

ECAT Chemistry Chapter 9 Solutions Online Test

Sr	Questions	Answers Choice
1	Equal volumes of 0.1 M AgNO3and 0.2 M NaCl are mixed. The concentration of NO $^{\text{-}}3$ ions in the mixture will be	A. 0.1 M B. 0.05 M C. 0.2 M D. 0.15 M
2	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
3	Which of the statements given below concerning properties of solution, describe a colligative effect?	A. Boiling point of pure water decreases by the addition of ethanol B. Vapour pressure of pure water decreases by the addition of nitric acid C. Vapour pressure of pure benzene decreases by the addition of naphthalene D. Boiling point of pure benzene increases by the addition of toluene
4	Aqueous solution of glucose C ₆ H ₁₂ O ₆ , boils at 100.052°C. The solution contains	A. 180 grams glucose in 1 kg water B. 18 grams glucose in 1 kg water C. 1.8 grams glucose in 1 kg water D. 3.6 grams glucose in 1 kg
5	The substance which is present in large quantity is called a :	A. Solute B. Solvent C. solutiion D. None of Above
6	The osmotic pressure of 1 m solution at 27°C is	A. 2.46 atm B. 24.6 atm C. 1.21 atm D. 12.1 atm
7	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
8	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. KCI 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
9	50 cm ³ of 0.05 molar nrea (N ₂ H ₄ CO) solution has % W/N concentration	A. 6% B. 3% C. 0.3 % D. 0.6 %
10	The concentration units independent of temperature would be	A. Normality B. Mass-volume precent C. Molality D. Molarity
11	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
12	What will be the molarity of solution if 103 g (NH ₄) ₂ SO ₄ is dissolved per 600 cm ³ of water	A. 2.32 M B. 3.32 M C. 4.32 M D. 1.30 M
13	According to Raoult's law	A. Relative lowering of V.P. is equal to mole fraction of solute B. The lowering of V.P. is directly proportional to mole fraction of solute C. V.P. of solvent above solution is

		equal to product of V.P. of pure solvent and mole fraction of solvent ins solution D. All of the above
14	$0.5~\mathrm{M}$ of $\mathrm{H}_2\mathrm{SO}_4$ is diluted from 1 litre to 10 litre, normality of resulting solution is	A. 1 N B. 0.1 N C. 10 N D. 11 N
15	Which of the following solutions has the highest boiling point ?	A. 5.85% solution of sodium chloride. B. 18.0% solution of glucose. C. 6.0% solution of urea. D. All have same boiling points.
16	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
17	17.1 grams sucrose (C ₁₂ H ₂₂ O ₁₁) dissolved in 250 cm ³ of solution. This has molarity	A. 0.1 M B. 0.2 M C. 0.01 M D. 0.02 M
18	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
19	To calculate volume of the solvent, we need to know, the :	A. Density of solute B. Normality of solute C. Mass of solute D. Molarity of solute
20	The example of colligative property is	A. Boiling point B. Osmosis C. Freezing point D. Osmotic pressure