

PPSC Chemistry Part I Physical Chemistry Online Test

Sr	Questions	Answers Choice
1	Which of the following system has low as well as upper consolute temperature.	A. Nicotine - water B. Aniline -water C. Triethylamine -water D. Phenol -water
2	Which of the following is not correct criteria for an idea solution.	A. Enthalpy of mixing = 0 B. Volume of mixing = 0 C. Free energy of mixing = 0 D. Obeys Raoult's law
3	Solution with components which obeys Raoult's over the entire composition range are said to be.	A. Real solution B. Regular solutions C. Dilute solutions D. Ideal Solution
4	Which of the following solutions of sulphuric acid will exactly neutralize 25 mL. of 0.2 M NaOH	A. 12.5 mL of 0.1 M solution B. 24 mL OF 0.1 m Solution C. 50 mL of 0.1 M solution D. None of the above
5	The molarity of a 500 mL solution containing 4 g NaOH	A. 0.1 B. 0.2 C. 0.3 D. 0.4
6	How much amount of NaOH is required to prepare 100 mL of 1 N solution.	A. 80 g B. 4 g C. 40 g D. zero
7	One ppm solution of NaOH Contain 1000 mg of the solute per how much of the volume of the solution.	A. 1000 mL B. 100 mL C. 10 mL D. 1 mL
8	The number of formula weight of the solute dissolved per dm ³ of the solution is called.	A. Mole fraction B. Normality C. Formality D. Molality
9	The number of moles of solute dissolved in 1000 gram of the solvent is called	A. Formality B. Molality C. Molarity D. Mole fraction
10	The number of gram equivalents of the solute per dm ³ of the solution is called.	A. Formality B. Normality C. Molality D. Molarity
11	The number of mole of the solute dissolved per dm ³ of the solution is called.	A. Molality B. Formality C. Normality D. Molarity
12	A 10% solution of sucrose contains 10 g of sucrose in how much volume of the solution.	A. 10 mL B. 100 mL C. 1000 mL D. 1 mL
13	If there are only two components in a solution with mole fraction X_A and X_B then which of the following relation is correct.	A. $X_A + X_B = 0$ B. $X_A + X_B = 1$ C. $X_A = X_B$ D. $X_A = 1 - X_B$
14	Which of the following concentration term is used in respect of standard solutions.	A. Normality B. Formality C. Molarity D. All of above
15	If 20 ml of 0.5 N salt solution is diluted in one litre. what is the new concentration.	A. 0.01 N B. 0.001 N C. 1 N D. ...

		D. 10 N
16	Which parameter of a chemical reaction will change with the use of a catalyst.	A. Delta F, change in free energy B. Delta S, change in entropy C. Delta E, change in internal energy D. K, the rate constant
17	The pKa of acetic acid is 4.74 which implies that.	A. pH of 1N solution is 4.74 B. At pH 4.74 the dissociation of acetic acid is maximum C. At pH 4.74 half of the acetic acid molecules are dissociated in the solution. D. At pH 4.74 the dissociation of acetic acid is minimum.
18	Which of the following is not a buffer.	A. $\text{H}_2\text{CO}_3/\text{HCO}_3^-$ B. $\text{NH}_4\text{Cl}/\text{NH}_4\text{OH}$ C. $\text{CH}_3\text{COOH}/\text{CH}_3\text{COONa}$ D. $\text{NH}_3\text{OH}/\text{CH}_3\text{COOH}$
19	Which of the following is a buffer solution.	A. $\text{CH}_3\text{COOH} + \text{NH}_4\text{OH}$ B. $\text{CH}_3\text{COOH} + \text{HCl}$ C. $\text{CH}_3\text{COOH} + \text{NaOH}$ D. $\text{CH}_3\text{COOH} + \text{CH}_3\text{COONa}$
20	A pH of a neutral solution at 100 °C when $K_w = 1.0 \times 10^{-12}$	A. 0 B. 7 C. 6 D. 7