

## ECAT Chemistry Chapter 9 Solutions Online Test

Sr	Questions	Answers Choice
1	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
2	As compared to molar solution, in the molal solution the quantity of solvent is :	A. Comparatively lesser B. More or less equal C. Comparatively greater D. Very large
3	The term ebullioscopy is used for	A. Depression of freezing point     B. Elevation in boiling point     C. Lower of vapour pressure     D. None of the above
4	Which one of the following is a colligative property?	A. Surface tension B. Osmotic pressure C. Viscosity D. Refractive index
5	The number of moles of solute dissolved per $\mathrm{dm}^3$ of the solution is called :	A. Normality. B. Molarity. C. Molarity. D. None of above.
6	Maximum freezing point falls in	A. Camphor B. Naphthalene C. Benzene D. Water
7	Osmotic pressure of a solution increases by	A. Decreasing the temperature     B. Increasing the volume     C. Increasing the number of molecules of the solute     D. None of the above
8	What is the molarity of $H_2SO_4$ 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
9	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.
10	Solution which distill without change in composition or temperature are called	A. Amorphous B. Azeotropic mixture C. Ideal D. Super saturated
11	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
12	The boiling point of an a zeotropic mixture of water and ethye 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
13	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 <sup>3f</sup> (eq) in parts per million	A. 0.001 B. 0.01 C. 0.1 D. 1.0

14	Hydrochloric acid available in the laboratory is 36% w/w. The density of HCl solution is 1.19 g $\mathrm{cm}^{-3}$ . The molarity of HCl solution is	A. 10.23 moles dm <sup>-3</sup> B. 11.55 moles dm <sup>-3</sup> C. 11.73 moles dm <sup>-3</sup> D. 12.67 moles dm <sup>-3</sup>
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 independent of temperature	A. Molarity B. Molality C. Normality D. Mole fraction
17	Molarity of pure water is :	A. 33.3 B. 55.5 C. 44.4 D. 66.6
18	Solubility cure of Na <sub>2</sub> SO <sub>4</sub> 10H <sub>2</sub> shows	A. Constant increase of solubility B. Constant decreases of solubility C. Discontinuously solubility wit temperature D. None of above
19	The ionic strength of a solution containing 0.1 mole/kg of KCl and 0.2 mole/kg of CuSO <sub>4</sub> is	A. 0.3 B. 0.6 C. 0.9 D. 0.2
20	Which is not a colligative property?	A. Osmotic pressure     B. Lowering of vapour pressure     C. Depression of freezing point     D. Elevation of boiling point