

Class 12 – Chemistry
Chapter: Solutions

Time: 45 Minutes

Maximum Marks: 15

Section A – MCQs and Very Short Answer (1 mark each)

1. The unit of molality is:

- A. mol L⁻¹
- B. mol kg⁻¹
- C. g L⁻¹
- D. g mol⁻¹

2. Which concentration unit is independent of temperature?

- A. Molarity
- B. Normality
- C. Molality
- D. Formality

3. Raoult's law is applicable to:

- A. Non-ideal solutions
- B. Ideal solutions
- C. Electrolytes only
- D. Gases only

4. Define osmotic pressure.

5. What do you mean by isotonic solutions?

6. Define Henry's Law.

7. What is colligative property?

Section B – Short Answer (2 marks each)

Attempt any four questions

8. Write the differences between molarity and molality.

9. Explain hypertonic and hypotonic solutions with examples.

10. Write two examples of solid solutions.

11. State Raoult's Law for volatile liquids.

12. What are the four colligative properties of dilute solutions?

13. Why is molality preferred over molarity in colligative property calculations?