ECAT Chemistry Chapter 9 Solutions Online Test

Sr	Questions	Answers Choice
1	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
2	The process in which solvent particles surround solute particles is called	A. Hydrolysis B. Hydration C. Solvation D. Dissolution
3	A solution of two component is called	A. Binary solution B. Dilute solution C. Original solution D. Standard solution
4	Coligative properties are the properties of	A. Dilute solution which behave as nearly ideal solutions B. Concentrated solutions which behave as nearly non-ideal solution C. Both (i) and (ii) D. Neither (i) and (ii)
5	Which is independent of temperature	A. Molarity B. Molality C. Normality D. Mole fraction
6	In azeotropic mixture showing negative deviation form Raoult's law show	A. Higher b.p. than either B. Lower b.p. than either C. No change in b.p. D. None of these
7	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
8	Use of glycol as anti freeze in the automobile is an important application of	A. Colligative property B. Raoult's law C. Fractional crystallization D. Prrhenivs law
9	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
10	A one thousand dm^3sample 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
11	The relative lowering of vapour pressure is equal to the mole fraction of the solute is statement of	A. Rault law B. Henry law C. Dalton law D. Grahms law
12	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. KCl 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
13	Which of the following solution 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 the same boiling point
14	Which statement is not true. A solution is a homogeneous mixture of	A. Two ionic substance like NaCl and HCl B. Two molecular substances sugar and water C. A solute and a solvent 1%

		NaHCO₃in water D. NaCl and sand
15	The freezing mixture used in ice cream machine consists of ice and	A. NaCl B. KCl C. MgCl₂ D. NaNO₃
16	3.6% WN solution of HCl has the molairity	A. 1.0 B. 1.15 C. 0.98 D. 1.98
17	If 5.85 of NaCl are dissolved in 90g of water the mole fraction of NaCl is	A. 0.1 B. 0.01 C. 0.2 D. 0.0196
18	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
19	A solutiion of 0.5 mole camphor in 100 grmas chloroform (K_b= 0.322) has rise in boiling point than that of chloroform by	A. 0.81°C B. 1.61°C C. 1.81°C D. 0.61°C
20	Which of the following half molar solutions will have lowest freezing point	A. Solution of non-volatile, none electrolyte B. Solution of non volatile, weak electrolyte C. Solution of non volatile strong electrolyte D. Solution of volatile, non electrolyte
21	Which of the following salts mixed with ice to make the freezing mixture used in ice cream machine	A. KNO₃ B. NH₄NO₃ C. AgNO₃ D. Mg(NO₃)₂
22	Which one of the following is used as antifreeze in the radiator	A. Methanol B. Ethanol C. Ethylene glycol D. Glycerin
23	Which one of the following solution will have higher vapour pressure than that of water	A. Aqueous solution of methanol B. Aqueous solution of HCl C. Aqueous solution of glucose D. Aqueous solution of urea
24	Solubility cure of $Na_2SO_410H_2$shows	A. Constant increase of solubility B. Constant decreases of solubility C. Discontinuously solubility wit temperature D. None of above
25	Which of the following aqueous solutions have the lowest freezing point	A. 5.85% NaCl B. 6% urea C. 34.2 sucrose D. All of them have same freezing points
26	Aqueous solution of glucose $C_6H_{12}O_6$, 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
27	Solubility of a substance in water decreases with rise in temperature except	A. CaCl₂. 6H₂O B. Pb(NO₃)₂ C. K₂Cr₂O₇ D. Ce₂(SO₄) ₃
28	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
29	Which one of the following has continuous solubility curve	A. NH₄NO₃ B. CaCl C. CaCl₂. 6H₂O D. Na₂SO₄. 10H₂O
30	Which one of the following has discontinuous solubility curve	A. CaCl₂6H₂O B. NaCl C. KCl D. NaNO₃