# CBSE Class 12 Physical Education Sample Paper 09 (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. In the placement of Byes, IV Bye is given to whom.
  - a. Last team of the lower half
  - b. Last team of the upper half
  - c. Ist Team of the lower half
  - d. Ist team of the upper half

OR

For smooth conduction of tournament we need:-

- a. Supervision
- b. Staffing
- c. Budgeting
- d. Proper Planning

2.	Nu	trients are substances present in food.
	a.	Irrelevant
	b.	Essential
	c.	Harmful
	d.	Dangerous
3.		ood pressure is the force of blood in the arteries. When this pressure becomes normally high then it is called
	a.	Heart Attack
	b.	Blood sugar
	c.	Hypertension
	d.	Cardiac arrest
		OR
	Ob	esity and Diabetes are
	a.	Uncommon diseases
	b.	Incurable diseases
	c.	Lifestyle diseases
	d.	Psychological diseases
4.	Th	e child is not able to adjust within society is suffering from
	a.	ASD
	b.	ADHD
	c.	ODD
	d.	OCD
5.	In	this deformity, there is no arch in the foot and the foot is completely flat. It is

	_	<del></del>
	a.	Short foot
	b.	Plain foot
	c.	Normal foot
	d.	Flat foot
6.		is test helps to measure the number of different muscle groups with regard to their ength and flexibility. It is
	a.	AAHPER
	b.	Krous-Weber Test
	c.	Back scratch test
	d.	Chair stand test
7.	Не	art size of the boys is the girls.
	a.	Equal to
	b.	Smaller than
	c.	None of these
	d.	Bigger than
		OR
	Wì	nich of the following is NOT a component of physical fitness?
	a.	Agility and Flexibility
	b.	Muscular Strength
	c.	Eating Habits
	d.	Age and Gender
8.	Fo	r every action, there is an equal and opposite reaction. It is

- a. None of these
  b. Newton's second law
  c. Newton's third law
  d. Newton's first law

  9. The intention to cause mental or physical harm to a person is called \_\_\_\_\_\_ in sports.

  a. aggression
  b. support
  c. attitude
  d. strength

  10. Speed play is another name of which method?

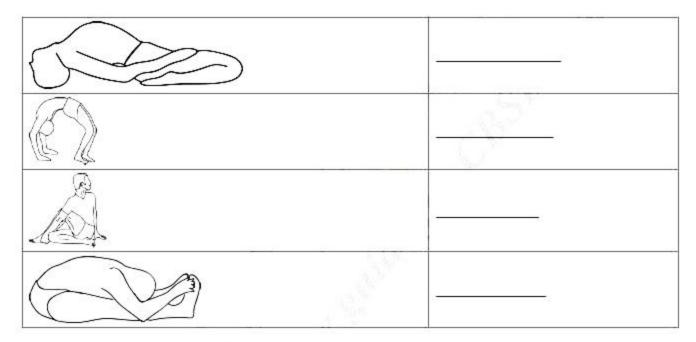
  a. Continuous method
  b. Fartlek method
  c. Isokinetic method
- 11. Given below are the two statements labeled Assertion (A) and Reason (R).

d. Interval method

- A. Assertion (A): seeding is done to overcome the drawback of the knockout tournament
- B. Reason (R): It protects the stronger teams from the weaker teams in early rounds.
- 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 the reason is not the correct explanation for the assertion.
- c. The assertion is a correct statement but the reason is the wrong statement.
- The assertion is the wrong statement but the reason is a correct statement.

12.	Which	of	the	follov	ving	is	NOT	part	of a	a	balanced diet?	

- a. Vitamins
- b. Carbohydrates
- c. Proteins
- d. Probiotics
- 13. Identify the below-given Asanas and write their names.



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

N	

15. Explain the term "Realistic" in goal setting principles.

Write the full form of ADHD and SPD. Elaborate on the causes that lead to the two disorders.

OR

What do you mean by disability etiquettes?

17. Raju, a 15 years old boy, is fond of playing cricket. Every Sunday, he goes out with his friends for playing. One day, he and his friends decided to organize a cricket tournament voluntarily. But they are confused about whether they should organize a league tournament or a knockout tournament. They want to minimize the number of matches.

Based on the above case, answer the following questions.

- i. What would you suggest which type of tournament should they organize?
  - a. Knockout Tournament
  - b. League Tournament
  - c. Round Robin Tournament
  - d. Challenging Tournament
- ii. The formula for calculating the number of matches in a knockout tournament is
  - a. N(N-1)/2
  - b. N+1
  - c. N-1
  - d. N(N-1)
- iii. What is the other name of the Round Robin Tournament?
  - a. League Tournament
  - b. Knockout Tournament
  - c. Challenging Tournament
  - d. Combination Tournament
- 18. Sejal is a very shy girl. She avoids eye contact with others most of the time and prefer to be all alone. She faces difficulty in expressing her needs and emotions to others. Besides that, she is very sensitive to taste, smell, and sound and also doesn't like to be embraced.

Based on the above case, answer the following questions.

- i. Which disorder Sejal is suffering from?
  - a. SPD
  - b. ODD
  - c. OCD
  - d. ASD
- ii. What are some other symptoms of the disorder identified above?
  - a. Repeated behaviour
  - b. Slow Development
  - c. Lack of social skill
  - d. All of these
- iii. Apart from the disorder, Sejal is suffering, she is also likely to have
  - a. ADHD
  - b. Down Syndrome
  - c. ODD
  - d. OCD
- What is a balanced diet? Elaborate the important nutrients/elements of the balanced diet.

OR

What do you mean by food intolerance? Write down its causes and symptoms.

- Differentiate between Isometric and Isotonic exercises.
- What is muscular strength? Write its importance.
- 22. What are the basic movements of early childhood in a baby?
- 23. What is strength? What are the different types of strength?
- 24. Neman was a Class VI student. He used to bring junk-food in his lunch-box daily. His teacher observed that he was neither concentrating on his studies nor actively participating in physical activities. In this matter, he had a talk with his parents and came to know that he refuses to eat roti, dal, fruits and vegetables. Due to this he is facing these problems.

Based on the above passage, answer the following questions:

- i. What types of problems was Naman facing?
- ii. Why should junk-food not be recommended?
- Discuss any two importance of tournaments.
- 26. What are the types of personality as given by Sheldon?

OR

How can you manage anxiety in sports?

- Define trajectory. Describe the factors affecting the trajectory of a projectile.
- 28. What are the causes of sports injuries?

OR

Elaborate any three physiological factors determining endurance.

 Briefly explain the symptoms and causes of Asthma. Explain the procedure, benefits and contraindications of any two asanas to prevent Asthma

OR

What is hypertension? Discuss the benefits and contraindications of Ardha Chakrasana and Vajrasana.

30. Explain in detail the AAHPER Test.

# 12 Physical Education Sample Paper - 09 Class 12 - Physical Education

#### Solution

#### Section A

- 1. (b) Last team of the upper half OR
  - (d) Proper Planning

Explanation: Because Planning is a systematic way to achieve our goals.

- 2. (b) Essential
- 3. (c) Hypertension. OR
  - (c) Lifestyle diseases
- 4. (b) ADHD
- 5. (d) Flat foot
- 6. (b) Krous-Weber Test
- 7. (d) Bigger than OR
  - (c) Eating Habits
- 8. (c) Newton's third law
- 9. (a) aggression
- 10. (b) Fartlek method
- (c) Assertion is a correct statement but the reason is the wrong statement.

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

- 12. (d) Probiotics
- 13. i. Matsyasana
  - ii. Chakrasana
  - iii. Ardh Matsyendrasana
  - iv. Paschimottasana
- 14. i. Bow Legs
  - ii. Flat Foot
  - iii. Knock Knee
  - iv. Kyphosis
- 15. 'Realistic' term means the aim of the person should be achievable. He should set a

realistic goal which is likely to accept the challenges that lie ahead with enthusiasm. It should be within the capacity of the individual neither too high nor too low.

 The full form of ADHD is Attention Deficit Hyperactivity Disorder and SPD is Sensory Processing Disorder.

The causes leading to the two disorders are as follows

The various causes of ADHD are as follows:

- Genetic factors: It is not a disorder that passed socially. Studies show that parents, siblings, and children of people with ADHD may be up to five times more likely to have the disorder than the people who are not related to someone with ADHD.
- Brain injuries: When a baby's brain is damaged before or after birth this could make the baby more likely to develop ADHD later on.

The various causes of SPD are as follows:

- Genetic Factor: Studies indicate that children born to adults who have Autism Spectrum Disorder (ASD) may be at a higher risk to develop SPD. Scientists allude that the cause of SPD is coded into a child's genetic material.
- Low birth weight: It is also considered one of the causes of sensory processing disorder.

OR

Disability etiquettes are a set of guidelines dealing specifically with how to approach persons with disabilities.

17. i. (a) Knockout Tournament

Exp- Knockout tournament involves the least number of matches.

ii. (c) N-1

Exp- Formula for calculating matches in a knockout tournament is N-1 where N is the number of teams.

iii. (a) League Tournament

Exp- League tournament is also known as Round Robin Tournament

18. i. (a) ASD

Exp- ASD is a disorder in which children face difficulty in social interaction and

are often sensitive to taste, smell, and sound.

- ii. (d) All of these
  - Exp- Repeated behaviour, Slow development, and lack of social skill, all are symptoms of ASD.
- iii. (b) Down Syndrome
  - Exp- It's a fact that atleast 10% of children with ASD have a genetic disorder 'Down Syndrome'
- Balanced Diet A diet that contains the right amount of carbohydrates, proteins, fats, minerals, salts, vitamins and water is called a balanced diet.
  - Carbohydrates These are our main source of energy.
  - Proteins These provide essential growth as well as repairing muscles and other body tissues.
  - Fats These are the source of energy.
  - 4. Vitamins These play an important role in many chemical processes in the body.
  - Minerals These are essential for the proper growth and functioning of our body.
  - Water It is essential for normal body functions. It serves as a vehicle for carrying other nutrients.

OR

Food Intolerance means the individual elements of certain foods that can not be properly processed and absorbed by our digestive system. The main cause of food intolerance is the complete absence of enzymes responsible for breaking down or absorbing the food elements. Food intolerance can cause nausea, stomach pain, diarrhea, vomiting, gas cramps, heartburn, headaches, irritability, etc.

20. 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 sturdy wall. ISOTONIC EXERCISE Isotonic exercises are those exercises in which movements can be seen directly. There are various examples of Isotonic exercises such as calisthenics exercises, running and jumping or the spot, lifting of

weights or weight training exercises and exercises with a medicine ball.

- 21. Muscular strength is the amount of force the muscle or a group of muscles can exert against resistance for a short duration as in aerobic activities. It is essential for performing daily routine work easily and smoothly such as lifting weight and climbing on stairs etc. It is also essential for maintaining good posture, avoiding injuries and remaining independent especially in old age.
- 22. This period is also known as preschool age and the movements during this period are
  - i. Ball handling,
  - ii. Fine eye-hand coordination,
  - iii. Walking leading to running,
  - iv. Good control overrunning.
  - v. Climbing proficiency using ladders.
- 23. The strength it is the ability of muscles to overcome resistance. It is the ability of an individual to work against resistance, e.g. various throws and jump events, swimming etc.

Types of strength are:-

- i. Static Strength
- ii. Dynamic Strength

Dynamic Strength 3 types -

- Maximum Strength
- Explosive Strength
- Strength Endurance
- 24. i. Lack of concentration, inactiveness, lack of physical activity.

ii.

- Junk food does not contain the required nutrients for a healthy life.
- It leads to overweight and other health problems.
- · Adversely affects growth and development.
- 25. Importance of tournaments are -

Source of Recreation; A large number of people go to watch various games and sports

for getting recreation. Sports tournaments provide ample recreation to the spectators. Development of Social Qualities: Social qualities such as cooperation, tolerance, sympathy, group cohesion, brotherhood and discipline are developed among participants through sports tournaments.

### W.H. Sheldon's classification of personality.

Endomorph: Endomorphs have a pear-shaped and rounded physique. They have short arms and legs. The upper parts of the arms and legs seem to be thicker than the lower parts. They have underdeveloped muscles. They are more inclined to become obese. Their excessive mass hinders their ability to compete in sports. These are most suitable for activities in which great strength is required.

Mesomorph: Mesomorphs have a rectangular shaped body with athletic physiques and balanced body composition. They are able to increase their muscle size quickly and easily. They have thick bones and muscles. Their chest and shoulders are broader than the waistline. They can excel in sports which require great strength, short bursts of energy and lots of power because they have enough strength, agility, and speed.

Ectomorphs: Ectomorphs are usually referred to as slim persons because their muscles and limbs are elongated. They have a weak constitution of busy and face great difficulty in gaining weight. They have a flat chest and have less muscle mass. They do not have a lot of strength but they dominate endurance sports as their busy type is naturally suited to perform wonderfully in endurance sports. They are best suited for games and sports like gymnastics and long-distance races.

OR

Anxiety can be managed by

- i) Keeping cool
- ii) Yogic meditation
- iii) Biofeedback
- iv) Following a behavior modification strategy
- v) Progressive relaxation breathing technique
- vi) Somatic adjustment (control of cognitive processes)

- vii) Guidance from a technically trained sports psychologist
- 27. The trajectory is the path described by a moving object or the path followed by a projectile. Examples are kicking a soccer ball, a throw-in cricket, throwing a hammer etc.

Factors affecting projectile trajectory are

- i. Propelling Force The propelling force produces certain effects depending upon Its point and direction of application. If the application is directly through the projectile's centre of gravity, only linear motion results from the force. As the projecting force is moved further from the centre of gravity, the rotatory motion of the object increases at the expense of linear motion. If the force is below the object's centre of gravity, backspin results. Forward spin results when the force is above the centre of gravity. When the force is off centre to the left, clockwise spin results and when it is off centre to right, counter-clockwise spin occurs.
- ii. Force of Gravity As soon as contact is broken with a projected object, the force of gravity begins to diminish the upward velocity of the object. Finally, gravity overcomes the effects of the upward component of the projectile's motion and the object begins to descend. The factors that determine how soon gravity will cause the object to descend are
  - a. weight (mass) of the object
  - b. amount of force driving it upward
  - c. the effects of aIT resistance on the object.
- iii. Effect of Air Resistance As the speed of an object increases, air resistance has a greater retarding effect. The more surface area an object presents in the direction of movement, the greater will be the effect of air resistance.
- To effectively diagnose, rehabilitate and ultimately prevent subsequent injuries, a sport therapist
  - Anatomical Factors: These are related to make up of the body. Leg length differences and cause injuries to the ankle, hip and back.
  - ii. Age-related causes As the body ages, it changes. It is less able to produce force, recovers slower and soft tissues lose the ability to stretch. Therefore it is more

- prone to injury.
- iii. Training related cause's Excessive repetitive loading of the tissues is needed for successive adaptation. However, without suitable recovery, tissues never have the chance to adapt and can fail.
- iv. Equipment selection factors These are related to the suitability of equipment. An instance is an incorrect footwear, which will not protect the foot and ankle adequately. It also will not distribute forces effectively. Thus it increases the risk of injury.
- v. Impact and contact cause Impact or contact can be with objects, surfaces or other people. These injuries are common in contact sports like football, rugby, hockey etc. Also, they are common in more dangerous sports like motor racing, boxing and skiing.

OR

## 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 the 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 a normal physiological response to prolonged exercise, required for the dissipation of heat produced during energy metabolism.

29. Asthma is a condition in which a person's airways in the lungs inflame and narrows making it difficult for the air to move in and out thus causing difficulty in breathing. It is a chronic disease and lasts life-long.

#### Causes of Asthma

- Allergy for airborne substances like pollen grains, dust, mites, molds, spores, etc.
- Air pollutants and irritants like smoke suspended in the air.
- Respiratory infections like the common cold.

## Symptoms of Asthma

- Shortness of breath
- · Coughing/ Sneezing too much m Frequent respiratory infections
- Fast heart rate

#### Asanas for Asthma

Asanas that can cure or help to manage asthma are Sukhasana, Chakrasana, Gomukhasana, Parvatasana etc. Sukhasana

#### Procedure

- · This is done in a sitting position.
- Sit cross-legged on the floor or any other flat surface.
- Bring one foot over the opposite knee. Place both the palms on your knees and close your eyes.
- Breathe slowly and concentrate on the breathing pattern.

#### Benefits

- It helps to make the back stronger and elongate the muscles of the knees and ankles.
- It is beneficial for opening the muscles of the groin, hips and outer thighs.
- It can relieve backache as well as pain.

#### Contraindications

- In case of severe knee and back injury, it is required to sit over the folded blanket or take the assistance of the bolster or pillow.
- · If facing difficulties in this pose, then try placing the blanket or bolster under

the thighs.

#### Chakrasana

#### Procedure

- This is done in a lying position.
- Lie down properly and look upward.
- Bring the feet closer to the hips and bend knees upward. Keep a distance of about one foot between the feet.
- Bring up the hands near to the ears and put the palms on the ground as the fingers should face the shoulders.
- Gradually left up the body in air by balancing on feet and rotate the head backward along with hands slowly.

#### Benefits

- It helps to strengthen the liver, pancreas, kidneys and hearts.
- It stretches the chest and lungs which is good for treating asthma.

#### Contraindications

- Those who are suffering from diarrhea, heart problems and hernia should avoid this.
- · Avoid during pregnancy.
- Avoid those who have wrist, ankles and spine pain.

OR

Hypertension means increased blood pressure. The normal blood pressure of an adult is considered 120/80 mm Hg. A person, whose blood pressure readings are beyond 140/90 mm Hg, is said to be having hypertension.

Benefits of Ardha Chakrasana:

- It helps to make the ankles, spine, thigh, chest, shoulders, spine and abdomen stronger.
- It relieves stress and tension.
- It improves digestion.

- It cures menstrual disorders.
- e. It cures pain in the legs.
- f. It reduces fat in the waist and thigh.
- g. It helps to alleviate upper back pain.
- h. It relieves stress in the neck and shoulders.

#### Contraindications of Ardha Chakrasana:

- Avoid performing this asana if you have migraines, headaches, low blood pressure, diarrhea and insomnia.
- b. Avoid practicing this asana if you have peptic ulcers and hernias.
- c. Avoid this asana in case of the hip or spinal problems.
- d. Pregnant women should avoid this asana.

## Benefits of Vajrasana:

- a. It is helpful for concentration.
- b. It is helpful in curing dysentery, back pain and chest diseases.
- It enhances memory.
- d. It cures problems related to menstruation.
- e. It cures mental stress.
- f. It strengthens the pelvic muscles.
- g. It removes postural defects.
- h. It prevents a hernia and gives relief from piles.

## Contraindication of Vajrasana:

- a. a person suffering from joint pain should not perform vajrasana.
- The individuals who have any spinal column problem should not perform vajrasana.
- c. The individuals who have some difficulty in the movement should practice vajrasana with a lot of care.

# 30. AAPHER PHYSICAL FITNESS TEST: This test consists of the following six items:

a. Pull-ups: In the case of girls, the pull-ups are to be started from a flexed arm hang.
This test item judges the arm and shoulder girdle strength.

- Flexed Leg sit-ups: This test is meant to judge the efficiency of abdominal and hip flexor muscles.
- c. Shuttle Run: This test item is meant for judging the speed and change of direction.
- d. Standing Long Jump: For judging the explosive power of leg muscles.
- e. 50 yard Dash or Sprint: For judging speed.
- f. 600 yard Run: For judging endurance.

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. 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 situp. (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 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).