

ECAT Chemistry Chapter 9 Solutions Online Test

Sr	Questions	Answers Choice
1	When the solute is present in trace quantities the following expression is used	A. Gram per million B. Milligram percent C. Microgram percent D. Parts per million
2	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% NaHCO ₃ in water D. NaCl and sand
3	Units of molarity are	A. gm/lit B. mol/lit C. kg/lit D. None of these
4	If liquids A and B form an ideal solution	A. The enthalpy of mixing is zero B. The entropy of mixing is zero C. <div>The free energy of mixing is zero</div> D. The free energy as well as the entropy of mixing are each zero
5	A Solution containing 6.8 g of non-ionic solute in 100g of water was found to freeze at - 0.93° C. If k_f for water is 1.86 and molecular mars of solute is	A. 13.6 B. 34 C. 68 D. 136
6	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
7	10 ml of 1.5 M NaOH solution is neutralized by 20 ml of a-M HCl solution. The value of 'a' will be	A. 1.0 B. 0.75 C. 0.5 D. 0.25
8	The osmotic pressure of solution increases if	A. Temperature is decreased B. Solution constant is increased C. Number of solute molecules are increased D. Volume is increased
9	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
10	Hydrochloric acid available in the laboratory is 36% w/w. The density of HCl solution is 1.19 g cm ⁻³ . The molarity of HCl solution is	A. 10.23 moles dm ⁻³ B. 11.55 moles dm ⁻³ C. 11.73 moles dm ⁻³ D. 12.67 moles dm ⁻³
11	A solution of two component is called	A. Binary solution B. Dilute solution C. Original solution D. Standard solution
12	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
13	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
14	Camphor is often used in molecular mass determination because	A. It is solvent for organic substance B. It is readily available C. It has a very high cryoscopic

		constant D. It is volatile
15	50 cm ³ of 0.05 molar nrea (N ₂ H ₄ CO) solution has % W/N concentration	A. 6% B. 3% C. 0.3 % D. 0.6 %
16	Solubility cure of Na ₂ SO ₄ 10H ₂ shows	A. Constant increase of solubility B. Constant decreases of solubility C. Discontinuously solubility wit temperature D. None of above
17	How many cm ³ of 1 M H ₂ SO ₄ required to neutralize 10 cm ³ of 1 M NaOH	A. 2 cm ³ B. 2.5 cm ³ C. 5 cm ³ D. 10 cm ³
18	Which inorganic precipitate acts as semipermeable membrane?	A. Calcium sulphateB. Barium oxalateC. Nickel phosphateD. Copper ferrocyanide
19	(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.
20	Which of the following will have the highest boiling point at 1 atm pressure?	A. 0.1 M NaCl B. 0.1 M Sucrose C. 0.1 M BaCl ₂ D. 0.1 M Glucose