



S-CAT GRAND FINALE

Sample Paper

(Based on the new exam pattern)



TOTAL MARKS
80



QUESTIONS
40



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.
- **New Exam Pattern:**
 1. Each question will carry 1, 2, or 4 marks, depending on its difficulty level.
 2. **Negative Marking:** Additional marks will be deducted for every incorrect answer (0.25 marks for a 1-mark question, 0.5 marks for a 2-mark question, and 1 mark for a 4-mark question).
 3. The Assessment Round score will be included in the Grand Finale score using a weighted average method. 30% of the Assessment Round and 70% of the Grand Finale score.
 4. New Method to Calculate Marks for Grand Finale Awards.

	Assessment Round	Grand Finale
Actual Marks	60	80
Weightage	30%	70%
Marks After Weighted Average Rule	$60 \times 30/100 = 18$	$80 \times 70/100 = 56$
Final Marks for Grand Finale Awards	$18 + 56 = 74$	

- On the answer sheet blacken the correct option against the corresponding question number.
- **Use pencil to mark your answer.**
- If you wish to change your answer, erase the previous mark completely.

All The Best !

SECTION 1: Concept Check

- 1. What should you do to maintain a healthy excretory system? (1m)**
 - a. Eat salty snacks daily.
 - b. Drink plenty of water and stay active.
 - c. Hold urine for long periods.
 - d. Consume junk food regularly.
- 2. Which gas in the air is needed for breathing? (1m)**
 - a. Carbon dioxide
 - b. Nitrogen
 - c. Oxygen
 - d. Hydrogen
- 3. Which body part of an insect contains the antennae? (1m)**
 - a. Thorax
 - b. Head
 - c. Abdomen
 - d. Wings
- 4. Which of these is NOT correct? (1m)**
 - a. Beaks- for eating and feeding baby birds
 - b. Tail-to maintain balance during flight
 - c. Feathers- to help fly and perch
 - d. Claws-to hold things and grip branches
- 5. A stick is 120 centimetres long. How many metres is it? (1m)**
 - a. 1.2 m
 - b. 12 m
 - c. 0.12 m
 - d. 1200 m
- 6. Choose the option that is NOT correct. (1m)**
 - a. Force-Second
 - b. Sound-Decibel
 - c. Length-Metre
 - d. Temperature-Degree
- 7. Which of the following is an adaptation of cactus plants? (1m)**
 - a. Thick, fleshy stems to store water
 - b. Needle-shaped leaves to reduce water loss
 - c. Shallow, widespread roots to absorb water quickly
 - d. All of the above
- 8. Which bird cannot fly but can swim well? (1m)**
 - a. Sparrow
 - b. Penguin
 - c. Pigeon
 - d. Crow

9. Which of the following statement is NOT correct? (1m)

- a. The circulatory system helps us transport oxygen and nutrients through the blood.
- b. The respiratory system pumps the blood through blood vessels.
- c. The nervous system helps us think, feel, and sense the world around us.
- d. The digestive system helps us turn food into energy.

10. Why does a drum produce sound when we tap on it? (1m)

- a. Its surface vibrates.
- b. Its surface absorbs vibrations.
- c. Its size increases.
- d. Its surface becomes hot.

SECTION 2: Skill Application

11. A plant is kept inside a closed jar with no air supply. It dies after 3 days. Why does it happen? (2m)

- a. Plants need nitrogen to survive.
- b. Plants need carbon dioxide to survive.
- c. Plants need sunlight, not air.
- d. Plants cannot survive in water.

12. What will happen if a ball is thrown upwards? (2m)

- a. It will speed up as it goes higher and fall back down.
- b. It will stop mid-air and stay there.
- c. It will slow down as it goes higher and fall back down.
- d. It will slow down as it goes higher and continue moving upwards.

13. A bird is observed catching fish and building nests near a river.

What kind of bird is it likely to be? (2m)

- a. Land bird
- b. Water bird
- c. Flightless bird
- d. Song bird

14. A magnet pulls an iron nail towards it but does not affect a wooden piece nearby. Why? (2m)

- a. The magnet is weak.
- b. Magnets attract only objects made of magnetic materials like iron.
- c. The wooden piece is too heavy.
- d. Magnets only attract small objects.

15. Kilometre is a unit of length. It can be used to measure which of the following? (2m)

- a. Distance between 2 cities
- b. Size of pen
- c. Size of bed sheet
- d. Size of ruler

16. Which of the following would most likely lead to digestive disorders? (2m)

- a. Eating fresh, cooked food
- b. Drinking 2 to 3 litres of water everyday
- c. Consuming large amounts of pizza
- d. Eating more green leafy vegetables

17. A person is pulling a cart. Which factors will affect how much force is needed? (2m)

- a. The weight of the cart
- b. The surface it is being pulled on
- c. Both a and b
- d. Neither a nor b

18. Which practice can help reduce air pollution? (2m)

- a. Using public transport or carpooling
- b. Using more plastic
- c. Burning garbage in open areas
- d. Cutting down trees

19. Which of these shows the correct order of transformation in a butterfly's life cycle? (2m)

- a. Caterpillar → Butterfly → Egg → Pupa
- b. Egg → Caterpillar → Pupa → Butterfly
- c. Egg → Pupa → Caterpillar → Butterfly
- d. Butterfly → Caterpillar → Egg → Pupa

20. You see a bear eating berries and then catching fish from a river. Which category does the bear belong to? (2m)

- a. Herbivore
- b. Carnivore
- c. Omnivore
- d. Insectivore

SECTION 3: Case-Based Science

21. Anil leaves two bowls of water: one in the sun and the other in the shade. The water in the sun evaporates faster. What can he conclude from this experiment? (2m)

- a. Heat decreases the rate of evaporation.
- b. Heat has no effect on the rate of evaporation.
- c. Heat increases the rate of evaporation.
- d. Heat stops the process of evaporation.

22. While cleaning the house, Maya accidentally swallows a small amount of a poisonous cleaning chemical. Her family members are worried and want to help her immediately. (2m)

- a. Give her water to drink immediately.
- b. Make her vomit and call for medical help.
- c. Ignore it and wait for her to recover.
- d. Apply first aid to the wound.

23. Amira's teacher places a glass tumbler, rubber band, and wooden stick in water. Amira observes that

- The tumbler sinks.
- The rubber band floats.
- The wooden stick floats.

What does this experiment test? (2m)

- a. Whether materials are hard or soft.
- b. If materials are transparent.
- c. Whether materials sink or float in water.
- d. If materials are flexible.

24. Arthur plays with his toy car at home. He notices that it moves quickly across the smooth floor but slows down when he pushes it over a rough mat.

What can he conclude from this observation? (2m)

- a. Rough surfaces reduce speed due to more friction.
- b. Smooth surfaces increase speed due to more friction.
- c. Force is not required to move objects on rough surfaces.
- d. Rough surfaces help the car move faster.

25. Ishaan hears the school fire alarm ringing. What should he do? (2m)

- a. Ignore it because it may be a drill.
- b. Follow the teacher's instructions and move to the safe assembly area.
- c. Hide under a desk and stay there.
- d. Run in any direction without telling anyone.

26. Neha observes a mosquito near a bucket. Her teacher tells her that mosquitoes can breed in stagnant water like this. What can she conclude from this? (2m)

- a. Stagnant water should not be allowed to collect.
- b. Stagnant water keeps mosquitoes away.
- c. Mosquitoes breed only in dry places.
- d. Mosquitoes cannot live near water.

27. Emily's mother wants to buy a cooking pan. She needs a material that is sturdy and allows heat to pass through it easily. Which material would be most suitable based on the properties given below? (2m)

Material	Property
Wood	Hard, does not conduct heat
Rubber	Flexible, waterproof
Metal	Strong, conducts heat
Cloth	Soft, absorbs water, conducts heat

- a. Wood
- b. Rubber
- c. Metal
- d. Cloth

28. Anna was outside on a very hot afternoon. After playing for a while, she noticed that her forehead was covered with sweat. Why did her body produce sweat? (2m)

- a. To help cool the body
- b. To make the body warmer
- c. To help digest her foods
- d. To make her bones stronger

29. Hina pours the water from a jug into a glass. She notices that the water takes the shape of the glass. What property of liquids does this show? (2m)

- a. Liquids do not have a fixed shape.
- b. Liquids do not have a fixed colour.
- c. Liquids cannot change their shape.
- d. Liquids have no weight.

- 30. Amay's school starts using reusable water bottles instead of disposable plastic bottles. How can this help the environment? (2m)**
- It increases water pollution.
 - It reduces plastic waste.
 - It increases the amount of garbage.
 - It makes the air more polluted.
- 31. Anne finds a sparrow with an injured wing near her garden. The bird looks weak and seems hungry. Anne wants to help the sparrow by giving it some food. Which food would be most suitable for the sparrow? (2m)**
- Fish
 - Leafy vegetables
 - Grains and seeds
 - Eggs
- 32. Megha works in an office and often has important meetings in her cabin. She does not want her colleagues to see clearly inside the cabin, but she still wants some light to enter so that the cabin does not become dark. What type of material should Megha use for the door of her cabin? (2m)**
- Transparent glass
 - Translucent glass
 - Wood
 - Metal
- 33. Tina wants to share the amount of water required for a recipe with her friend. She wants to tell her friend exactly how much water to use. Which unit does Tina need to use, and why? (2m)**
- Gram, because it is standard unit to measure mass
 - Litre, because it is a standard unit for capacity of liquids
 - Kilogram, because it is standard unit measure weight.
 - Metre, because it is a standard unit for capacity of liquids
- 34. Soham is pushing a box from one room to another. He notices that it is easier to push the box across the wooden floor of his living room than to push the box on the carpet of his bedroom. What could be the reason? (2m)**
- The wooden floor has more friction than the carpet.
 - The carpet has more friction than the wooden floor.
 - The box becomes lighter on the wooden floor.
 - The box becomes heavier on the carpet.
- 35. Reena wants to grow a tree in her garden. Her mother explains the necessary steps to her. Which of the following is correct? (2m)**
- She needs to plant a seed into the soil and water it.
 - She has to start watering it only once it has grown into a small plant.
 - She needs to keep it in the dark till it grows strong
 - She needs to keep the seed in a closed box.

SECTION 4: Challenger's Section

36. Read the data below and answer the question. (4m)

A: It needs food and water. It can breathe, grow over time and move around.

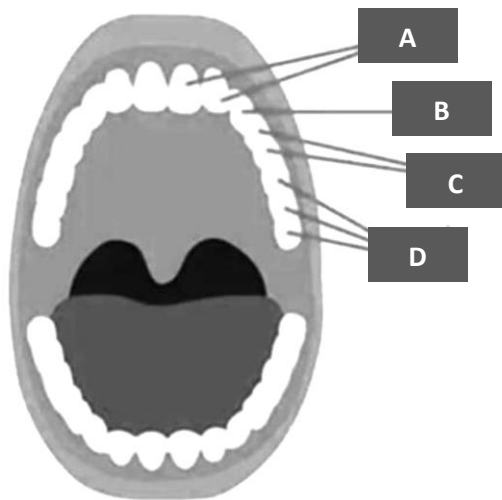
B: It does not need food or water. It cannot breathe, grow or move.

C: It needs water and sunlight. It grows over time but cannot move from one place to another.

What conclusion can you draw?

- a. Objects A and B are living things, Object C is a non-living thing.
- b. Objects A and C are living things, Object B is a non-living thing.
- c. Objects B and C are non-living things, Object A is a living thing.
- d. Objects A, B and C are living things.

37. Choose the correct option. (4m)



- a. A-Incisor, B-Molar, C-Premolar, D-Canines
- b. A-Molar, B-Premolar, C-Canine, D-Incisor
- c. A-Incisor, B-Premolar, C-Canine, D- Molar
- d. A-Incisor, B- Canine, C-Premolar, D- Molar

38. Read the following statements about changes of state of matter. (4m)

Statement I: The conversion of a liquid into a gas when heated is called evaporation.

Statement II: The conversion of a gas into a liquid when cooled is called condensation.

Statement III: The conversion of a liquid into a solid is called melting.

Choose the correct option.

- a. Only Statement I is correct.
- b. Only Statement II is correct.
- c. Statements I and II are correct.
- d. Statements I, II and III are correct.

39. Why do we need both bones and muscles to move, and how do they work together? (4m)

- a. Bones provide support, while muscles pull on bones to help the body move
- b. Bones pull the muscles, while muscles provide support for the whole body.
- c. Bones transport blood to organs, while muscles carry oxygen to the lungs.
- d. Bones control the brain, while muscles protect the heart.

40. How do astronauts talk to each other in space and what does this show about sound? (4m)

- a. They remove their helmets because sound travels faster without air.
- b. They speak as they normally as they do on ground.
- c. They shout because sound travels slowly in space.
- d. They use radios because sound cannot travel through the empty space between them.

