

(b) 9 to 18 years	(ii) Hamstring muscles
(c) Sit and reach test	(iii) Cardiovascular fitness
(d) 600 metre run	(iv) Plate tapping test

a) (a) - (iv), (b) - (i), (c) - (iii), (d) - (ii) b) (a) - (i), (b) - (iv), (c) - (ii), (d) - (iii)

c) (a) - (iv), (b) - (ii), (c) - (i), (d) - (iii) d) (a) - (iv), (b) - (i), (c) - (ii), (d) - (iii)

12. To calculate the total no of teams in the upper half for knock out tournaments, when total no of teams is odd, which formula is used? [1]

a) $\frac{N+1}{2}$ b) $\frac{N^2+1}{2}$

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

13. In the placement of Byes, IV Bye is given to whom? [1]

a) Last team of lower half b) Last team of upper half

c) 1st Team of lower half d) 1st team of upper half

14. Obesity is a condition in which the person weighs _____ more than the normal weight. [1]

a) 20% b) 25%

c) 30% d) 15%

15. The word personality is derived from the Latin word: [1]

a) Endomorphy b) Perjona

c) Persona d) Person

16. Match the following: [1]

(i) Creates antibodies	(a) Fat
(ii) Protects internal organs	(b) Calcium
(iii) Essential for bones and teeth	(c) Iron
(iv) Essential for creating haemoglobin	(d) Protein

a) (i) - (d), (ii) - (a), (iii) - (b), (iv) - (c) b) (i) - (a), (ii) - (c), (iii) - (b), (iv) - (d)

c) (i) - (d), (ii) - (b), (iii) - (a), (iv) - (c) d) (i) - (b), (ii) - (c), (iii) - (d), (iv) - (a)

17. Match the following: [1]

(i) Change in the Nervous system	(a) Calcium deficiency
(ii) Change in the cardio-vascular system	(b) Slow reaction time
(iii) Loss in sensors	(c) Reduction in cardiac out put
(iv) Change in Bone Density	(d) Loss of Hearing

- a) (i) - (a), (ii) - (c), (iii) - (b), (iv) - (d) b) (i) - (d), (ii) - (a), (iii) - (b), (iv) - (c)
- c) (i) - (b), (ii) - (c), (iii) - (d), (iv) - (a) d) (i) - (c), (ii) - (d), (iii) - (a), (iv) - (b)

18. The body will remain in its state of rest or of constant linear velocity unless it is acted upon by some external force. It is _____. [1]

- a) Newton's first law b) Newton's third law
- c) Newton's fourth law d) Newton's second law

Section B

Attempt any 5 questions

19. What is 'stroke volume'? [2]
20. What is sports nutrition? [2]
21. Define personality. [2]
22. What is Diabetes? [2]
23. Which test would you suggest your grand mother for measuring upper body flexibility? [2]
24. Enlist the methods of reducing friction. [2]

Section C

Attempt any 5 questions

25. Write the name of various committees. [3]
26. Explain the jungs classification of human personality. [3]
27. Explain the strategy of inclusive classrooms. Why is it gaining popularity? [3]
28. What is strength? Explain its types. [3]
29. Elaborate the role of Ardhchakrasana and Shavasana in preventive the hypertension. [3]
30. Describe fartlek Training Method. [3]

Section D

31. Read the text carefully and answer the questions: [4]

A balanced diet refers to the intake of food constituting all the necessary nutrients. Ram shares his knowledge of 'food and nutrition' with neighbors while visiting his grandparents in a village. Ram notices that few people living in that village are suffering with goiter and severe anemia.



- (i) Minerals are placed under which nutrient category on the basis of the required quantity?
- (ii) Goiter is caused due to deficiency of _____.
- (iii) What conclusion you can derive from the picture?
- (iv) Fresh Vegetables and Fruits are rich sources of _____.

OR

Almost _____ part of our body is made up of water.

32. Read the text carefully and answer the questions:

[4]

While organizing sports events for the Annual Sports Day, Arjun and Ravi being the captain and vice captain of sports, formed various committees as shown below.



- (i) Members of which committee are responsible for welcoming guests and spectators?
- (ii) Announcement of venue, date and events is done by _____.
- (iii) Organizing and conducting of sports events involve _____.
- (iv) Who takes complete responsibility for the success of the competition?

OR

The work of committees is divided into _____.

33. Read the text carefully and answer the questions:

[4]

Rajesh went to an old age home on the occasion of his birthday. At that time all the inmates in the home were assembled in one place. When he enquired, they

replied that they have a physical fitness test.



- (i) Name any three standard physical fitness tests for senior citizens.
- (ii) Chair stand test is used for measuring the _____.
- (iii) The weight of dumbbells in Arm Curl test for men is _____.
- (iv) Muscular strength starts receding at what age period?

Section E

Attempt any 3 questions

- 34. What are the various factors affecting physiological fitness? Explain. [5]
- 35. How are physical activities helpful for children with special needs? Explain strategies to make physical activities assessable for them. [5]
- 36. What is Friction? Discuss various types of Friction. [5]
- 37. What are the causes of Round Shoulders? Explain its remedial measures. [5]

SOLUTION

Section A

1. (c) hunger
Explanation: Hunger is a biological need of a person. It exists in all humans.
2. (c) strength
Explanation: Strength is the ability of the muscles to overcome resistance.
3. (c) Nadi-shodhanapranayam
Explanation: Nadi-shodhanapranayam
4. (d) Flat foot
Explanation: Flat foot is a deformity in which the person doesn't have an arch in the feet, required for changing directions.
5. (b) Both A and R are true but R is not the correct explanation of A.
Explanation: Both A and R are true but R is not the correct explanation of A.
6. (d) A is false but R is true.
Explanation: A is false but R is true.
7. (b) Five
Explanation: There are Five components that determine physical fitness- Strength, Speed, Endurance, Flexibility and coordinative ability.
8. (c) Upper Body Strength Endurance
Explanation: Upper Body Strength Endurance
9. (a) Both A and R are true and R is the correct explanation of A.
Explanation: Both A and R are true and R is the correct explanation of A.
10. (a) Personality
Explanation: Personality is the sum total of sentiments, skills, ideas, behaviour, etc.
11. (d) (a) - (iv), (b) - (i), (c) - (ii), (d) - (iii)
Explanation: (a) - (iv), (b) - (i), (c) - (ii), (d) - (iii)
12. (a) $\frac{N+1}{2}$
Explanation: The formula for calculating the number of teams in upper half when the number of teams is odd = $\frac{N+1}{2}$
13. (b) Last team of upper half
Explanation: The 4th bye is given to the last team of the upper half as per bye distribution rule.
14. (a) 20%
Explanation: When a person weighs 20% more than the normal weight in his age group, he/she is called obese.
15. (c) Persona
Explanation: Personality is derived from the latin word "persona".
16. (a) (i) - (d), (ii) - (a), (iii) - (b), (iv) - (c)
Explanation: (i) - (d), (ii) - (a), (iii) - (b), (iv) - (c)
17. (c) (i) - (b), (ii) - (c), (iii) - (d), (iv) - (a)
Explanation: (i) - (b), (ii) - (c), (iii) - (d), (iv) - (a)
18. (a) Newton's first law
Explanation: Newton's first law states the same also called the "law of inertia".

Section B

19. Stroke Volume- The amount of blood pumped into the aorta with every heartbeat is known as the stroke volume (SV) in other words stroke volume is the volume of blood pumped from the left ventricle per beat. In an untrained male, it is 70 mL/beat to 90 mL/beat.
20. **Sports nutrition** is the study and practice of nutrition and diet as it relates to athletic performance. It is concerned with the type and quantity of fluid and food taken by an athlete, and deals with nutrients such as vitamins, minerals, and organic substances such as carbohydrates, proteins and fats.
21. According to Ogburn and Nimkoff, "The totality of sentiments, attitude, idea, habits, skills and behaviour' of an individual is personality."
22. Diabetes is such a disorder that it causes sugar to build up in our blood stream instead of being used by the cells in the body.
23. The test I would suggest grand mother for measuring upper body flexibility is Back scratch test.
24. Methods of reducing friction are:-
 1. Polishing surfaces in contact.
 2. Lubrication.
 3. Use of ball bearings.
 4. Streamlining.
 5. Changing the type of material used.

Section C

25. Administration committee, Executive committee, Decoration committee, Lodging and Boarding committee, Transport committee, Ground and Equipment committee, Financial Committee, Refreshment Committee, First Aid Committee, Ceremony Committee, Official committee, Prize committee etc.
26. According to Carl Jung's, the human personality can be classified into three categories:
 - i. **Introvert:** If an individual is motivated or energized by the internal world of thoughts, feelings, and reflections is known as an Introvert. They are having poor self-confidence, moody, unsocial, quiet and pessimist.
 - ii. **Extrovert:** This kind of individual associated with the external world of objects and other people. They believe in action, social settings, interacting. They are friendly, confident responsive and lively leaders.
 - iii. **Ambivert:** These kinds of people have the mixed trait of Introvert and Extrovert. They are having few friends.
27.
 1. In an inclusion classroom, general education teachers and special education teachers work together to meet the needs of students.
 2. This type of classroom gives special education students the support they need and allows them to stay in the least restrictive environment.
 3. All students can benefit from the additional resources and supportive techniques used in an inclusion classroom.

It is gaining popularity because it not only help CWSN students to cop up with the real life situations but also make them learn what is being taught to other students. It also develops a sense of respect and responsibility among other students towards CWSN.

28. **Strength is the ability to act against resistance. The following are its types:-**

- i. **Maximum strength:** Ability to act against maximum resistance.
- ii. **Explosive strength:** Ability to act against resistance with speed.
- iii. **Strength Endurance:** Ability to act against resistance under the condition of fatigue.

29. **Ardh Chakrasana:-**

i. **Procedure:-**

- a. Stand straight and keep your hand close to your body.
- b. Place your hands on your buttocks.
- c. Breathing gently, bend backwards while keeping the knees straight.
- d. Stay for some time in this position.
- e. Come back to the starting position.

ii. **Benefits:-**

- a. Waist becomes flexible
- b. Strengthen backbone
- c. High BP comes to normal
- d. Tones the arms and shoulder muscles

iii. **Precautions:-** Keep knees straight while bend backwards.

Shavasana:-

i. **Procedure:-**

- a. Lie flat on your back.
- b. Keep your arms at your side and your palms facing up.
- c. Legs should be separated and just relax.
- d. Start concentrating from your head to your feet and relax each part of your body and feels that you are just like a dead body.

ii. **Benefits:-**

- a. Relax the whole body.
- b. Release stress, fatigue, depression & tension.
- c. It calms the mind and improves mental health.

iii. **Precautions:-** The place, where Shavasana is performed, should be peaceful with no noise at all.

30. It is another method to develop endurance ability. This method was developed by Swedish coach "Gosta Holmer" in 1930. So it is also known as "Swedish play" or "Speed play" (changes his/her pace. Himself/herself according to surrounding (Hills, River, Forest, Mud etc.)

This method helps in the development of endurance of the sportsperson. Athlete changes his/her speed according. So it is self-disciplined in nature. The heart rate fluctuates between 140 - 180 beats/ minute Fartlek training involves varying our pace throughout our run. Alternating between fast and slow pace.

Section D

31. **Read the text carefully and answer the questions:**

A balanced diet refers to the intake of food constituting all the necessary nutrients. Ram shares his knowledge of 'food and nutrition' with neighbors while visiting his grandparents in a village. Ram notices that few people living in that village are

suffering with goiter and severe anemia.



(i) Minerals are placed under the category of micro-nutrients as they are needed in small quantities by the body.

(ii) Iodine

Goiter is a disease that is caused by the deficiency of iodine. Iodine is an essential minerals that is present in the sea salt.

(iii) Nutrition for a healthy body, exercise along with proper nutrition is required. A balanced diet that has all the essential nutrients should be eaten. Exercises like walking, running, etc. are also needed to remain healthy.

(iv) Both vitamins and minerals

Fresh fruits and vegetables are required by the body to remain healthy. Various micro nutrients are needed by the body which are available in fruits and vegetables.

OR

Two-third part of our body comprises of water.

32. Read the text carefully and answer the questions:

While organizing sports events for the Annual Sports Day, Arjun and Ravi being the captain and vice captain of sports, formed various committees as shown below.



(i) The reception committee is that committee that looks after the welcoming of guests and spectators. It is required throughout the event but majorly in the opening and closing ceremony of the sports event.

(ii) Publicity committee

Announcement of venue, date and events are decided by the publicity committee. It is a pre-meet committee that fixes the important aspects of the event.

(iii) Both planning and forming committees

The organisation and conducting of a sports event depends upon planning and forming of committees. In planning, entire plan about how to conduct a sports event is done.

(iv) The administrative director is the head who organises a sports meet therefore entire responsibility for success of competition to the person in that post.

OR

From the given option, team no. 10 is not a seeded team. Seeded teams do not play the match in the initial rounds of a tournament.

33. Read the text carefully and answer the questions:

Rajesh went to an old age home on the occasion of his birthday. At that time all the inmates in the home were assembled in one place. When he enquired, they replied that they have a physical fitness test.



- (i) ■ Arm Curl Test
■ Chair Sit and Reach Test
■ Back Scratch Test
■ Eight Foot Up and Go Test

(ii) Lower body strength

The chain stand test is used to test the strength of the lower body.

(iii) 8 pounds

The weight of dumbbells in the Arm Curl test for women is 8 pounds.

(iv) 35-40 years

Muscular strength starts receding during the ages of 35-40 years.

Section E

34. 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.
 - 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.

35. Physical activities are very helpful for children with special needs.

- i. Physical improvement
- ii. Mental improvement
- iii. Cognitive benefits
- iv. Social interactions
- v. Self-esteem

Physical improvement:- Exercise improve muscle strength coordination and flexibility. They help combat obesity and reduce the risk of lifestyle diseases like diabetes, asthma, etc. Bone density improves due to exercises. Children experience better balance, improve motor skills, and become aware of their body & become physically fit.

Mental improvement:- General mood of children improves and children tend to become happier.

Social interactions:- Physical activities improve social interactions and improve the psychological and emotional ability of such children.

Cognitive benefits:- Sports are a learning tool for self-regulation and decision making. Children learn to communicate when they get to interact with other children.

Self-esteem:- confidence is developed which results in the improvement of a positive self-image. Children start feeling that they can also contribute to the growth of society.

Strategies:-

- i. Different playing rules
- ii. Specialized equipment
- iii. Trained Educators
- iv. Individual needs
- v. Regular medical check-ups
- vi. Safety supervision
- vii. Positive learning environment
- viii. Modified games (etc.)

36. Friction is the force that combats relative motion between the two surfaces that comes in contact. Friction always acts in the opposite direction of the applied force.

Type of frictions:

- i. **Static friction:** The opposite force that comes into play when one body is actually not moving over the surface of another body. Dynamic friction is two types.
- ii. **Rolling friction:** The opposing force that comes into play when the body is actually rolling over the surface of another body. For example, a hockey/cricket ball is hit.
- iii. **Sliding Friction:** The opposite force that comes into play when one body actually slides over the surface of another body, for example sliding on the field of cricket by a fielder.

37. Causes of Round Shoulders:

- i. Due to poor posture in work.
- ii. Faulty furniture.
- iii. Wrong habit of sitting or standing.

- iv. Carrying heavy load on shoulders.
- v. Tendency to keep the body leaning forward.

Remedial measures: There are few corrective exercises for round shoulders. We should sit and try to stand in erect position. Change the side time to time to avoid deformity. Make yourself more conscious. Special attention must be paid while performing basic movements.

- i. Stand in erect position.
- ii. Do not allow to drop the shoulder.
- iii. Do exercise with rotating the shoulders in backward direction and downward motion.
- iv. Do more exercise with shoulder and strengthen shoulder muscles girdle.
- v. BE conscious while you sit.
- vi. Exercise for lengthening the chest muscles.