

**SAMPLE QUESTION PAPER 1**  
**CLASS XII**  
**PHYSICAL EDUCATION (048)**  
**TERM 2**  
**(2021–22)**

**Maximum Marks: 35**

**Time: 90 Minutes**

**General Instructions:**

1. There are three sections in the Question paper, namely Section A, Section B and Section C.
2. Section A consists of 9 questions amongst which 7 questions have to be attempted. Each question carries 2 marks and should have 30-50 words.
3. Section B consists of 5 questions amongst which 3 questions have to be attempted. Each question carries 3 marks and should have 80-100 words.
4. Section C consists of 4 questions amongst which 3 questions have to be attempted. Each question carries 4 marks and should have 100-150 words.

**(Section A)**

1. What are the two types of motivation? (1+1)

**Ans.** The two types of motivation are intrinsic and extrinsic. Intrinsic motivation comes to an individual from within while extrinsic motivation comes from outside support like a coach or a mentor or family and friends.

2. Define speed and mention its types. (1+1)

**Ans.** In sports, speed is the ability to move quickly across the ground or to move limbs rapidly to throw and grab. Speed types include reaction ability, acceleration ability, movement speed, locomotor ability and speed endurance.

3. Define disability and disorder. (1+1)

**Ans.** Disability is any continuing condition that restricts a person from performing day-to-day activities. Disorder refers to a physical or mental condition that disturbs normal life with reference to physical or mental functioning.

4. What is asthma? Mention at least two asanas that help alleviate asthma symptoms. (1+0.5x2)

**Ans.** Asthma is a medical condition in which the airways become narrow and swell up making breathing difficult and resulting in coughing or wheezing or shortness of breath. While many yogasanas help, the most suggested are Sukhasana and Chakrasana.

5. What is endurance? Mention methods to develop endurance. (1+1)

**Ans.** Endurance is defined as the capacity to resist fatigue during an activity. Endurance allows a person to keep doing a difficult or painful activity for a long time. Endurance is developed by training—either continuous or interval training.

6. What is isotonic method and which ability does it help develop? (1+1)

**Ans.** Isotonic method is a method of exercising the muscle by altering the length of the muscle during its movement. It causes movement at the joints and is particularly useful for increasing the elastic strength of muscles.

7. What does RICE treatment mean? (0.5x4)

**Ans.** RICE stands for Rest, Ice Application, Compression to the limb and Elevation of the injured limb.

8. What is a sprain and how can it be managed? (1+1)

**Ans.** Sprain is injury to the ligaments in the body. It is managed by following the RICE protocol which involves allowing the sprained area to be given rest. Ice is applied locally and the injured area is compressed with a compression bandage and is kept elevated on pillows or with some other support.

9. List any two strategies to make physical activities accessible to the CWSN. (1+1)

**Ans.** Physical activity can be made accessible to the CWSN by understanding their needs. Emphasis has to be on creating specialized equipment such as altering the size, shape and colour of the sports equipment. One more thing that should be done is to have an enhanced trained medical and safety supervision.

### (SECTION B)

10. Define strength. List the three methods of increasing strength and briefly explain any one. {1+(0.5x4)}

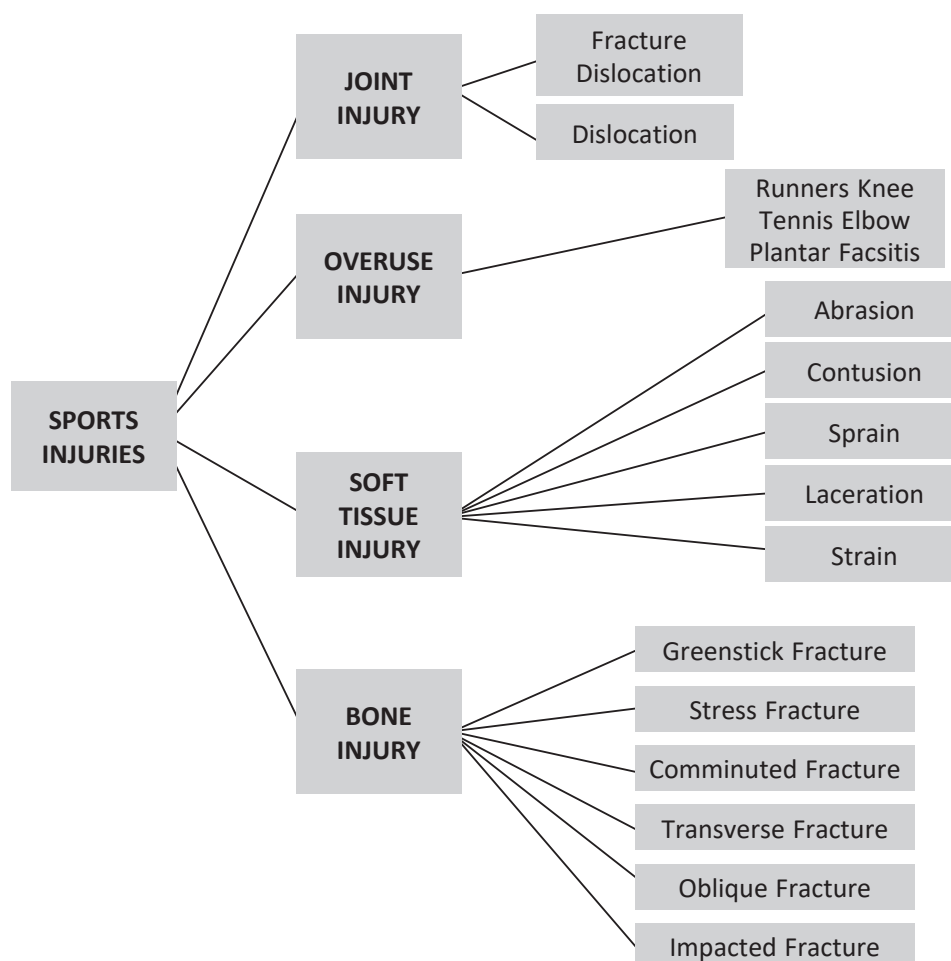
**Ans.** Strength is defined as the quality of being physically strong with good muscle power and vigour. The three methods of improving strength are to do isometric, isokinetic and isotonic exercises. Isometric exercises contribute greatly to increase the strength of muscle because when we do these exercises the length of the muscle remains the same but its strength increases.

11. What is first aid? Explain the basic principles of first aid. (1+2)

**Ans.** First aid is the immediate aid offered to an injured player on the sports field. This can be done by trained paramedical or medical staff. The principles of first aid are based on three 'P's', which are first to preserve life, prevent deterioration and promote recovery.

12. Draw a flow chart with reference to sports injuries and explain any two types of bone injuries. (1+2)

**Ans.**



Bone injuries are called fractures and are among the more serious sports injuries that need treatment and rehabilitation. Dislocations are bone injuries that cause the bones to come out of their position and joints. Greenstick fractures are common in children and involve the bone breaking in one of the cortices only and not completely. This, in fact, results in a bend rather than a fracture. They mostly occur in long bones like fibula, tibia, ulna, etc.

Comminuted fractures are bone injuries where the bone is broken into many pieces at a point or at different places.

**For visually impaired candidates**

Explain classification of sports injuries. (1x3)

**Ans.** Sports injuries are classified as soft tissue injuries, bone & joint injuries and overuse injuries. In soft tissue injuries, there is involvement of the skin, muscles and ligaments but there is no bony involvement. In case of bone injuries, they either get injured at the joints, called dislocations or they break, which is called a fracture. In overuse injury, there is excess loading, mostly of the soft tissues, because of repetitive use.

**13.** Define aerobic capacity. Explain briefly the four sub-factors on which it depends. (1+0.5x4)

**Ans.** Aerobic capacity is the maximum amount of oxygen consumed by the body during intense exercises in a given time frame. The sub-factors which it depends upon are: (i) Oxygen intake, which depends on the lung size and capacity and is the oxygen we get from the atmosphere while breathing; (ii) Oxygen circulation, which is carrying blood from the heart to all parts of the body; (iii) Oxygen uptake, which is the capacity of the muscle to absorb and consume oxygen; and (iv) Energy reserve, which is the store of glycogen in the muscles and the blood sugar.

**14.** What is flexibility? Discuss in brief any three laws of training for flexibility. (1x3)

**Ans.** Flexibility, also known as limberness, is the range of movement in a joint or series of joints leading to bending motion or movement. The laws of training for flexibility include the law of specificity, which requires focus on one joint to improve its flexibility. The second law of flexibility is the law of overload, which encourages caution while increasing the load of the joint. The third law of flexibility is the law of reversibility, which specifies that flexibility is reversible and diminishes with time if the joint is not used.

**(SECTION C)**

**15.** Explain how joint injuries are to be treated with a brief description of any three of the treatment protocols. (1+3)

**Ans.** Joint injuries are treated with a protocol called the RICE protocol where:

R stands for rest to the injured limb which means avoid using the joint at least for the next 48 hours;

I stands for Ice compressions to the injured joint to reduce swelling;

C stands for compression using an elastic bandage over the injured joint to reduce swelling.

**16.** What is personality? Discuss briefly the traits of personality. (1x4)

**Ans.** Personality is defined as a combination of characteristics or qualities that form an individual's character. Personality is also defined as the type of person one is as shown by the behaviour, feeling and thinking of the individual.

The traits of personality are physical, mental, emotional and social. Physical trait refers to the height and appearance of the person. Posture too is an important part of physical trait. Mental trait refers to the thinking capabilities and agility of the mind. Social trait is the capacity of the person to thrive in society by exhibiting appropriate behaviour and following traditions and customs. Emotional traits refer to suitable control over anger, aggression and fear.

**17.** What is circuit training? Why is it important? What are the advantages and disadvantages of circuit training? (1+1+1+1)

**Ans.** Circuit training is a form of body conditioning or endurance training or resistance training. It is important as it combines strength training and cardio as well as workouts which are short but extremely effective. Also, these increase metabolism. The advantages of circuit training include rapid calorie burning with reduced risk of injuries. Besides they increase lean muscle mass, are easy to learn and can be done indoors as well as outdoors. The disadvantages include the need for space and good planning and that they can be initially very tiring for the beginners. Also, these do not increase long-term endurance and may not really increase a lot of muscle strength and power.

18. Briefly explain the administration of Tadasana along with its contraindications and draw stick diagram. (2+1+1)

**For visually impaired candidates.**

Briefly explain the administration of Tadasana along with its contraindications. (2+2)

**Ans.** Tadasana or mountain pose is the basis for most other asanas. To practise it, stand erect with legs slightly apart and hands hanging alongside the body. Then, with thigh muscle firm, stand on toes with a slight look upwards and breathe in and stretch your shoulders, chest and arms upwards and ensure that the full weight of the body is on the toes. Feel the stretch in your body right from your feet to your head. Hold the pose for a few seconds, then exhale and release.

This asana should be avoided by people with low backache, patients of insomnia and those suffering from low blood pressure.



**SAMPLE QUESTION PAPER 2**  
**CLASS XII**  
**PHYSICAL EDUCATION (048)**  
**TERM 2**  
**(2021–22)**

**Maximum Marks: 35**

**Time: 90 Minutes**

**General Instructions:**

1. There are three sections in the Question paper namely Section A, Section B and Section C.
2. Section A consists of 9 questions amongst which 7 questions have to be attempted. Each question carries 2 marks and should have 30-50 words.
3. Section B consists of 5 questions amongst which 3 questions have to be attempted. Each question carries 3 marks and should have 80-100 words.
4. Section C consists of 4 questions amongst which 3 questions have to be attempted. Each question carries 4 marks and should have 100-150 words.

**(Section A)**

1. What are the two distinct uses of modern yoga? (1+1)

**Ans.** Modern yoga is a preventive measure when it is used to prevent diseases. It has a curative use when it helps cure certain diseases.

2. Define obesity. How is BMI used to classify obesity? (1+1)

**Ans.** Obesity is defined as having too much body fat for the weight of a person. BMI measures height-to-weight ratio. A BMI of over 23 is considered being overweight for Indians while over 30 is defined as obesity.

3. Define disability. What are its types? (1+1)

**Ans.** Disability is any condition that restricts one to perform their day-to-day activities. Disabilities are classified as cognitive disability, where the person suffers from limitations of mental functioning and intellectual disability, where the sufferer has a below-average IQ and lacks skills required for learning and problem-solving.

The third type of disability is physical, where the sufferer faces challenges in walking, running or stamina because of problems with muscles or nervous system.

4. What is diabetes? Mention at least two asanas that help alleviate diabetes symptoms. (1+0.5x2)

**Ans.** Diabetes is a condition where the body is unable to utilise sugars from the food we eat leading to increase in levels of blood sugar. Bhujangasana and Paschimottamasana are two important asanas that help in diabetes.

5. What is physical fitness? Mention the components of physical fitness. (1+1)

**Ans.** Physical fitness is the capacity of a person to carry out various physical activities without premature fatigue. The components of physical fitness are speed, strength, endurance and flexibility.

6. What are the different types of sports injuries? (0.5x4)

**Ans.** There are four different types of sports injuries. These are soft tissue injuries, joint injuries, bony injuries and overuse injuries.

7. Mention the four physiological determinants of speed. (0.5x4)

**Ans.** The four physiological determinants of speed are:

1. Muscle size—bigger the size more the speed;
2. Body weight—heavier the muscle, stronger they are likely to be;
3. Muscle composition—more the white fibres, stronger the power generated; and
4. Nerve impulse intensity.

8. What are joint injuries and how can they be managed? (1+1)

**Ans.** Joints injuries can be subluxations or dislocations. As first aid, we can offer RICE treatment but these should always be under the supervision of professionals as it can lead to crippling residual effects.

9. List any two methods to enhance muscle strength. (1+1)

**Ans.** Muscle strength can be enhanced by isometric exercises, where length of the muscle does not change and strength increases or isotonic exercises, where the muscle length alters.

**(Section B)**

10. Define endurance. List endurance-enhancing techniques and briefly explain any one. {1+(0.5×4)}

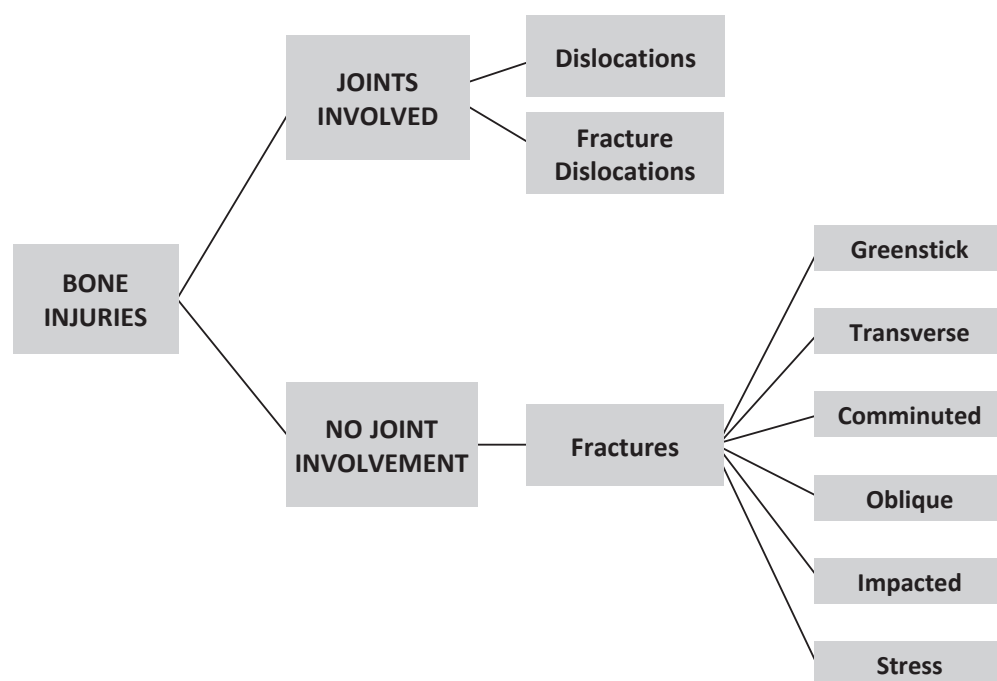
**Ans.** Endurance is defined as the capacity to resist fatigue during an activity. To increase endurance, especially in sportspersons, the methods used include continuous training or interval training or fartlek method. Interval training is when we alternate periods of intense activity for about 30 seconds followed by periods of less intense activity for three to four minutes. This increases fitness and burns more calories over a shorter period of training.

11. What is flexibility? Explain the two different types of flexibility. (1+2)

**Ans.** Flexibility is the ability of a joint or joints to move through an unrestricted, pain-free range of motion. Flexibility can be active flexibility or passive flexibility. Active flexibility can be achieved by moving the muscle during motion and can be dynamic or static. Passive flexibility is the ability to hold the stretch using an external aid or an assistant to achieve motion.

12. What are sports injuries? Draw a flow chart of bone injuries. Explain any one type of such injury. (1+1+1)

**Ans.** Sports injuries may occur in various tissues in the body and are classified as bone injuries, joint injuries, and soft tissue injuries or overuse injuries.



A greenstick fracture is when the bone bends rather than breaks completely. This occurs because only one of the bony cortices breaks leading to a bending of the bone. This occurs in young children.

**For visually impaired candidates**

Explain classification of sports injuries. (1×3)

Sports injuries may occur in various tissues in the body and are classified depending on where they occur. These are thus classified as bone injuries, where the bone is injured or joint injuries, where joints are also involved and soft tissue injuries or overuse injuries occurring in the muscles and ligaments because of too much use or direct impact.

- 13.** Define aggression in sports. Explain briefly the two categories of aggression in sports. (1+1x2)

**Ans.** Aggression in sports is defined as a feeling of anger leading to hostile or violent behaviour or readiness to confront and attack. The two categories of aggression are hostile aggression and instrumental aggression. While hostile aggression aims to hurt the opponent by using violence, instrumental aggression aims to achieve a goal, especially in contact sports, such as a tackle in hockey or even sledging in cricket.

- 14.** What is coordinative ability? Discuss in brief any three types of coordinative abilities. (1x3)

**Ans.** Coordinative ability is defined as the ability that depends on the coordinated effort of central nervous system and the musculoskeletal system.

While there are eight different types of coordinative abilities, the important ones are differential ability, orientation ability and balance ability. Differential ability is the ability to determine the position of the body in relation to gravity while orientation ability helps adjust to time and movement. Balance ability helps the body maintain balance during movement and regain balance quickly if balance is disturbed by the movement.

### (Section C)

- 15.** Explain how yoga is beneficial in treating various diseases. With a brief description of any three diseases, name the asanas useful for treating each of them. (1+3)

**Ans.** Yoga has been used since time immemorial to prevent and treat many diseases. Obesity, diabetes, high blood pressure, low backache and asthma are a few diseases where yoga plays an important curative and preventive role.

Low backache is very common nowadays and regular practice of Vakrasana, Shalabhasana, Tadasana and Bhujangasana helps a lot.

Similarly, a patient of diabetes is greatly benefitted by regularly practising Bhujangasana, Paschimottasana, Pawanmuktasana and Ardhamatsyendrasana.

Patients of high blood pressure are advised to practise Tadasana, Vajrasana, Pawanmuktasana, ArdhaChakrasana and Shavasana to feel better.

- 16.** What is Sheldon's classification of personality? Discuss briefly the traits of personality. (1+1x3)

**Ans.** Sheldon classified personality based on body structure into three types. These are ectomorphic, mesomorphic and endomorphic.

Ectomorphic personalities are those with narrow shoulders, thin legs, narrow chest and low body fat. Such people tend to be quiet and private and are best suited for sports such as gymnastics.

Endomorphic people, on the other hand, are physically round with a pear-shaped body because of wide hips and narrow shoulders with extra fat on arms and thighs. Such people tend to be sociable and outgoing and this body type does well at sports such as weightlifting.

Mesomorphs are between the above two and have broad shoulders with narrow waists and a strong muscular body. Such people do well at most sports.

- 17.** What is motivation and what are the different types of motivation? (2+2)

**Ans.** Motivation is defined as the condition of being eager to act or work, to be enthusiastic about our activities and performance on a day-to-day basis at work and play. Motivation helps overcome obstacles, make sustained efforts, excel at work and sports.

Motivation can be intrinsic or extrinsic. Intrinsic motivation is the feeling from within to do well. This is based on self-determination and helps a person move forward. Extrinsic motivation, on the other hand, is a result of outside forces. This is spurred by reward or someone from outside forcing an action leading to overcoming fear of failure.

18. Briefly explain the administration of Bhujangasana with its contraindications and draw stick diagram. (2+1+1)

**For visually impaired candidates.**

Briefly explain the administration of Bhujangasana along with its contraindications. (2+2)

**Ans.** To start, lie down on the stomach with forehead on the floor. Place feet together with the top of feet pressing the floor. Hands should be under the shoulder with elbows close to the body. Now lift the body from the waist line as up as possible.

This asana is contraindicated during pregnancy, in patients of hernia, back injuries or just after abdomen surgery. Also, people with wrist problems like carpal tunnel should avoid it.

