

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	Colligative properties are the properties of :	A. Dilute solutions which behave as nearly ideal solutions. B. Concentrated solutions which behave as nearly non-ideal solutions. C. Both (i) and (ii) D. Neither (i) nor (ii)
3	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
4	1.0 g pure calcium carbonate was found to require 50 ml of dilute HCl for complete reaction. The strength of HCl solution is given by	A. 4 N B. 2 N C. 0.4 N D. 0.2 N
5	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
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 number of moles of solute dissolved per dm ³ of the solution is called :	A. Normality. B. Molarity. C. Molarity. D. None of above.
8	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)
9	Units of molarity are	A. gm/lit B. mol/lit C. kg/lit D. None of these
10	If liquids A and B form an ideal solution	A. The enthalpy of mixing is zero B. The entropy of mixing is zero C. The free energy of mixing is zero D. The free energy as well as the entropy of mixing are each zero
11	What is the molarity of H ₂ SO ₄ solution that has density of 1.84 gm/cc at 35°C and contains 98% by weight?	A. 4.18 M B. 8.14 M C. 18.4 M D. 18 M
12	Solutions with same osmotic pressures are called	A. Hypertonic B. Hypotonic C. Isotonic D. Normal
13	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.

14	Molarity of pure water is :	A. 33.3 B. 55.5 C. 44.4 D. 66.6
15	The amount of solute present in the given amount of solvent is called	A. Molarity B. Molality C. Concentration D. Solubility
16	Which is not a colligative property?	A. Osmotic pressure B. Lowering of vapour pressure C. Depression of freezing point D. Elevation of boiling point
17	Dust particles in smoke is a solution of the type	A. Liquid is solute and solid is solvent B. Solid is solute and liquid is solvent C. Solid is solute and gas is solvent D. Gas is solute and solid is solvent
18	Which is independent of temperature	A. Molarity B. Molality C. Normality D. Mole fraction
19	Which of the following is not a colligative property?	A. Depression in freezing point B. Elevation of boiling point C. Osmotic pressure D. Modification of refractive index
20	The substance which is present in large quantity is called a :	A. Solute B. Solvent C. solution D. None of Above