

ECAT Chemistry Chapter 9 Solutions

Sr	Questions	Answers Choice
1	What is the molarity of a solution containing 15.0 g urea in 500 cm ³ of solution	A. 0.5 M B. 1 M C. 1.5 M D. 2 M
2	Which of the following mixture of liquids show negative deviation from Raoult's law	A. Ethyl alcohol and ether B. HCl and water C. Phenol- water D. Chlorobenzene-bromobenzene
3	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
4	A solution can be	A. Dilute and concentrated B. Saturated and dilute C. Saturated and unsaturated D. Supersaturated and saturated
5	In cold countries ethylene glycol is added to water in radiators of cars during winter. It results in	A. Lowering in b.pt B. Reducing viscosity C. Reducing specific heat D. Lowering in freezing pt
6	5g of glucose is dissolved in 100 cm of solution. Percentage of solution is :	A. 5 % v/w B. 5 % v/v C. 5 % w/v D. 5 % w/w
7	The volume of 0.1 M H ₂ SO ₄ required to neutralize completely 40 ml of 0.2 M NaOH solution is	A. 10 ml B. 40 ml C. 20 ml D. 50 ml
8	10% aqueous solution of NaCl has molarity	A. 1.7 M B. 2.7 M C. 0.17 M D. 3.7 M
9	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
10	Which one of the following has continuous solubility curve	A. NH ₄ NO ₃ B. CaCl ₂ C. CaCl ₂ ·6H ₂ O D. Na ₂ SO ₄ ·10H ₂ O
11	A homogeneous mixture of two or more than two chemical substances is called	A. Solute B. Solution C. Solvent D. Salvation
12	(A) is one molar NaCl solution and (b) is 1 molal NaCl solution :	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	The boiling point of an azeotropic mixture of water and ethyl alcohol is less than that of water and alcohol. The mixture shows	A. That solution is highly saturated B. No deviation from Raoult's law C. Positive deviation from Raoult's law D. Negative deviation from Raoult's law
14	Solution may have units	A. Molarity B. Molality C. Mole fraction D. All of these

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15	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
16	A solution contains 1.2046×10^{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
17	The amount of solute present in the given amount of solvent is called	A. Molarity B. Molality C. Concentration D. Solubility
18	Which one of the following is an ideal solution that obeys Rault's law	A. Ethanol + water B. Benzene + toluene C. HCl + water D. Acetone + chloroform
19	Hydrolysis of potassium acetate produces	A. Acidic solution B. Neutral solution C. Basic solution D. None of these
20	In which type of following solutions the total volume of solutions may not be necessarily equal to sum of volumes of solute and solvent ?	A. Percentage volume/volume B. Percentage volume/weight C. Percentage weight/volume D. Percentage weight/weight