ECAT Chemistry Chapter 9 Solutions Online Test

Sr	Questions	Answers Choice
1	5g of glucose is dissolved fro 100 cm of solution. Percentage of solution is :	A. 5 % v/w B. 5 % v/w C. 5 % w/v D. 5 % w/w
2	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.
3	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
4	10g of NaOH has been dissolved per kg of solvent. The molality of solution is :	A. .25 m B. 1.5 m C. .5 m D. 2.5 m
5	10g Of NaOH Has Been Dissolved Per$dm^3$of solution. The morality of solution is :	A. 0.025 M B. 1.5 M C. 0.1 M D. .25 M
6	A solution sucrose is 34.2%. The volume of solution containing one mole of solute :	A. 342cm³ <o:p></o:p> B. 1000cm³ <o:p></o:p> C. 500cm³ D. 242cm³
7	(A) is one molar NaCl solution and (b) is 1 molal NaCl solutin :	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.
8	A solution of glucose is 10% The volume to which 1g mole of it dissolved will be :	A. 8.1 dm³ <o:p></o:p> <o:p></o:p> B. 1.7 dm³ <o:p></o:p> C. 1.8 dm³ <o:p></o:p> D. 6.1 dm³ <o:p></o:p>
9	Molarity of pure water is :	A. 33.3 B. 55.5 C. 44.4 D. 66.6
10	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
11	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
12	The number of moles of solute in 1000g (1 Kg) of the solvent is called :	A. Molarity B. Molarity C. Normality D. Mole fraction

13	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.
14	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
15	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
16	Solutions containing relatively lower concentrations of solute are called :	A. Concentrated solutions. B. Lighter solutions. C. Dilute solutions. D. None of above.
17	The substance which is present in large quantity is called a :	A. Solute B. Solvent C. solutiion D. None of Above
18	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)
19	Every sample of matter with uniform properties and a fixed composition is called a :	A. Solid B. Liquid. C. Phase. D. Gas.
20	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)
21	The molar boiling point constant is the ration of elevation in boiling point to :	A. Molarity B. Molarity C. Mole fraction of solvent D. Mole fraction of solute.
22	The solutions of NaCl and KCl are prepared separately by dissolving same amount of solute in water, which of the following statements is true fro these solutions ?	A. KCl solution will have higher boiling point than NaCl solution. B. Both the solutions have same boiling points. C. KCl and NaCl solutions possess same vapour pressure. D. KCl solution possesses lower freezing point than NaCl solution.
23	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.
24	An azeotropic mixture showing it's positive deviation from Raoult's law, the volume of the mixture is :	A. Slightly more than the total volume of the components. B. Slightly less than the total volume of the components. C. Equal to the total volume of the components. D. None of these.
25	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.
26	A solution of glucose is of methanol in water has vapor pressure :	A. Equal that of water. B. Equal to that of methanol. C. More than that of water. D. Less than that f water.
27	18 g glucose is dissolved in 90 g of water. The relative lowering vapor pressure is equal to :	A. 1/5 B. 5.1 C. 1/51 D. 6
		A. Diffusion rate of the solute B. Ionic concentration

28	The osmotic pressure of a dilute solution is directly proportional to the	B. Ionic concentration C. Elevation in boiling point D. Flow of solvent from a concentrated to a dilute solution
29	The vant Hoff factor (1) accounts for	A. Degree of solubilisation of solute B. The extent of dissolution of solute C. The extent of dissolution of solute D. The degree of decomposition of solution
30	Equal volumes of ethylene glycol (molar mass = 62) and water (molar mass = 18) are mixed. The depression in freezing point of water is (given K_f of water = 1.86 K mol^{-1} kg and specific gravity of ethylene glycol is 1.11)	A. 0.003 B. 3.33 C. 0.333 D. 33.3