ECAT Chemistry Chapter 9 Solutions

Sr	Questions	Answers Choice
1	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
2	An azeotropic mixture of two liquids boils at a lower temperature than either of them when :	A. It is saturated. B. It shows positive deviation from Raoult's law. C. It show negative deviation from Raoult's law. D. It is metastable.
3	The vapour pressure of two liquids 'p' and 'Q' are 80 and 60 torr respectively. The total vapour pressure of solution obtained by mixing 3 mole of P and 2 mol of Q would be	A. 140 torr B. 20 torr C. 68 torr D. 72 torr
4	The ratio of moles of a particular component of solution to total moles of all components of solution is :	A. Mole fraction. B. Molality. C. Molarity. D. Normality.
5	The sum of mole percent of all the components of solution is always equal to :	A. Less than 100 B. One C. 100 D. 10
6	Number of moles of the solute dissolved per $dm^3$of the solution is knows as	A. Molarity B. Formality C. %age D. None of these
7	In which type of following solutions we don't know the total volume of the solutions :	A. Percentage weight/weight B. Percentage weight/volume C. Percentage volume/volume D. Percentage volume/weight
8	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
9	A one thousand dm^3sample 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
10	Mixture of alcohol and water can be separated by	A. Solvent extraction techniques B. Crystallization C. Precipitation and filtration D. Fractional distillation
11	Which one of the following is a colligative property?	A. Surface tension B. Osmotic pressure C. Viscosity D. Refractive index
12	The term cryoscopy is used for	A. Depression of freezing point B. Elevation in boiling poing C. Lowering of vapour pressure D. Osmotic pressure
13	The freezing mixture used in ice cream machine consists of ice and	A. NaCl B. KCl C. MgCl₂ D. NaNO₃
		A. 0.1 M

14	Equal volumes of 0.1 M $AgNO_3$and 0.2 M NaCl are mixed. The concentration of NO^-_3 ions in the mixture will be	B. 0.05 M C. 0.2 M D. 0.15 M
15	Which one of the following has discontinuous solubility curve	A. CaCl₂6H₂O B. NaCl C. KCl D. NaNO₃
16	Hydrolysis of potassium acetate produces	A. Acidic solution B. Neutral solution C. Basic solution D. None of these
17	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
18	Which is independent of temperature	A. Molarity B. Molality C. Normality D. Mole fraction
19	A solution can be	A. Dilute and concentrated B. Saturated and dilute C. Saturated and unsaturated D. Supersaturated and saturated
20	50 mL of 10 N H_2SO_4. 25mL of 12 N Hcl and 40 mL of 5N $HNO_3$are mixed and the volume of the mixture is made 100 mL by adding water. The normality of resulting will be	A. 1 N B. 2 N C. 3 N D. 9 N