ECAT Chemistry Chapter 9 Solutions

Sr	Questions	Answers Choice
1	Saturated solution of a solid is prepared at a constant temperature. 100 $cm^3$of this saturated solution is evaporated in a china dish. The mass of the residue is called	A. Azetropic mixture B. Solubility C. Solubility product D. Equilibrium constant
2	The term cryoscopy is used for	A. Depression of freezing point B. Elevation in boiling poing C. Lowering of vapour pressure D. Osmotic pressure
3	The molarity of toluene solution in benzene is 0.22 if 5 grams of toluene dissolved, then mass of benzene is grams is	A. 267 B. 260 C. 240 D. 247
4	Two solutions of NaCl and KCl are prepared separately by dissolving 0.1 M of the solute in water. Which of the following statements is not true for these solution	A. KCl solution will have higher boiling point than NaCl solution B. Both the solutions have same boiling C. KCl and NaCl solution possess same vapour pressure D. KCl solution possess same freezing point at NaCl solution
5	Use of glycol as anti freeze in the automobile is an important application of	A. Colligative property B. Raoult's law C. Fractional crystallization D. Prrhenivs law
6	The substance which contains the water of crystallization is called	A. Hydrated B. Solvated C. Crystal D. None
7	Ifα us the degree of dissociation of $Na_2SO_4$the vant Hoff's factor (1) used for calculating the molecular mass is	A. 1 +α B. 1 -α C. 1 + 2α D. 1 - 2α
8	The freezing mixture used in ice cream machine consists of ice and	A. NaCl B. KCl C. MgCl₂ D. NaNO₃
9	Solution may have units	A. Molarity B. Molality C. Mole fraction D. All of them
10	A solution is a homogeneous mixture of two or more kinds different :	A. Molecular. B. Covalent substance C. Ionic Substances D. Both (a) and (c)
11	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
12	(A) is one molar NaCl solution and (b) is 1 molal NaCl solutin :	A. A and B are of same strength. B. A is more Concentrate than B. C. b is more Concentrate than A. D. None of above.
13	Isotonic solutions have same	A. Molar concentration B. Molality C. Normality D. None of the

		D. None of these
14	A solution contains 1.2046 x 10^{24} hydrochloric acid molecules in one dm^3 of the solution. The strength of the solution is	A. 6 N B. 2 N C. 4 N D. 8 N
15	10g of NaOH has been dissolved per kg of solvent. The molality of solution is :	A. .25 m B. 1.5 m C. .5 m D. 2.5 m
16	Every sample of matter with uniform properties and a fixed composition is called a :	A. Solid B. Liquid. C. Phase. D. Gas.
17	A one thousand dm^3 sample of water contains one gram of iron (iii) ions what is the concentration in parts per million of Fe^{3f} (eq) in parts per million	A. 0.001 B. 0.01 C. 0.1 D. 1.0
18	A solution containing maximum amount of solute dissolved at a given temperature is called	A. Saturated solution B. Unsaturated solution C. Supersaturated solution D. Impure solution
19	The freezing point of 1 molal NaCl solution assuming NaCl to be 100% dissociated in water in	A. -1.86°C B. -3.72°C C. +1.86°C D. +3.72°C
20	The temperature at which the vapour pressure of a liquid becomes equal to external pressure is	A. Melting point B. Sublimation point C. Inversion point D. Boiling point