O.P.JINDALSCHOOL,SAVITRI NAGAR
Half Yearly Examination–(2026-27)

Class/Sec-VII/ **MM– 50**

Subject–Science **Time-2 hours**

Name_____ **Roll No.**_____

Fifteen minutes extra will be given for reading the Question Paper. General Instructions – **All the questions are compulsory.**

1. **The Question paper comprises of 6sections A,B,C,D.E,F.There are 14 questions in all.**
2. **SectionA,Q1 comprises of 10 MCQ type questions and carries 1 mark each.**
3. **SectionB,Q2 to Q3 comprises of 4,4 Case-Based type questions.**
4. **SectionC,Q4 comprises of 2 Assertion-Reason type questions.**
5. **SectionD,Q5 to Q8 are very short answer type questions,carries 2marks each.**
6. **SectionE,Q9 to Q12 are short answer type questions,carries 3marks each.**
7. **SectionF,Q13 and Q14 are long answer type questions,carries 5 marks each.**

SECTION-A

Q1. Choose the correct option.

i. Carbon dioxide from the air enters the leaves through tiny pores. What are these pores called

(a) Veins (b) Root hair (c) Stomata (d) Chlorophyll

ii. What is formed when magnesium reacts with oxygen?

(a) Acid (b) Base (c) Neutral (d) None

iii. Turmeric is a natural indicator. What color change occurs when a drop of turmeric solution is added to a basic solution?

(a) Green (b) Blue (c) Red (d) Pink

iv. The components of an electric circuit is shown by symbols called

(a) Circuit diagram (b) Circuit (c) Cell (d) Battery

v. Electric current flows opposite to the direction of flow of

(a) Cells (b) Neutrons (c) Electrons (d) Protons

vi. Which of the following is not a metal?

(a) Iron (b) Oxygen (c) Gold (d)Silver

vii. In the symbol for an electric cell ⊣⊢ , what does the longer line represent which terminal?

(a) -ve (b) + ve (c) Neutral (d)Both (a) & (b)

viii. Which of the following is used in purification of water?

(a) Iron (b) Sulfur (c) Iodine (d) Chlorine

ix. Which is not observed in a chemical change?

(a) Can be reversed (b) Gas is evolved

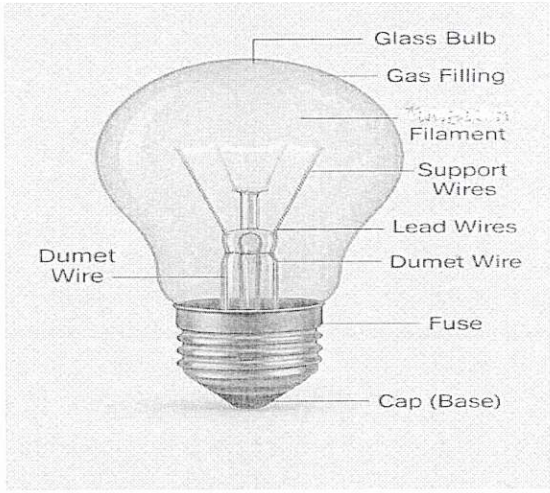
(c) Heat may produce (d) Colour may change

x. Which of the following is needed for rusting?

(a) Oil (b)Moisture (c) Air (d) Both (b) & (c)

SECTION-B

Q.2 Look at the picture and answer the given questions:



(i) The filament of the bulb is made of :

(a) Iron (b) Copper (c) Tungsten (d)Gold

(ii) The bulb will glow only in:

(a)Closed circuit (b)Open Circuit (c)Fused (d)Both (a) and (b)

(iii) Which of the following is the symbol of bulb?

(a) ⊣⊢ (b) —⊗— (c) —o o— (d) ——•——

(iv) The base of the bulb is made up of:

(a)Insulators (b)Metal (c)Wires (d) Non metal

Q.3 Read the following passage and answer the following questions.

During a National Science Day event at school, Ravi and Sneha visited a chemistry stall. The presenter sprayed a colorless liquid onto a blank sheet of paper, and the words "WELCOME TO SCIENCE DAY" appeared instantly in a bright reddish-pink color. The presenter explained that the paper had been treated with an indicator. Later, they were given samples of soap solution, lemon juice, and pure water to test using blue and red litmus papers. They observed distinct color changes and noted how chemical substances can be categorized based on these interactions.

(i) The colour of the bule litmus changes to _____ in acids.

(a)Red (b)White (c)Yellow (d)Purple

(ii) Which of the following is not a base?

(a)Soap (b)Detergent (c)Baking soda (d)Lemon juice

(iii) Substances that change their colour in acids or bases are called:

(a) Base (b)Indicators (c)Acids (d) Neutral

(iv) Which of the following changes the colour of red litmus to blue?

(a)Acid (b)Base (c)Turmeric (d)Either (a) or (b)

SECTION-C

Q4. A statement of Assertion is given by the corresponding statement of Reason. Choose the correct answer.

(i) **Assertion:** Metals can be beaten into thin sheets.

Reason: This property of metals is called malleability.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true and R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

(ii) **Assertion:** Gold and copper are highly ductile.

Reason: Metals are good conductors of electricity.

(a) Both A and R are true and R is the correct explanation of A.

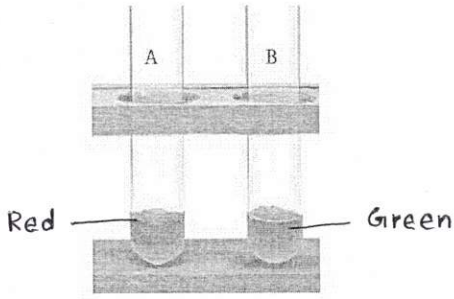
(b) Both A and R are true and R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

SECTION-D

Q5. The figure shows the changes in colour of the red rose extract on adding lemon juice and soap solution.



i. Can we say that red rose extract is an acid base indicator? Why?

ii. Identify the nature of the substance in 'A' and 'B'.

Q6. What are the steps involved in scientific method?

OR

Why are patterns important to scientists?

Q7. Why are electrical wires made of copper?

Q8. What is desirable change? Give two examples of it.

SECTION-E

Q9. How do plants get their food? Explain with a neat diagram.

Q10. What is a neutralization reaction? Give two examples of it.

Q11. Mention any three differences between metals and non metals.

Q 12. Is curdling of milk a physical or chemical change? Justify your statement.Give any two examples of such type of changes.

OR

Explain why the burning of a candle is considered both a physical and a chemical change.

SECTION-F

Q 13. Describe what happens when baking soda is added to vinegar. How do you test the gas evolved? Write the word equations.

Q 14. What are electrical conductors and insulators? Provide three examples of each and explain why electrical wires are coated with plastic.

OR

State five possible reasons why a bulb in a freshly constructed electric circuit might fail to glow, even when the switch is turned ON.