

**PRACTICE PAPER-1 (SOLUTIONS)**

**CLASS: XII**

**SUBJECT : PHYSICAL EDUCATION**

**SECTION – A**

| S. No. | 1.  | 2.  | 3.  | 4.  | 5.  | 6.  | 7.  | 8.  | 9.  | 10. |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ans.   | (a) | (c) | (a) | (b) | (d) | (d) | (c) | (a) | (b) | (c) |
| S. No. | 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. |     |     |
| Ans.   | (b) | (c) | (c) | (b) | (d) | (a) | (b) | (b) |     |     |

**SOLUTIONS**

1. 55
2. Logistic committee
3. Primary amenorrhea
4. Purging type
5. Ardhalasana
6. 1988
7. Calcium
8. Thiamine
9. Both (A) and (R) are true, but (R) is not the correct explanation of (A).
10. Flexibility
11. 2.2 kg
12. Aerobic System
13. Transverse fracture
14. Mass
15. All the above
16. Process Goal
17. C A D B
18. D C B A

## SECTION – B

**19. The role of logistic committee during sports event**

While the event is in progress, the Logistics Committee is responsible for the conduct of the Opening and Closing Ceremonies, checking registration, distribution of refreshment, management of spectators, handing over of medals and certificates, transportation of players/participants from place of stay to the field and back.

**20. Special Olympics :** Special Olympic is the world's largest inclusive sports organization for children as well as adults. It is a global movement that accepts and welcomes every single individual regardless of their abilities and disabilities. With their unified sports partners in more than 172 countries, the movement is creating a better world order with equality, joy and better fitness.

**Paralympic :** The word "Paralympic" derives from the Greek preposition "para" (beside or alongside) and the word "Olympic". Its meaning is that Paralympics are the parallel Games to the Olympics and illustrates how the two movements exists side-by-side.

**21. Macro Nutrients:** Macro nutrients constitute the majority of individuals' diet. They are taken in large amount. They supply energy and are needed for growth, maintenance and to perform activities.

**Micro Nutrients:** They are required in very small amounts. These are extremely significant for normal functioning of the body. The main function of these nutrients is to enable various chemical reactions to occur in the body

**22. Stroke Volume:** The volume of blood pumped during one beat (contraction) is called stroke volume.

During exercise, stroke volume increases as more oxygen is required. This is accomplished by delivering blood to muscles. After endurance training programme capacity of heart to pump blood in one contraction increased by 20 to 50%.

**23. Friction** is the force that develops at the surface of contact of two bodies and opposes their relative motion.

There are two **causes** of friction:

- (i) The roughness or irregularities of surface
- (ii) The strong atomic or molecular forces of attraction between the two surfaces at the points of actual contact.

**24. Benefits of self-talk**

- (i) Building and developing self-efficacy
- (ii) Controlling effort
- (iii) Creating and changing mood
- (iv) Skill acquisition
- (v) Focusing attention or concentration

SECTION – C

25. No. of matches =  $\frac{N(N-1)}{2}$   
 $= \frac{6(6-1)}{2} = 15$  matches

Fixture of 6 teams (Staircase method)

|       |       |       |       |       |  |
|-------|-------|-------|-------|-------|--|
| 1 – 2 |       |       |       |       |  |
| 1 – 3 | 2 – 3 |       |       |       |  |
| 1 – 4 | 2 – 4 | 3 – 4 |       |       |  |
| 1 – 5 | 2 – 5 | 3 – 5 | 4 – 5 |       |  |
| 1 – 6 | 2 – 6 | 3 – 6 | 4 – 6 | 5 – 6 |  |

26. Logo of Special Olympics :

The Special Olympics logo is based on the sculpture “Joy and Happiness to All the Children of the World” by Zurab Tsereteli. The logo is a symbol of growth, confidence and joy among children and adults with disabilities who are learning coordination, mastering skills, participating in competitions and preparing themselves for richer, more productive lives.

Oath of Special Olympics

The Special Olympics athlete's oath, which was first introduced by Eunice Kennedy Shriver at the inaugural Special Olympics international games in Chicago in 1968, is “Let me win. But if I cannot win, let me be brave in the attempt.”

27. **Phytochemicals** are a wide variety of nonnutritive chemical compounds found in plant foods, which may have health effects.

**Sources:** Phytochemicals are found in fruits, vegetables, grains and other plants.

**Functions:** They act as antioxidants and protect cells from damage that could lead to cancer. By eating more colorful vegetable, fruits and other plant foods, the risk of cancer can be reduced because these foods have certain phytochemicals like Beta-carotene and other carotenoids.

28. **Chair Stand Test for Lower Body Strength**

**Procedure:** Keep the chair against the wall. The participant sits in the middle of the seat. His feet should be shoulder width apart and flat on the floor. The arms should be crossed at the wrists and held close to the chest. From the sitting position, the participant stands up completely up then completely back down at the start of the signal. This is repeated for 30 sec. Count the total no. of complete chair stands.

**Scoring:** The score is the total no. of completed chair stands during 30 seconds.

- 29. Air Resistance:** When a projectile moves through the air, it is slowed down by air resistance. Air resistance decreases the horizontal component of a projectile. There are following factors which are related to the amount of air resistance acting on a projectile.
- (i) **Surface of the Objects:** If the surface of the object is rough, the air resistance will definitely be greater.
  - (ii) **Surface to Volume Ratio:** The larger the surface to volume ratio, the more air resistance will affect the object.
  - (iii) **Mass:** Air resistance depends on the mass of the object. If the mass of the object is smaller there will be more air resistance.
  - (iv) **Speed:** If speed of an object increases, the air resistance also increases. This occurs due to friction.
- 30.** Load and adaptation have a relationship of cause and effect. This relationship however is governed by certain rules which are explained below:
- (i) The adaptation processes are set in motion only when the load is optimum. For achieving adaptation the load must have certain minimum of intensity and volume. If the load is less than the adaptation processes are not started and if the load is too much then recovery processes are delayed considerably.
  - (ii) The adaptation if the result of proper cycle of load and recovery. Without proper and adequate recovery the adaptation will not take place.
  - (iii) The adaptation takes place faster in case of beginners. But it takes a longer time in case of advanced sportsmen. High level sports men take several weeks or even months to achieve an adaptation.
  - (iv) The adaptation to load not only result in improvement of performance capacity but it also leads to increase in the load tolerance ability.
  - (v) Load given to a sportsman only once does not lead to any adaptation. A stable adaptation and increase in performance is achieved only when the load is given regularly for several days or weeks.
  - (vi) Adaptation achieved through load is not permanent. If the training is stopped then the organism adapts itself to the lower level of demands. The stability of an adaptation is more if it has been achieved gradually and steadily.

### SECTION – D

**31.** (a) Formula for no. of matches is  $= \frac{N(N-1)}{2}$

$$= \frac{7(7-1)}{2} = \frac{42}{2} = 21 \text{ matches}$$

**(b) Advantages of league tournament:**

- (i) Only strong or deserving teams get victory in the tournament.
- (ii) Every team gets full opportunity to show its efficiency or performance.
- (iii) Sports and games can be made more popular through league tournament owing to maximum number of matches.

- (iv) In such type of tournament, the sports official does not face any difficulty while selecting the appropriate player of team. They have enough time to watch the efficiency of a player.
- (v) Appropriate opportunities are available to the players to improve their performance.
- (vi) The spectators also get good opportunity to watch many games.
- (c) Mr. Burger was the first person, who imagined about the league tournament and owing to that, it is also called 'Burger System'.
- (d) League tournament is also called 'round robin' tournament. According to this tournament, every team play with every other team once, if it is a single league tournament. If it is a double league tournament, each team play with every other team twice.

### Types of league tournament

#### 1. Single League tournament

#### 2. Double League tournament

- 32. (a) Partially
- (b) Reactive aggression
- (c) In psychology, the term aggression refers to a range of behaviors that can result in both physical and psychological harm to oneself.
- (d) Hostile aggression
- 33. (a) **Fartlek** training method
- (b) The heart rate usually ranges between 140-180 beats per minute during this training. The duration of this training may range from 15 minutes to 1 hour.
- (c) **Gosta Holmer**
- (d) **Major effects of this method:**
  - (i) Promotes weight loss
  - (ii) It's an excellent test for strength and endurance
  - (iv) Improves speed and race tactics
  - (v) It improves the mind over matter game
  - (vi) Increases physical and mental energy
  - (vii) Improves flexibility
  - (viii) Improves Fast and Slow Twitch Muscle Response.

## SECTION – E

- 34. **Anorexia Nervosa:** This is a psycho-physical condition. It is characterised by lack of appetite and an associated with the subconscious desire to remain slim. Such a felling usually develops in young women or adolescence female in order to retain their body figure and image. As a result of this, there is a refusal to maintain normal body weight from their fear of becoming obese and spoiling their figure.

**Causes of Anorexia:** Anorexia is an eating disorder that is caused by a combination of several psychological social and biological factors. Several other factors such as family environment, personality traits and low self-esteem may also lead to anorexia. The factors causing anorexia are as follows:

- (i) Psychological factors
- (ii) Social factors
- (iii) Biological factors

### Symptoms of Anorexia

- (i) Significant underweight: The individual having anorexia will not be able to maintain BMI and will lose weight significantly.
- (ii) Anaemia: Anorexia may be one of the leading causes of anaemia. This leads to tiredness in an individual.
- (iii) Low pulse rate: The individual having anorexia will have low heart rate.
- (iv) Low blood pressure: Anorexia may lead to low blood pressure.
- (v) Denial of illness: An individual suffering from anorexia has the tendency to deny the facts related to the disorder.
- (vi) Self-induced vomiting: An individual suffering from anorexia will go the wash room frequently and induce vomit, especially after a meal.

**Prevention and Management of Anorexia:** The basic preventive measures used in anorexia are also follows:

- (i) People should be encouraged to inculcate a positive self-esteem and body image.
- (ii) Body sizes should not be criticized and students should not be taught to be preoccupied with their weight.
- (iii) Students should have knowledge of generic factors that determine body weight. They should be made to understand that being thin is not the most important means to be popular, beautiful or successful.
- (iv) They should have a healthy approach towards their eating and exercising habits and should avoid the company of those people who are obsessed about their body weight.

35. Asanas which cure Hypertension are:

| Hypertension     |                       |
|------------------|-----------------------|
| Tadasana         | Sitlipranayam         |
| Katichakrasana   | Uttanpadasana         |
| Shavasana        | Gomukhasana           |
| Saral Matsyasana | Ardha Halasana        |
| Bhujangasana     | Makarasana            |
| Vakrasana        | Nadi-shodhanapranayam |
| UttanMandukasana |                       |

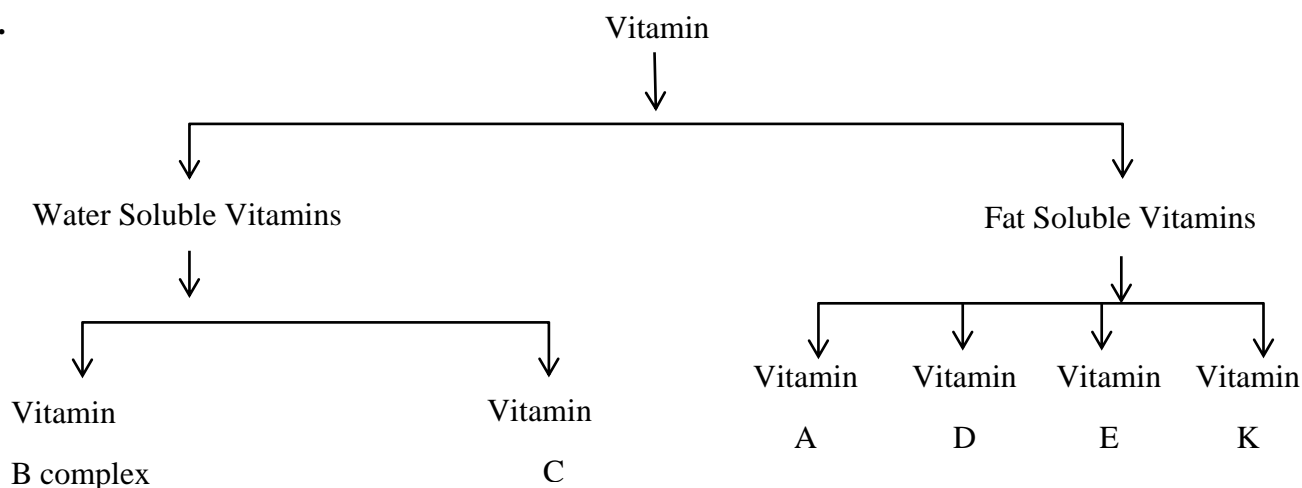
**Procedure of Makarasana :** Lie down on the floor on your stomach with your hands folded under the head. Place the right palm over the left palm on the ground and place the head over the right palm in a relaxed way and close your eyes. Stretch the legs as far as possible. The toes should point outwards. Relax the whole body. Breathe normally and slowly. Feel the whole body touching the ground and the deep relaxation in all your muscles. Relax in this posture for few minutes.



**Benefits of Makarasana :**

- (i) Deep relaxation to the shoulders and the spine.
- (ii) Reduce Waist pain.
- (iii) Helps in Slipped disc.
- (iv) Asthmatic and patients with lung disorders.
- (v) Relief for arthritis patients.

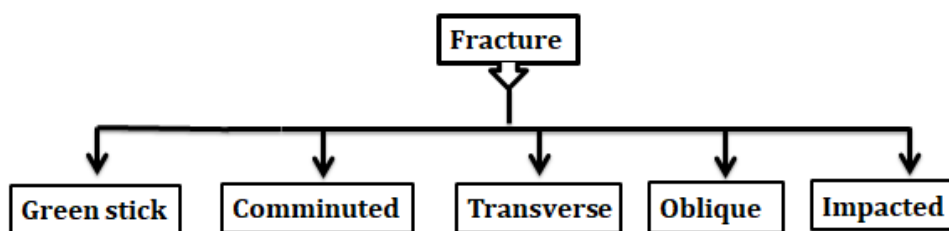
36.



**Fat-soluble vitamins**

| Vitamins         | Function   | Sources  |
|------------------|--|--|
| <b>Vitamin A</b> | Needed for vision in dim light, healthy skin and mucous membranes, growth of skeletal and soft tissues, immune system health | Vitamin A from animal sources (retinol): milk, cheese, cream, butter, egg yolk, liver<br>Beta-carotene (from plant sources): dark green leafy vegetables; red and yellow fruits and vegetables (carrots, pumpkin, mangoes, papaya) |
| <b>Vitamin D</b> | Needed for proper absorption of calcium and phosphorus; deposition of calcium and phosphorus in bones                        | Egg yolks, liver, fatty fish, fortified foods.<br>When exposed to sunlight, the skin can make vitamin D.   |
| <b>Vitamin E</b> | Antioxidant; protects cell walls   | Polyunsaturated plant oils (soybean, corn, cottonseed, safflower); green leafy vegetables; wheat germ; wholegrain products; liver; egg yolks; nuts and seeds   |
| <b>Vitamin K</b> | Needed for proper blood clotting   | green leafy vegetables and cabbage; milk; also produced in intestinal tract by bacteria  |

37.

**Symptoms of Bone Injuries**

- (i) The pain at the moment of the injury and on attempts to move. The pain is constant and increases during jolts and jerks.
- (ii) Disturbance in function may be manifested in limited mobility or complete inability to move the injured extremity. There will be tenderness, extreme pain when we try to move the injured areas.
- (iii) There will be rubbing or cracking sound (crepitation) will hear
- (iv) swelling in the region of fracture.
- (v) Change in the shape of extremity.
- (vi) Change in the direction of the axis.
- (vii) Shortening of the part.
- (viii) Clotting of blood under the skin.
- (xi) Unnatural mobility at the site of the fracture.

**Treatment of Bone Injuries :**

- (i) Careful examination of the region of the injury, mechanism of the injury, shapes along the axis of the bone, irregularity in the curvature, the swelling, etc. Injured extremity is carefully measured and compared with the normal extremity. To establish abnormal mobility and crepitation, the extremity is moved above and below the point of fracture and is carefully and slowly bent at the site of fracture.
- (ii) In closed fractures first aid consists in primary immobilization for the purpose of sending the patient to the medical institution. In case of a sharp displacement of the fragments with bending at a right or acute angle, when the protruding fragments threaten to break the skin, it is necessary, by pulling on the extremity to bring it into proper position and then produce temporary immobilization. Splint bandages are best for temporary immobilization.
- (iii) First aid in open fractures consists in applying an aseptic dressing. The skin around the injury is painted with antiseptic dilution or ointment. This is followed by application of splint bandage and immediate delivery of the injured to a hospital.
- (iv) Treatment of fractures consists of detection, reduction or reposition, or retention or retraction and rehabilitation.