ECAT Chemistry Chapter 9 Solutions

Sr	Questions	Answers Choice
1	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
2	The concentration units independent of temperature would be	A. Normality B. Mass-volume precent C. Molality D. Molarity
3	Which one of the following has discontinuous solubility curve	A. CaCl₂6H₂O B. NaCl C. KCl D. NaNO₃
4	Which one of the following has continuous solubility curve	A. NH₄NO₃ B. CaCl C. CaCl₂. 6H₂O D. Na₂SO₄. 10H₂O
5	How many $cm^3$of 1 M H_2SO_4required to neutralize 10 $cm^3$of 1 M NaOH	A. 2 cm³ B. 2.5 cm³ C. 5 cm³ D. 10 cm³
6	The vapour pressure of two liquids 'p' and 'Q' are 80 and 60 torr respectively. The total vapour pressure of solution obtained by mixing 3 mole of P and 2 mol of Q would be	A. 140 torr B. 20 torr C. 68 torr D. 72 torr
7	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.
8	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
9	Which inorganic precipitate acts as semipermeable membrane?	A. Calcium sulphate B. Barium oxalate C. Nickel phosphate D. Copper ferrocyanide
10	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
11	The number of moles of NH_4Cl dissolved in 500 $cm^3$of its 15%, W/N solution is	A. 1 mole B. 1.4 mole C. 2.0 mole D. 2.4 mole
12	Which one of the following is a colligative property?	A. Surface tension B. Osmotic pressure C. Viscosity D. Refractive index
13	Zeotropic mixture	A. Obey Henry's law B. Obey Raoult's law C. Does not obey Raoult's law D. Obey Dalton's law
14	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

15	Solutions containing relatively lower concentrations of solute are called :	A. Concentrated solutions. B. Lighter solutions. C. Dilute solutions. D. None of above.
16	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.
17	3.6% WN solution of HCl has the molairity	A. 1.0 B. 1.15 C. 0.98 D. 1.98
18	Elevation of boiling point is measured by	A. Beckmann's apparatus B. Lands Berger's method C. Antifreeze apparatus D. None of these above
19	Solutions with same osmotic pressures are called	A. Hypertonic B. Hypotonic C. Isotonic D. Normal
20	A homogeneous mixture of two or more than two chemical substances is called	A. Solute B. Solution C. Solvent D. Salvation