
IQNexus Science Olympiad (IQSO) – Class 5

Sample Paper

Total Questions: 30

Total Marks: 100

Time: 1 Hour

Student Details:

Name: _____

Class: _____

Section: _____

Roll No.: _____

School Name: _____

Pattern & Marking Scheme:

1. Logical Challenger (Science-Based Puzzles & Reasoning) – 5 Questions (10 Marks)

Each question carries 2 marks

2. Core Science (Physics, Chemistry, Biology) – 15 Questions (45 Marks)

Each question carries 3 marks

3. Scientific Aptitude (Application-based & Experimental Science) – 5 Questions (25 Marks)

Each question carries 5 marks

4. HOTS (Higher Order Thinking Skills) – 5 Questions (20 Marks)

Each question carries 4 marks

Section 1: Logical Challenger (5 Questions, 10 Marks)

1. If the Sun is related to Solar Energy, then Wind is related to:

- A) Light Energy
- B) Wind Energy
- C) Hydro Energy
- D) Geothermal Energy

2. A scientist notices that when she rubs a balloon on a sweater, it sticks to the wall. This is an example of:

- A) Gravity
- B) Static Electricity
- C) Magnetism
- D) Chemical Reaction

3. If $5+3=15$, $6+4=24$, and $7+5=35$, then what is $8+6=?$

- A) 40
- B) 48
- C) 42
- D) 56

4. A train takes 2 hours to travel 120 km. How long will it take to travel 300 km at the same speed?

- A) 4 hours
- B) 5 hours
- C) 6 hours
- D) 7 hours

5. If a plant is to photosynthesis, then a human is to:

- A) Breathing
 - B) Walking
 - C) Sleeping
 - D) Growing
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Section 2: Core Science (15 Questions, 45 Marks)

6. Which organ in the human body pumps blood?

- A) Brain
- B) Lungs
- C) Heart
- D) Liver

7. The process by which plants prepare their own food is called:

- A) Respiration
- B) Photosynthesis
- C) Germination
- D) Digestion

8. What is the main function of the roots in a plant?

- A) Making food
- B) Transporting water
- C) Absorbing nutrients and water
- D) Releasing oxygen

9. Which property of water allows it to dissolve many substances?

- A) Cohesion
- B) Adhesion
- C) Universal Solvent
- D) Surface Tension

10. Which gas do humans inhale from the air?

- A) Carbon Dioxide
- B) Oxygen
- C) Nitrogen
- D) Hydrogen

11. What is the hardest natural substance on Earth?

- A) Gold
- B) Iron
- C) Diamond
- D) Graphite

12. The energy that comes from the Sun is called:

- A) Chemical Energy
- B) Kinetic Energy
- C) Solar Energy
- D) Thermal Energy

13. What is the primary function of the skeleton in the human body?

- A) Producing blood
- B) Providing shape and support
- C) Digesting food
- D) Controlling body temperature

14. Which of the following is a non-renewable source of energy?

- A) Wind
- B) Solar
- C) Coal
- D) Water

15. The Earth's rotation causes:

- A) Seasons
- B) Day and Night
- C) Gravity
- D) Tides

16. What is the boiling point of water?

- A) 50°C
- B) 100°C
- C) 150°C
- D) 200°C

17. Which gas is released by plants during photosynthesis?

- A) Carbon Dioxide
- B) Oxygen

- C) Nitrogen
- D) Hydrogen

18. What is the function of the stomach in the human body?

- A) Pumping blood
- B) Absorbing oxygen
- C) Digesting food
- D) Controlling movement

19. Which of these is a liquid metal?

- A) Iron
- B) Gold
- C) Mercury
- D) Silver

20. What do we call a group of stars forming a recognizable pattern?

- A) Constellation
- B) Asteroid
- C) Galaxy
- D) Meteor

Section 3: Scientific Aptitude (5 Questions, 25 Marks)

21. If a student mixes vinegar and baking soda, which gas is released?

- A) Oxygen
- B) Carbon Dioxide
- C) Hydrogen
- D) Nitrogen

22. Why does a ship float on water while a small iron nail sinks?

- A) Ships are lighter
- B) Ships are made of plastic
- C) Ships have less density than water
- D) Ships are pushed up by air

23. What happens to a shadow when the light source moves closer?

- A) It becomes larger
- B) It disappears
- C) It becomes smaller
- D) It stays the same

24. What is the best way to separate salt from water?

- A) Filtration
- B) Evaporation
- C) Sedimentation
- D) Freezing

25. Which simple machine is used in a seesaw?

- A) Lever
- B) Pulley

C) Wedge

D) Screw

Section 4: HOTS (5 Questions, 20 Marks)

26. Why does ice float on water?

A) Ice is heavier than water

B) Ice is lighter than water

C) Ice has a lower density than water

D) Ice repels water molecules

27. If a spaceship travels away from Earth, what happens to the astronaut's weight?

A) Increases

B) Decreases

C) Remains the same

D) Disappears completely

28. Why do we wear dark-colored clothes in winter?

A) They reflect heat

B) They absorb heat

C) They let air pass

D) They keep us dry

29. What would happen if there were no gravity on Earth?

- A) Nothing would change
- B) We would float into space
- C) We would be pulled towards the Sun
- D) The atmosphere would become stronger

30. If plants are kept in complete darkness, they will:

- A) Grow normally
 - B) Stop photosynthesis and die
 - C) Become healthier
 - D) Grow faster
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Answer Key

- 1. B | 2. B | 3. B | 4. B | 5. A
- 6. C | 7. B | 8. C | 9. C | 10. B
- 7. C | 12. C | 13. B | 14. C | 15. B
- 8. B | 17. B | 18. C | 19. C | 20. A
- 9. B | 22. C | 23. A | 24. B | 25. A
- 10. C | 27. B | 28. B | 29. B | 30. B