कुल मुद्रित पृष्ठ संख्या / Total No. of printed pages: _____

परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society

Term-I Practice paper Examination 2025 - 26

कक्षा / Class : 7 **अवधि / Duration :** 3 hours

विषय / Subject :Science **अधिकतम अंक / Maximum Marks :80**

Section A

Multiple Choice Questions **(1 × 16 = 16 marks)**

Choose the correct option.

1. Which of the following is a conductor of electricity?

a. Rubber

b. Plastic

c. Copper

d. Wood

2. Which acid is found in lemon?

a. Acetic acid

b. Citric acid

c. Hydrochloric acid

d. Sulphuric acid

3. Which metal is most reactive?

a. Gold

b. Iron

c. Sodium

d. Copper

4. Which of the following is a physical change?

a. Burning of paper

b. Rusting of iron

c. Melting of ice

d. Curdling of milk

5. Which indicator turns red in acidic solution?

a. Blue litmus

b. Red litmus

c. Turmeric

d. Phenolphthalein

6. Which of the following is a base?

a. Vinegar

b. Lemon juice

c. Hydrochloric acid

d. Sodium hydroxide

7. Which component completes the circuit?

a. Bulb

b. Switch

c. Battery

d. Wire

8. Which of the following is a non-metal?

a. Iron

b. Copper

c. Aluminium

d. Sulphur

9. Which change is reversible?

a. Freezing of water

b. Burning of candle

c. Rusting of iron

d. Digestion of food

10. Which of the following is a chemical change?

a. Melting of wax

b. Burning of wood

c. Boiling of water

d. Dissolving sugar

11. Which metal reacts vigorously with water?

a. Gold

b. Copper

c. Sodium

d. Silver

12. Which of these is an insulator?

a. Copper

b. Aluminium

c. Iron

d. Plastic

13. Which of the following is used to test acidity?

a. Litmus paper

b. Water

c. Salt

d. Sugar

14. Which of the following is a displacement reaction?

a. Water + Salt → Solution

b. Iron + Copper sulphate → Iron sulphate + Copper

c. Vinegar + Baking soda → CO_2

d. Ice → Water

15. Which of the following is a good conductor?

a. Wood

b. Aluminium

c. Plastic

d. Rubber

16. Which of the following is a neutral substance?

a. Vinegar

b. Soap

c. Lemon juice

d. Water

Section B

Assertion–Reason Questions **(1 × 4 = 4 marks)**

Choose the correct option: A, B, C, or D

17. Assertion: Metals are malleable.

Reason: Metals can be drawn into wires.

a. Both A and R are true, and R explains A

b. Both A and R are true, but R does not explain A

c. A is true, R is false

d. A is false, R is true

18. Assertion: Acids turn blue litmus red.

Reason: Acids are sour in taste.

a. Both A and R are true, and R explains A

b. Both A and R are true, but R does not explain A

c. A is true, R is false

d. A is false, R is true

19. Assertion: Plastic is a poor conductor.

Reason: It allows electricity to pass through.

a. Both A and R are true, and R explains A

b. Both A and R are true, but R does not explain A

c. A is true, R is false

d. A is false, R is true

20. Assertion: Rusting is a chemical change.

Reason: It changes the chemical composition of iron.

a. Both A and R are true, and R explains A

b. Both A and R are true, but R does not explain A

c. A is true, R is false

d. A is false, R is true

Section C

I. Case-Based Question (2× 4 = 8 marks)

Read the passage and answer the questions.

Case study -1

A student sets up a circuit with a bulb, switch, and battery. When the switch is turned on, the bulb glows. She replaces the copper wire with plastic, and the bulb doesn't glow.

21. Why did the bulb glow with copper wire?

a. Copper is an insulator

b. Copper is a conductor

c. Copper is a base

d. Copper is a non-metal

22. What property of plastic caused the bulb to stop glowing?

a. It is a conductor

b. It is a metal

c. It is an insulator

d. It is reactive

23. Which of the following are conductors?

a. Copper and Aluminium

b. Plastic and Rubber

c. Wood and Glass

d. Paper and Cloth

24. Which of the following is an insulator?

a. Iron

b. Copper

c. Rubber

d. Aluminium

Case Study -2: The Curious Experiments of Aarav

Aarav was fascinated by how things change around him. One day, he mixed vinegar with baking soda and saw bubbles forming. He also noticed that when he folded paper or melted ice, the substance remained the same. He began to wonder: What makes some changes reversible and others permanent? His science teacher explained the difference between physical and chemical changes using everyday examples.

25. What kind of change occurred when Aarav mixed vinegar and baking soda?

a. Physical change

b. Reversible change

c. Chemical change

d. Temporary change

26. Which observation indicates a chemical change in Aarav's experiment?

a. The paper was folded

b. Ice melted into water

c. Bubbles formed during the reaction

d. Water was frozen

27. Which of the following is a physical change?

a. Burning of paper

b. Rusting of iron

c. Melting of ice

d. Cooking of food

28. What is a key feature of a physical change?

a. Formation of a new substance

b. Irreversible process

c. Change in chemical composition

d. No new substance is formed

Section D

Very Short Answer Questions **(2 × 9 = 18 marks)**

Answer in about 40 words.

29. What is the difference between acids and bases?

30. Define displacement reaction with an example.

31. What is a physical change? Give one example.

32. What is an indicator?

33. Why is copper used in electrical wires?

34. What happens when an acid reacts with a base?

35. What is rusting?

36. Name two physical and two chemical changes.

37. What is the role of a switch in a circuit?

Section E

Short Answer Questions **(3 × 8 = 24 marks)**

Answer in about 60 words.

38. Explain the working of a simple electric circuit.

39. What are indicators? Name two natural indicators.

40. Why is rusting considered a chemical change?

41. What is neutralization?

42. Describe the properties of metals.

43. Describe the properties of non-metals.

44. What is a chemical reaction?

45. What happens when magnesium reacts with hydrochloric acid?

Section F

Long Answer Questions **(5 × 2 = 10 marks)**

Answer in about 120 words.

46. Describe the properties of metals and non-metals with examples.

47. Explain the process of neutralization with a labelled diagram and real-life application.