrance in the participation of women in sports?
 26. Briefly explain amenorrhea. How it is associated with women athletes.
 27. Define motor development in 6-12 year old children.

OR

Briefly explain amenorrhea. How it is associated with women athletes?

28. Explain the Rockport Test.
29. Discuss two techniques used to avoid sports injuries.

OR

Discuss the management of stress fracture.

30. Write briefly about protein as an essential component of the diet.

Section C

31. Explain five strategies to make physical activities accessible for children with special needs.
32. Discuss the procedure, benefits and contraindications of Trikonasana and Ardha Matsyendrasana.
33. What are specific sports programmes? Explain any three.
34. What do you mean by joint injuries? Discuss various types of dislocations.

OR

What are the various factors affecting physiological fitness? Explain.

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Solution

Section A

1. (a) Competition within students of same institute

Explanation: Competition within students of same institute

2. (d) Training of empires and coaches

Explanation: Training of empires and coaches

3. (d) Two-third

Explanation: Two-third

4. (c) Bones

Explanation: Bones

5. (b) Krous-Weber Test

Explanation: Krous-Weber Test

6. (c) Rockport Test

Explanation: Rockport Test

7. (a) Isokinetic

Explanation: Isokinetic

OR

- (d) Flexibility development

Explanation: Flexibility development

8. (b) Creating special classrooms

Explanation: Creating special classrooms

9. (a) Having only one leg

Explanation: Having only one leg

10. (c) Rewards and punishments

Explanation: Rewards and punishments

11. (a) aggression

Explanation: aggression

12. (a) Sukasana

Explanation: Sukasana

OR

(c) Lifestyle diseases

Explanation: Lifestyle diseases

13. (c) Adulthood

Explanation: Adulthood

OR

(c) Menarche

Explanation: Menarche

14. (b) Four

Explanation: Four

15. (a) Swimming

Explanation: Swimming

16. (d) Increase in height

Explanation: Increase in height

17. (c) strength

Explanation: strength

OR

(d) 600 Yard Run-Walk

Explanation: 600 Yard Run-Walk

18. (c) Decreases

Explanation: Decreases

19. (d) Knock Knee

Explanation: Knock Knee

20. (a) Flexion

Explanation: Flexion

Section B

21. The different types of coordinative abilities are:

1. Differentiation Ability It is the ability to achieve a high level of fine-tuning or

harmony of individual movement phases and body part movements.

2. **Coupling Ability** It is the ability to coordinate body part movements (e.g movements of hand, feet, trunk etc) with one another and in relation to a definite goal-oriented whole body movement Coupling ability is especially important in sports in which movements with a high degree of difficulty have to be done e.g gymnastics, team games.
3. **Reaction Ability** It is the ability to react quickly and effectively to a signal.
4. **Rhythm Ability** It is the ability to perceive an externally given rhythm and to reproduce it in motor action.
5. **Adaptation Ability** It is the ability to adjust or completely change the movement programme during movement on the basis of changes or anticipated changes in the situation.

Basic coordination abilities:

1. **Adaptive ability** enables modifications of motor activity on the basis of comparison or anticipation of new or changing conditions during performing motor activity.
2. **Balance ability** is understood as an ability to keep body or its parts in a relatively stable position.
3. **Combinatory ability** is understood as an ability to simultaneously put partial movements together into more complex movement structures.
4. **Orientation ability** is an ability to realize position of the body or its parts in space and time. Rhythm ability enables to grasp and meteorically express rhythm which is externally determined or contained in the motor activity itself.

OR

The word training means to give practical and theoretical knowledge of a specific field. But in physical education, training is a scientific and systematic way to enhance sports performance. The training methods are based upon scientific principles in a systematic order. In other words, we can say that these are methods to improve general and specific performance in games and sports.

22. According to this law a body at rest will remain at rest and a body in motion will

remain in motion at the same speed and in the same direction unless acted upon by an external force. There are great examples of this law in sports such as starting in rowing, starting in sprinting, starting in throwing the hammer. Basically if an object is in motion, it remains in motion unless something or some external force stops it. The external force may be gravitational force, the surface of playing field or a defensive player etc.

23. Goal setting technique is one of the most important techniques of motivation. If you do not set a goal, you cannot achieve an apex position in life. A person should set goals according to one's capabilities on a regular basis. Coaches should not be too rigid while setting goals for a sportsperson. There should be some flexibility in their approach

24. Motivation means to be inspired to do something. It is a kind of inner force which energizes a man to make constant efforts.

Techniques of motivation for higher achievement in sports are:-

1. Healthy Sports Environment - A healthy sports environment plays a vital role in motivating the sportsperson. Healthy sports environment consists of proper humidity and temperature, smooth and clean sports fields, good quality of sports equipment and other facilities.
2. Positive Attitude - For proper motivation, the coaches should try to encourage a positive attitude among sportspersons. Players must think positively.
3. Cash Prizes, Certificates and Trophies - These are good incentives to sportspersons. Governments offer cash prizes to sportspersons who win.

25. The following factors are responsible for less participation of women in sports

- i. Time constraints Women find less time for sports due to their domestic duties.
- ii. Social constraints the attitude of society towards participation of women in sports is negative
- iii. Lack of sports infrastructure this is particularly so for infrastructure exclusively for women.
- iv. Absence of skill there are very few female coaches available to develop the skills of women,

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- v. Sociological constraints limit the success of male coaches with female athletes.
 - vi. Concerns for personal safety Women are more afraid to venture in female field (perceived) as they are concerned more about safety from harassment or exploitation.

26. Amenorrhea refers to the absence of menstrual periods. It may be either primary (meaning woman has never developed menstrual periods) or secondary (absence of menstrual periods in a woman who was previously menstruating). There are many reasons responsible for amenorrhea including extensive exercise and improper diet. Exercising intensively and not consuming enough calories can lead to decreases in hormones that result in a girl's periods becoming irregular or stopping altogether.
27. After the age of 6 years, it becomes increasingly difficult to describe changes and differences in motor skills development of a child. The following characteristics are evident
- i. Running this will become faster depending on the length of stride and tempo.
 - ii. Jumping the ability to jump higher will become greater due to body size, weight, age and strength.
 - iii. Throwing Boys to throw further with a better technique and accuracy.
 - iv. Balancing and Coordination This increases as the child becomes older and control is perfect

OR

Amenorrhea refers to the absence of menstrual It may be either primary (meaning woman has never developed menstrual periods) or secondary (absence of menstrual periods in a woman who was previously menstruating). There are many reasons responsible for amenorrhea including extensive exercise and improper diet. Exercising intensively and not consuming enough calories can lead to decreases in hormones that result in a girl's periods becoming irregular or stopping altogether. The absence of a menstrual period for more than 6 months. Anemia:- Resulting from the inadequate nutrition Exercising intensively and not consuming enough calories can lead to hormonal imbalances that result in girl's periods becoming irregular or stopping altogether.

28. The Rockport Test tells us about the aerobic fitness of an individual. In this test, the time taken to finish the walk, exercising heart rate, body mass, age and gender are noted. These parameters are inserted in an equation to predict aerobic fitness. The Rockport Test is performed on a 400-meter standard track. After walking for one mile, the heart rate is measured at the wrist for 15 seconds immediately after completion. The actual heart rate is determined by multiplying that number by 4. The time taken to complete the 1 mile is converted to the nearest hundredth of a minute.

The formula used to calculate

VO2 Max is : $132.853 - (0.0769 \times \text{weight}) - (0.3877 \times \text{Age}) + (6.315 \times \text{Gender}) - (3.2649 \times \text{Time})$

$- (0.1565 \times \text{Heart rate})$

Where:-

- Weight is in pounds (lbs),
- Gender : Male = 1 and Female = 0
- Time is expressed in minutes and seconds,
- Heart rate is in beats/minute
- Age in years

29. One of the important objectives of sports medicine is preventing injuries. It also prevents other physical, mental, social and financial harm accompanying sports injuries. General techniques that can prevent sports injuries are

- i. Warm-up and Cool-down A well structured warm-up and cool-down is necessary to increase blood and nutrient flow and concentration. Also it helps in relaxation, improved flexibility and recovery of muscles. Planning a Session Careful planning of training and rehabilitation sessions allows gradual specific adaptations. It reduces the damage to the tissues as a result of training.
- ii. Using Protective Equipment The use of protective equipment like proper footwear, helmets, goggles, gum shield, shin pads and gloves prevents many sports injuries.

OR

The management of stress fracture are:

- a. Elevate the extremity and rest while bone heals itself.
- b. Apply ice to the affected part for 24 to 48 hrs
- c. If pain persists, give painkillers.
- d. If there is any need of immobilization to the affected part, use a slint
- e. After removal of swelling begin to put partial weight on the affected area.
- f. Crutches or walking stick may be used in the beginning. After two weeks start putting normal weight.
- g. For 6 to 8 weeks, avoid the activity that caused stress fracture. Then start doing the activity slowly.

30. Proteins are the basic structure of all living cells. These are complex organic compounds. Protein is a chain of amino acids that contain carbon, oxygen, hydrogen, and nitrogen.

These are two types of proteins:

- (i) Non-essential proteins
- (ii) Essential proteins

All meat and other animal products are sources of proteins. The best sources are eggs, milk, meat, poultry, milk products, beans etc.

Functions of Proteins:

1. The cells of muscles and ligaments are maintained with protein.
2. Proteins are needed for the growth and development of children.
3. Proteins are the main components of muscles, organs, and glands.

Section C

31. 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.
32. Procedure of Trikonasana: First of all stand with your legs apart. Then raise the arm sideways up to the shoulder level. Bend the trunk sideways and raise the right hand upward. Touch the ground with left hand behind left foot. After sometime, do the same asana with opposite arm in the same way.

Benefits of Trikonasana:

- a. It strengthens the legs, knees, arms and chest.
- b. It helps in improving digestion and stimulates all body organs.
- c. It increases mental and physical equilibrium.
- d. It reduces stress, anxiety, back pain and sciatica.
- e. It helps in increasing height.
- f. It helps in reducing obesity.
- g. It enhances blood circulation.
- h. It is also helpful in reducing extra fat around the waistline.

Contraindications of Trikonasana:

- a. If you are suffering from diarrhea, low or high blood pressure, back injury or migraine, avoid the practice of trikonasana.
- b. The individuals having cervical spondylosis should not perform this asana.

Procedure of Ardha Matsyendrasana: the left heel is kept under right thigh and the right leg is crossed over the left thigh. After that hold the right toe with left hand and turn your head and back to the right side. In this position move the trunk sideways. Then Perform the same sasna in the reverse position.

Benefits of Ardha Matsyendrasana:

- a. It keeps gall bladder and prostate gland healthy.
- b. It enhances the stretch ability of back muscles.
- c. It alleviates digestive ailments.
- d. It regulates the secretion of adrenaline and bile and thus is recommended in yogic management of diabetes.
- e. It is also helpful in treating sinusitis, bronchitis, constipation, menstrual disorder, urinary tract disorder and cervical spondylitis.

Contraindications Ardha Matsyendrasana:

- a. Women, who are two or three months pregnant, should avoid practicing this asana.
- b. The individuals who suffer from peptic ulcers, hernia, and hypothyroidism should practice this asana under expert guidance.
- c. The individuals who have the problem of sciatica or sleep disc may benefit from asana but they need to take great care while doing this asana.

33. Specific sports programmes are such programmes which have various objectives such as creating awareness among peoples regarding health, unity etc. These programmes are not usually related to competitions. The various specific sports programmes are as follows:

- 1. Run for Specific cause
- 2. Run for Unity
- 3. Run for Fun
- 4. Health Runs
- 5. Sports day
 - **Sports Day:** Sports days are events staged by many schools and offices in which people take part in competitive sporting activities, Often with the aim of

winning trophies or prizes. School stage many sports days in which children participate in the sporting event. In schools which use a house system a feature of the school is the competition between the houses; this is especially brought out during sporting events such as Inter house sports day. Games that are popular in the schools are included to be played on that day. They can include straight forward sprint, long races for all ages as well as egg and spoon race. Three legged races as run as well as sac races and parents and child races. The various social qualities such as honesty, brotherhood, group cohesion, friendship are developed among the students by participating in such sporting events.

- **Run for Unity:** Run for unity is organized to foster peace and unity among the people of the country. Such runs are the symbol of demand of the people for peace and unity in the world. In such runs efforts are made to include people from different cultures, religions and all walks of life. Such a platform cuts across the social and political barriers. It brings together the common man, the rich man, the politicians, an actor, and people from different faiths and culture .
- **Run for Specific Cause:** These races are organised for some noble cause or for creating awareness among the people about cancer, AIDS, environmental pollution, educating the girl child, etc. The running distance may be 5 km or 1 mile. These runs are also organized to raise the funds of charitable trust or society or for specific cause.

Mumbai and Chennai marathons are the examples of such runs.

34. A hard blow to a joint, a fall, a forceful throwing, lifting or hitting may cause dislocation. Infact it is dislocation of surface of bones.

There are following types of dislocation

- a. Dislocation of lower jaw: it occurs when the chin strikes to any other object. It may occur if mouth is opened excessively.
- b. Dislocation of shoulder joint: dislocation of shoulder joint may occur due to a sudden jerk or a fall over a hard surface. The end of the humerous comes out from the socket. In face when your shoulder dislocates, a strong force, such as a sudden blow to your shoulder. Pulls the bones in your shoulder out of place.

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- c. Dislocation of hip joint: By putting maximum strength spontaneously may cause dislocation of hip joint. The end of the femur is displaced from the socket.
 - d. Dislocation of wrist: A sportsperson who participates in a sports or game in which he may fall, runs the risk of getting a dislocated wrist. A miscalculated landing can also cause a dislocated wrist. Infact, it generally occurs to the person who use his hand to break his fall.

Preventions:

- a. Adequate warming-up should be performed prior to any activity.
- b. Proper conditioning should be performed during preparatory period.
- c. Stretching exercises should be include in warm-up
- d. Players should be careful during training and competition.
- e. Protective equipments should be used
- f. Players should have good anticipation and concentration power
- g. Always obey the rules and regulations.
- h. Perform regular exercise around your shoulder, hip, and wrist joints etc.
- i. Avoid falls or hits as far as possible.

OR

The following are the factors that affect the physiological fitness.

- i. Anatomical structure: An individual must be appropriate in body size, shape and structure essential for the performance. Sometimes genetic impaired organs are responsible for weakness in structure which limits individual performance.
- ii. Psychological factors or stress tension: This can become a barrier to performance by contributing tension and anxiety which affect the fitness level of a person. One must be mentally tough/strong and prepared to perform better.
- iii. Climate: Physical fitness also gets influenced by different climatic conditions such as summer, winter and humid.
 - During Summer Exercise must be done early morning .
 - Drink plenty of fluid.
 - Wear light loose fitting, comfortable clothes.
 - In winter dress in layers.

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- Stop if you experience dizziness, shivering, cramp, etc.
- iv. Diet: Plays an important role in maintaining physical fitness level. Diet requirement varies from individual to individual game wise. Therefore, while planning fitness programme diet factor must also be given due consideration.
 - v. Healthy surroundings: A healthy environment at home/ school/ playfields is helpful in proper growth and development of an individual which creates a better learning situation. There is a need for proper working environment for participation in sports activities, otherwise it will affect the fitness of individual.