

UNIT- 9 - SOLUTIONS

I. Answer in brief (2/3 marks)

1. What is solutions?
2. What is binary solutions? Give examples.
3. What is ternary solution? Give examples.
4. Why water is called universal solvent?
5. Define aqueous solution. Give examples.
6. Define Non – Aqueous solution. Give examples.
7. What is saturated solution? Give example.
8. What is unsaturated solution? Give examples.
9. Define super saturated solution. Give examples.
10. Define solubility. Give its mathematical expression.
11. Define concentration.
12. Define mass percentage.
13. What is volume percentage?
14. Give an example each:
 - a) Gas in liquid
 - b) Solid in liquid
 - c) Solid in solid
15. The aquatic animals live more in cold region why?
16. Define hydrated salt.
17. A hot saturated solution of copper sulphate forms crystal as it cools why?

II. Answer in a paragraph (5 marks)

1. Explain factors affecting solubility.
2. Classify the following substance into deliquescent hygroscopic.
 - a) Concentration sulphuric acid
 - b) Copper sulphate pentahydrate
 - c) Silica gel
 - d) Calcium chloride
 - e) Gypsum
3. What happens when $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ is heated. Write the equations.
4. In what way hygroscopic substances differ from deliquescent substance.
5. 3.5 Liters of Ethanol is present in 15 liters of aqueous solution of ethanol. Calculate volume percent of ethanol solution.
6. A solution is prepared by dissolving 45g of sugar in 180g of water. Calculated the mass percentage of solution.
7. 'A' is a blue coloured crystalline salt. On heating it losses blue colour and to give 'B'. When water is added, 'B' gives back to 'A'. Identity A and B wripte the equation.
8. Will the cool drinks give more fizz at top of the hills or at the foot? Explain.