

## Solution

Sr	Questions	Answers Choice
1	The amount of solute present in the given amount of solvent is called	A. Molarity B. Molality C. Concentration D. Solubility
2	Compared to a 1.0M aqueous solution of calcium chloride will have	A. The same freezing and boiling point B. A lower freezing point and lower boiling point C. A lower freezing point and higher boiling point D. A higher freezing point and higher boiling point
3	Which one of the following mixture shows positive deviation form Rault's law and forms an azetrope with minimum boiling point	A. Methanol + CCl <sub>4</sub> B. Methanol + acetone C. Ether + HCl D. Acetone + chloroform
4	If the ionic product of a solution is less than the solubility product, the solution is	A. Supersaturated B. Unsaturated C. Ideal D. Saturated
5	The relative lowering of vapour pressure is equal to the mole fraction of the solute is statement of	A. Rault law B. Henry law C. Dalton law D. Grahms law
6	The osmotic pressure of a dilute solution is directly proportional to the	A. Diffusion rate of the solute     B. lonic concentration     C. Elevation in boiling point     D. Flow of solvent from a concentrated to a dilute solution
7	The solubility of a gas in water depends upon	A. Nature of the gas B. Temperature C. Pressure of the gas D. All of the above
8	Solutions with same osmotic pressures are called	A. Hypertonic B. Hypotonic C. Isotonic D. Normal
9	A solutiion of 0.5 mole camphor in 100 grmas chloroform ( $K_b$ = 0.322) has rise in boiling point than that of chloroform by	A. 0.81°C B. 1.61°C C. 1.81°C D. 0.61°C
10	The number of moles of NH <sub>4</sub> Cl dissolved in 500 cm <sup>3</sup> of its 15%, W/N solution is	A. 1 mole B. 1.4 mole C. 2.0 mole D. 2.4 mole
11	At room temperature, the mole fraction of a solution in 0.25 and the vapour pressure of the solvent is 0.80 atm. Then the lowering of vapour pressure is	A. 0.75 B. 0.512 C. 0.80 D. 0.0512
12	The molar boiling point constant is the ration of elevation in boiling point to :	A. Molarity B. Molarity C. Mole fraction of solvent D. Mole fraction of solute.
13	10g of NaOH has been dissolved per kg of solvent. The molality of solution is :	A25 m B. 1.5 m C5 m D. 2.5 m
14	Hydrolysis of potassium acetate produces	A. Acidic solution B. Neutral solution C. Basic solution D. None of these

15	The process in which the solvent molecules are surrounded and interact with solute ions or molecules is called	A. Solvation B. Hydration C. Hydrogenation D. None
16	What happens when isotonic solution of A (mol.wt.342) and B (mol.wt 60) are put in to communication through semipermeable membrane?	A. Transference of solvent from solution A to that of B take place B. Transference of solvent from solution B to that of A takes place C. No transference of solvent from solution A to that of B takes place D. Change in temperature of solutions takes place
17	The molal depression constant depends upon	A. Nature of solute  B. Nature of solvent C. <span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; for size: 16px;">Δ H<sub>solution D. Vapour pressure of solution</sub></span>
18	50 cm <sup>3</sup> of 0.05 molar nrea (N <sub>2</sub> H <sub>4</sub> CO) solution has % W/N concentration	A. 6% B. 3% C. 0.3 % D. 0.6 %
19	Which one of the following solution will have higher vapour pressure than that of water	A. Aqueous solution of methanol B. Aqueous solution of HCI C. Aqueous solution of glucose D. Aqueous solution of urea
20	An azeotropic mixture of two liquids boils at a lower temperature than either of them when lower temperature	A. It is saturated B. it shows positive deviation from Raoult's law C. It shows negative deviation form Raoult's law D. It is metastable