



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
टर्म-1 परीक्षा / Term-I Examination 2025-26

कक्षा /Class : VII

अवधि /Duration : 3 Hours

विषय / Subject : Science

अधिकतम अंक /Maximum Marks : 80

सामान्य निर्देश / General Instructions:

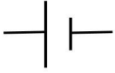
1. The questions paper consists of 41 questions.
 2. All questions are compulsory.
 3. **Section A** consists of 20 objective questions carrying 1 mark each.
 4. **Section B** consists of 9 very short questions carrying 2 marks each.
 5. **Section C** consists of 8 short answer type questions carrying 3 marks each.
 6. **Section D** consists of 2 paragraph based questions carrying 4 marks each.
 7. **Section E** consists of 2 Long answer type questions carrying 5 marks each.
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Section A

I) Choose the correct answer from the options given below:

(1X16 =16)

1. Red litmus turns blue in the presence of _____
a) an acid b) a base c) a salt d) Water
2. During galvanization, which metal is coated over iron?
a) Zinc b) Copper c) Aluminium d) Magnesium
3. Which of the following is a chemical change?
a) Melting of ice b) Boiling of water c) Rusting of iron d) Breaking of glass
4. What natural phenomenon occurs due to the Earth or the Moon casting a shadow?
a) Tides b) Eclipses c) Earthquakes d) Tsunami
5. Which of the following is a base?
a) Tamarind Juice b) Lemon juice c) Vinegar d) Baking soda solution
6. Which of the following materials is a conductor of electricity?
a) Plastic b) Glass c) Wood d) Copper

7. Formation of curd from milk is a:
 a) Physical change b) Reversible change c) Chemical change d) Temporary change
8. When an ant bites, it injects _____
 a) Citric acid b) Acetic acid c) Formic acid d) Tartaric acid
9. Which of the following changes is reversible?
 a) Ripening of a fruit b) Breaking a rock c) Melting of ice d) Cooking
10. Which symbol is used to represent a cell in a circuit diagram?
 a) ! b) = c)  d) $\Rightarrow$
11. Which substance can be added to acidic soil to neutralize its acidity?
 a) Lime b) Water c) Organic matter d) Lemon juice
12. If a circuit is open:
 (a) the bulb glows (b) the bulb does not glow
 (c) the bulb glows for some time and then stops glowing (d) none of the above
13. Which of the following is a liquid metal?
 a) Copper b) Mercury c) Zinc d) Aluminium
14. A combination of two or more electric cells is called
 a) Cells b) Battery c) Circuit d) Combination of cells
15. Which of the following is an olfactory indicator?
 a) Vinegar b) Turmeric c) onion d) Salt
16. The basic aim of science is to:
 a) Spread opinions b) Understand the natural world
 c) Scare people d) Replace technology

II) Assertion-Reason Type Questions

(1X4=4)

For question numbers from 17 to 20, two statements are given, one labeled as **Assertion (A)** and the other labeled as **Reason (R)**. Select the correct answer to these questions from options a), b), c), d) as given below.

- a) Both assertion (A) and reason (R) are true and R is the correct explanation of A.
 b) Both assertion (A) and reason (R) are true but R is not the correct explanation of A.
 c) Assertion (A) is true but the Reason (R) is false.
 d) Assertion (A) is false but the Reason (R) is true.

17. **Assertion (A):** Lemon juice turns blue litmus red.

Reason (R): Lemon juice contains oxalic acid.

18. **Assertion (A):** A bulb glows only when the circuit is closed.

Reason (R): A closed circuit allows electric current to flow through the bulb.

19. **Assertion (A):** Copper vessels are used for boiling water

Reason(A): Copper is a good conductor of electricity

20. **Assertion (A):** Burning of wood is a chemical change.

Reason (R): A new substance is formed during burning.

Section B

III) Very Short Answer Questions

(2X 9= 18)

21. What are indicators? Give an example of a natural indicator.

22. Draw a labelled circuit diagram with a Light emitting Diode (LED) lamp.

23. Write an example where a simple observation leads to a big discovery?

24. Why does baking soda not taste sour?

25. What is a switch? Draw the symbol of a switch in an **off** position.

26. Why is copper mainly used for making electrical wires instead of silver or gold, even though all three are good electrical conductors?

27. a) What is the ignition temperature of a substance?

b) Draw a fire triangle.

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

29. Radha observes gas bubbles with fizzing sound when she adds baking soda in vinegar. Identify the gas evolved. How will you confirm the gas?

Section C

IV) Short Answer Questions

(3X 8= 24)

30. What is an electric cell? If there are no symbols on the terminals of a cell, how can you identify the terminals of an electric cell? Draw an electric cell and mark the terminals.

31. a) How to make red rose extract?

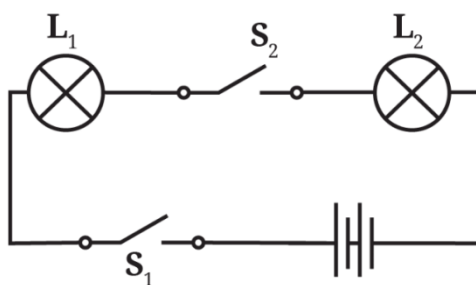
b) What change will happen when soap solution is added to the red rose extract?

32. a) Draw an incandescent lamp used in a torch and label it.

b) How do incandescent lamps work?

33. Why is the utensil's handle made of wood, whereas their body is made of steel or iron?

34. What is weathering? Explain how physical and chemical changes contribute to weathering.
35. On burning sulphur in air a gas X is formed which upon dissolving in water forms an acid Y.
- Name the gas X
 - Identify the acid Y
 - How will you confirm that Y is an acid and not a base?
36. In the given figure:
- If S_1 is in 'ON' position, S_2 is in 'OFF' position, which lamp(s) will glow? Give reasons.
 - If S_1 is in 'OFF' position, S_2 is in 'ON' position, which lamp(s) will glow? Explain why.
 - If S_1 and S_2 both are in an 'ON' position, which lamp(s) will glow? Give reasons.



37. Write about any three non-metals and their uses in our everyday life.

Section D

V) Case Based Questions

(4X 2= 8)

38. One day, Aarav was helping his grandmother to cook. While preparing pickles, she accidentally spilled some turmeric powder on her apron. Later, Aarav was washing the apron using soap. To his surprise, the yellow turmeric stain turned bright red! Curious, he asked his science teacher about it the next day. The teacher explained how turmeric acts as a natural indicator.
- Why did the turmeric stain turn red when soap was applied? (1)
 - What type of substance is soap — acidic or basic? (1)
 - Which acid/base is present in tomato? What happens when red litmus paper is dipped in tomato juice? (2)

39. Arman left his bicycle outside during the rain for a few days. After some days, he noticed that the metal parts of the bicycle, especially the chain and handle, had developed brown patches. His elder sister told him that it was because of rusting. Arman wants to take care of his bicycle better next time.

- a) What is rusting? (1)
- b) Why did it happen? (1)
- c) How can he protect it in the future? (any one method) (1)
- d) Name another metal that undergoes corrosion? (1)

Section E

VI) Long Answer Questions

(5X 2=10)

40. Differentiate between metals and non-metals based on their physical and chemical properties. Also, give examples for each.

41. a) Why should factories never release acidic waste directly into rivers? How can this problem be solved? (2)
- b) What are neutralization reactions? Write the equation of neutralization reaction. (2)
- c) Explain any other situations where we use neutralization processes. (1)
