

Grade
6

S-CAT Assessment Round Sample Question Paper

Return the answer sheet along with question paper to the invigilator at the end of the exam.



TOTAL MARKS
100



QUESTIONS
50



DURATION
60 mins

Instructions for Student:

- Read the question carefully before answering.
- Each question has 4 options (A, B, C & D).
- Choose one correct option as your answer, from the 4 options.
- Every question carries 2 marks.
- On the answer sheet blacken the correct option against the corresponding question number,

The Correct Method

Q.	Answer
1	(A) (B) ● (D)

The Wrong Methods

Q.	Answer
1	(A) ● ● (D)
1	(A) (B) ● (D)
1	(A) (B) ✓ (D)
1	(A) (B) ✗ (D)

- Use pencil to mark your answer.
- If you wish to change your answer, erase the previous mark completely.

- 1. Athletes require more carbohydrates because:**
 - a. Carbohydrates help in protecting against diseases.
 - b. Carbohydrates are the primary source of energy needed for physical activities.
 - c. Carbohydrates help in building muscles.
 - d. Carbohydrates help in repairing tissues.
- 2. Which vitamin is synthesized by the body when it is exposed to sunlight?**
 - a. Vitamin A
 - b. Vitamin B
 - c. Vitamin D
 - d. Vitamin C
- 3. What observation indicates the presence of fat in the grease-spot test?**
 - a. A dry spot
 - b. A translucent spot
 - c. A dark spot
 - d. No change
- 4. Which of the following statements is true about fats?**
 - a. They provide less energy than carbohydrates.
 - b. They do not help in absorbing vitamins.
 - c. They are stored in the body as energy reserves.
 - d. They are the building blocks of body tissues.
- 5. What type of root system do dicots generally have?**
 - a. Fibrous root
 - b. Tap root
 - c. Aerial root
 - d. Pneumatophores
- 6. Given that a plant has fibrous roots, how does its ability to anchor itself in the soil compare to plants with tap roots?**
 - a. It has a stronger anchoring ability.
 - b. It has weaker anchoring ability.
 - c. It has the same anchoring ability.
 - d. It cannot be determined.
- 7. If you want to test the effect of light on photosynthesis, which part of the plant would you observe most closely?**
 - a. Roots
 - b. Stem
 - c. Leaves
 - d. Flowers
- 8. Which of the following is a biotic component of the environment?**
 - a. Water
 - b. Air
 - c. Soil
 - d. Animals

9. Why do animals like polar bears have a thick layer of blubber?

- a. To help them swim faster
- b. To keep them warm in cold environments
- c. To help them climb trees
- d. To camouflage in their surroundings

10. Which of these experiments would best demonstrate the role of plants in providing oxygen?

- a. Measuring the amount of water absorbed by plant roots
- b. Observing the growth of plants under different light conditions
- c. Measuring oxygen levels in water with and without aquatic plants
- d. Testing soil pH in different habitats

11. What is the primary cause of water pollution from factories?

- a. Littering
- b. Oil spills
- c. Chemical waste discharge
- d. Plastic waste

12. What are non-biodegradable wastes?

- a. Waste that can be broken down naturally.
- b. Waste that cannot be broken down easily.
- c. Waste that can be burned for energy.
- d. Waste that is recycled into new products.

13. Why is it important to use fewer chemicals at home and in the garden?

- a. To save money
- b. To reduce water pollution
- c. To increase plant growth
- d. To decrease air pollution

14. What happens to a light when it passes through a pinhole camera?

- a. It creates a shadow.
- b. It forms an upright image on the screen.
- c. It forms an inverted image on the screen.
- d. It reflects back through the pinhole.

15. Data shows a decrease in fish populations in a polluted river. What can be inferred from this information?

- a. Fish thrive in polluted water.
- b. Pollution may be harming the fish population
- c. Pollution does not affect fish.
- d. Fish populations are unrelated to water quality.

16. What is the primary function of the large intestine?

- a. It absorbs nutrients.
- b. It stores and concentrates bile.
- c. It absorbs water and salts.
- d. It produces digestive enzymes.

17. Which enzyme in saliva begins the process of carbohydrate digestion?

- a. Pepsin
- b. Trypsin
- c. Salivary amylase
- d. Lipase

18. In an experiment to observe peristalsis, what kind of model or material could be used to simulate the oesophagus?

- a. A plastic tube
- b. A rubber band
- c. A balloon
- d. A glass rod

19. If more water than usual is being absorbed in the large intestine, it leads to

- a. Diarrhoea
- b. Dehydration
- c. Constipation
- d. Normal digestive function

20. What are the tiny hair-like structures that line the nasal passages called?

- a. Alveoli
- b. Bronchioles
- c. Cilia
- d. Diaphragm

21. Which type of plastid is responsible for the green colour in plants and helps in photosynthesis?

- a. Cromoplast
- b. Leucoplast
- c. Chloroplast
- d. Mitochondria

22. Among the following parts of the respiratory system, where would a chart typically show the highest levels of oxygen?

- a. Nasal passages
- b. Alveoli
- c. Bronchioles
- d. Trachea

23. What is the main component of plasma in blood?

- a. Red blood cells
- b. White blood cells
- c. Water
- d. Platelets

24. What happens if the septum of the heart is damaged?

- a. Blood flow will stop.
- b. Oxygenated and deoxygenated blood will mix.
- c. Only oxygenated blood will circulate.
- d. Only deoxygenated blood will circulate.

25. How does the structure of capillaries support their function?

- a. They have thick walls for strength.
- b. They are very thin to allow an exchange of materials.
- c. They are large enough to carry more blood.
- d. They are rigid to maintain their shape.

26. A graph indicates a sharp increase in white blood cell count. What might this suggest about the individual's health?

- a. He is experiencing an infection.
- b. He has high oxygen levels.
- c. He has a nutrient deficiency.
- d. He has high blood pressure.

27. Which disease is an example of a non-communicable disease?

- a. Malaria
- b. Cholera
- c. Diabetes
- d. Influenza

28. What is the primary mode of transmission for malaria?

- a. Direct contact with an infected person
- b. Contaminated food and water
- c. Mosquito bites
- d. Airborne respiratory droplets

29. Why is it important to cover coughs and sneezes with tissues or elbows?

- a. To avoid using hands
- b. To reduce the spread of respiratory droplets
- c. To increase contamination of surfaces
- d. To keep hands clean

30. To study the effectiveness of a new vaccine, what is the most appropriate experimental approach?

- a. Observing the physical activity of individuals
- b. Comparing infection rates before and after vaccination
- c. Measuring blood pressure in vaccinated individuals
- d. Counting white blood cells

31. How do plant cells and animal cells differ in terms of vacuoles?

- a. Plant cells have large vacuoles, while animal cells have small vacuoles.
- b. Plant cells have small vacuoles, while animal cells have large vacuoles.
- c. Both plant and animal cells have equally sized vacuoles.
- d. Plant cells do not have vacuoles, while animal cells have numerous vacuoles.

32. What is the role of cell division in living organisms?

- a. It helps in nutrient absorption.
- b. It ensures genetic material is passed on to new cells.
- c. It regulates energy production.
- d. It controls waste storage.

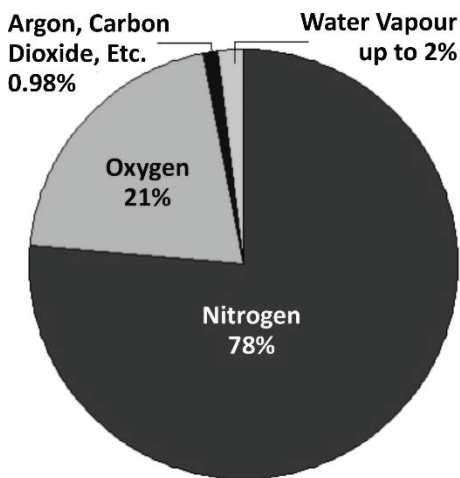
33. Which property is common to metals but not to non-metals?

- a. Poor conduction of electricity
- b. Low melting and boiling points
- c. Malleability and ductility
- d. Dull appearance when polished

34. How would you determine the speed of a moving object?

- a. Use a balance
- b. Use a thermometer
- c. Use a ruler
- d. Use a stopwatch and measure the distance travelled

35. Based on the pie chart, which of the following statements is true?



- a. Water vapor makes up 21% of the atmosphere.
- b. Oxygen is less abundant than Nitrogen in the atmosphere.
- c. Argon is the most abundant gas in the atmosphere.
- d. Nitrogen and Oxygen together make up less than half of the atmosphere.

36. Which of the following actions demonstrates how force can change the direction of an object?

- a. Kicking a soccer ball to start its motion.
- b. Stopping a rolling ball with your hand.
- c. Turning a steering wheel to make a car turn.
- d. Compressing a spring with your hand.

37. If an event lasted for 3 hours and 30 minutes, what is its duration in minutes?

- a. 120 min
- b. 150 min
- c. 180 min
- d. 210 min

38. If a car travels at a speed of 80 km/h for 3 hours, how far does it travel?

- a. 180 km
- b. 160 km
- c. 200 km
- d. 240 km

39. What tool would you use to measure the length of a table?

- a. Balance
- b. Thermometer
- c. Ruler
- d. Stopwatch

40. What is the unit of force?

- a. Newton (N)
- b. Kilogram (kg)
- c. Metre (m)
- d. Second (s)

41. If a ball is rolling on a rough surface and the surface becomes smoother, what would happen to the ball's motion?

- a. Speed up.
- b. Slow down.
- c. Stop.
- d. Change direction.

42. How can you investigate the behaviour of light passing through different materials?

- a. By using a pinhole camera
- b. By observing a solar eclipse
- c. By shining light through various objects
- d. By measuring the speed of light

43. How is electricity produced in a nuclear power plant?

- a. By burning fossil fuels
- b. By splitting atoms
- c. By capturing wind energy
- d. By converting solar energy

44. How can you demonstrate the heating effect of electric current?

- a. By observing the magnetic effect
- b. By turning on an electric heater
- c. By closing an electric circuit
- d. By connecting wires to a light bulb

45. What experiment can you conduct to demonstrate the magnetic effect of electric current?

- a. Using an electric heater
- b. Using an electric switch
- c. Making an electromagnet
- d. Connecting wires to a light bulb

46. Which type of magnet retains its magnetism once magnetized?

- a. Temporary magnet
- b. Permanent magnet
- c. Electromagnet
- d. Artificial magnet

47. What is the purpose of using magnets in data storage devices?

- a. To hold data securely
- b. To generate electricity
- c. To heat up the device
- d. To rotate the disk

48. Which machine/tool is a combination of two or more simple machines?

- a. inclined plane
- b. wheel
- c. Bicycle
- d. All of the above

49. Which force keeps an object moving in a circular path?

- a. Buoyant force
- b. Tension force
- c. Centripetal force
- d. Spring force

50. Which of the following is an example of wedge?

- a. Steering wheel
- b. Ramp
- c. Knife
- d. Bicycle

