Chapter -Theory | Class XII| Solution I Time: 1 h I Marks- 20

Q.1. What is meant by 'reverse osmosis'? **(1 Mark)**

Q.2. (a) What are isotonic solutions?

(b) What are 'azeotropes'?

(c) What is the effect of change in temperature of a solution on its molality and molarity? **(3 Marks)**

Q.3. Non-ideal solutions exhibit either positive or negative deviations from Raoult's law why? Osmotic pressure as compared to other colligative properties for the determination of molar masses of solutes in solutions is preferred why? **(3 Marks)**

Q.5. State Raoult's law. How is it formulated for solutions of non-volatile solutes? **(2 Marks)**

Q.6. State Henry's law and mention two of its important applications. **(3 Marks)**

Q.7. Why do gases nearly always tend to be less soluble in liquids as the temperature is raised?

(2 Marks)

Q.8. Define an ideal solution and write one of its characteristics.**(2 Marks)**

Q.9. State Raoult's law for the solution containing volatile components. What is the similarity between Raoult's law and Henry's law? **(2 Marks)**

Q.10. How is the vapour pressure of a solvent affected when a non-volatile solute is dissolved in it? **(2 Marks)**