

Mindbenz Olympiad Of Science (MOS)

Sample paper

Class – 4

Maximum Marks: 40

Time Allowed – 45 Minutes

Section A: Concept Clarity (10 Questions x 1 Mark = 10 Marks)

1. Which pigment gives leaves their green color?

- A) Hemoglobin
- B) Xylem
- C) Chlorophyll
- D) Phloem

2. Which group has only herbivores?

- A) Lion, Tiger, Leopard
- B) Cow, Goat, Deer
- C) Bear, Fox, Dog
- D) Crow, Eagle, Owl

3. What type of joints are found in fingers?

- A) Ball and socket
- B) Hinge
- C) Pivot
- D) Gliding

4. Which nutrient builds muscles in the human body?

- A) Carbohydrates
- B) Fats
- C) Proteins
- D) Vitamins

5. Which natural fiber comes from a plant?

- A) Wool
- B) Silk
- C) Cotton
- D) Nylon

6. Which of the following is a gas at room temperature?

- A) Ice
- B) Water
- C) Oxygen
- D) Salt

7. What is needed to change the motion of an object?

- A) Speed
- B) Mass
- C) Energy
- D) Force

8. Which of these is a non-renewable resource?

- A) Wind
- B) Sunlight
- C) Petroleum
- D) Water

9. Which planet is known as the "Blue Planet"?

- A) Mars
- B) Earth
- C) Uranus
- D) Neptune

10. The largest organ in the body is:

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

Section B: Application Zone (Moderate – 10 Questions × 1 mark = 10 marks)

11. A child eats only junk food and refuses vegetables. What might happen over time?

- A) Strong bones
- B) Balanced diet
- C) Nutritional deficiency
- D) Better immunity

12. A house made on stilts is best suited for:

- A) Desert

- B) Mountains
- C) Flood-prone areas
- D) Urban cities

13. Which property helps metals to be drawn into wires?

- A) Ductility
- B) Hardness
- C) Brittleness
- D) Elasticity

14. A plant kept in a dark room stops growing well. The likely reason is:

- A) Lack of water
- B) Too much soil
- C) No photosynthesis
- D) Excess sunlight

15. A person in Kashmir wears woolen clothes because:

- A) They are stylish
- B) They absorb sweat
- C) They keep us warm
- D) They dry fast

16. Which of the following is an example of work being done?

- A) Holding a bag without moving
- B) Sitting on a bench
- C) Lifting a book
- D) Sleeping

17. You cannot see stars during the day because:

- A) They are hidden
- B) The moon covers them
- C) Sunlight is too bright
- D) Clouds block them

18. A glass tumbler breaks when hot water is poured into it quickly. Why?

- A) Water is too clean
- B) Glass is allergic to heat
- C) Sudden expansion causes breakage
- D) Water is heavy

19. Boiling milk before drinking helps in:

- A) Changing its taste

- B) Killing harmful microbes
- C) Reducing fat
- D) Increasing thickness

20. A seesaw works on the principle of:

- A) Pulley
- B) Lever
- C) Wedge
- D) Screw

Section C: Higher Order Thinking (Hard – 10 Questions × 2 marks = 20 marks)

21. A plant has thick stems and needle-like leaves. Where does it likely grow?

- A) Forest
- B) Desert
- C) Plains
- D) Water

22. Assertion (A): Blood helps in transporting oxygen to different parts of the body. Reason (R): Red blood cells carry oxygen using hemoglobin.

Choose the correct option:

- A) Both A and R are true, and R is the correct explanation of A.
- B) Both A and R are true, but R is not the correct explanation of A.
- C) A is true, R is false.
- D) A is false, R is true.

23. Match the animal with its mode of breathing

1. Fish –
2. Frog –
3. Human –
4. Earthworm –

- A) 1-Skin, 2-Lungs, 3-Gills, 4-Nose
- B) 1-Gills, 2-Skin and Lungs, 3-Lungs, 4-Skin
- C) 1-Lungs, 2-Gills, 3-Skin, 4-Mouth
- D) 1-Gills, 2-Nose, 3-Lungs, 4-Lungs

24. Match the celestial object to its type

1. Sun –
2. Moon –

- 3. Earth –
- 4. Mars –

- A) 1-Star, 2-Satellite, 3-Planet, 4-Planet
- B) 1-Planet, 2-Star, 3-Satellite, 4-Asteroid
- C) 1-Satellite, 2-Planet, 3-Star, 4-Planet
- D) 1-Star, 2-Planet, 3-Satellite, 4-Star

25. An athlete needs quick energy before a race. Which of the following foods is most suitable?

- A) Paneer and dal
- B) Fruits and glucose water
- C) Chicken and rice
- D) Salad and soup

26. Which of the following changes is irreversible and chemical in nature?

- A) Freezing water into ice
- B) Melting chocolate
- C) Burning paper
- D) Dissolving salt in water

27. A boy uses a ramp to move a heavy box into a truck. What advantage does the ramp give him?

- A) Increases the weight of the box
- B) Reduces the work done
- C) Decreases the force needed over a longer distance
- D) Increases energy required

28. Which practice is most sustainable and eco-friendly?

- A) Using plastic bags made from recycled plastic
- B) Burning garbage to reduce its volume
- C) Composting kitchen waste at home
- D) Burying all waste in landfills

29. During a lunar eclipse, what is the correct alignment of celestial bodies?

- A) Sun – Earth – Moon
- B) Earth – Moon – Sun
- C) Moon – Sun – Earth
- D) Sun – Moon – Earth

30. Match the waste to its type

- 1. Banana peel –
- 2. Plastic bag –
- 3. Newspaper –
- 4. Glass bottle –

- A) 1-Biodegradable, 2-Non-biodegradable, 3-Recyclable, 4-Non-recyclable
 - B) 1-Non-biodegradable, 2-Biodegradable, 3-Non-recyclable, 4-Recyclable
 - C) 1-Biodegradable, 2-Non-biodegradable, 3-Recyclable, 4-Recyclable
 - D) 1-Recyclable, 2-Biodegradable, 3-Biodegradable, 4-Non-recyclable
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Answer key:

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|-------|--------|-------|
| 1.C) | 11.C) | 21.B) |
| 2.B) | 12. C) | 22.A) |
| 3.B) | 13.A) | 23.B) |
| 4.C) | 14.C) | 24.A) |
| 5.C) | 15.C) | 25.B) |
| 6.C) | 16.C) | 26.C) |
| 7.D) | 17.C) | 27.C) |
| 8.C) | 18.C) | 28.C) |
| 9.B) | 19.B) | 29.A) |
| 10.C) | 20.B) | 30.C) |