

MDCAT Chemistry Chapter 20 Macromolecules Online Test

Sr	Questions	Answers Choice
1	Ionization of KClO_3 . is suppressed by	A. Increasing temperature B. adding KCl C. adding NaNO_3 D. Decreasing temperature
2	The value of K_c for H_2O at 25°C is	A. 1×10^{-14} mole dm^{-3} B. 14 mol dm^{-3} C. 1.86×10^{-16} mol dm^{-3} D. 1.0×10^{-7} moldm $^{-3}$
3	If K_c value is small then equilibrium position will shift	A. Towards left B. Remains unchanged C. Towards right D. It is always constant value
4	A basic buffer solution can be prepared by mixing?	A. Weak acid and its salt with strong base B. Weak base and its salt with strong acid C. Strong acid and its salt with weak base D. Strong base and its salt with strong acid
5	The solubility of A_2B_3 is X mole dm^{-3} . Its K_{sp} is?	A. $6X(5)$ B. $36X(5)$ C. $64X(5)$ D. $108X(5)$
6	The pH of neutral water is 6.8 then the temperature of H_2O is	A. 25°C B. More than 25°C C. less than 25°C D. Not predicted
7	Which Henderson equation is not correct?	A. $\text{pH} = \text{pK}_a + \log [\text{salt/acid}]$ B. $\text{pH} = \text{pK}_a - \log [\text{salt/acid}]$ C. $\text{pH} = \text{pK}_a - \log [\text{acid/salt}]$ D. $\text{pK}_a = \text{pH} - \log [\text{salt/acid}]$
8	Which one of the following has the lowest pH values	A. 0.1 M HCl B. 0.01 M HCl C. 0.1 M KOH D. 0.01 M KOH
9	On adding NH_3 to water	A. Ionic product will increase B. $[\text{H}_3\text{O}^+]$ will increase C. Ionic product will decrease D. $[\text{H}_3\text{O}^+]$ will decrease
10	The units of ionic product of H_2O is	A. Mole dm^{-3} B. Mole 2 dm^{-6} C. Mole $^{-1}$ dm^{-3} D. Mole $^{-2}$ dm^{-6}
11	According to Lowery Bronsted concept, which of the following is considered as an acid?	A. BF_3 B. OH^- C. H_3O^+ D. Cl^-
12	With increase in temperature, ionic product of H_2O	A. Decreases B. Remains same C. Increases D. May increase or decrease
13	Which of the following is a base according to lowery Bronsted concept?	A. I^- B. HCl C. H_3O^+ D. NH_4^+
14	A certain buffer solution contains equal cone. of X^- and HX . K_a for HX is 10^{-8} . The pH of buffer is	A. 3 B. 11 C. 8 D. 14

15	For $\text{N}_2 + 3\text{H}_2 \rightleftharpoons 2\text{NH}_3$, if K_c is 1 then value of K_p at 273K would be	A. 1/22.414 B. $1/(22.414)^2$ C. 22.414 D. 11.207
16	At equilibrium, the concentration of reactants and products are	A. Constant B. Maximum C. Different D. Equal
17	Buffer action can be explained by except	A. Common ion effect B. Le-Chatelier's principle C. Law of mass action D. Solubility product
18	Buffer solutions are used in except	A. Clinical analysis B. Nutrition C. Soil science D. Qualitative analysis
19	What will be the pH of 1.0 mol dm ⁻³ of NH_4OH , which is 1% dissociated	A. 2 B. 12 C. 0 D. 2.7
20	What will be the pH of 1.0 mol dm ⁻³ of H_2X , which is only 50% dissociated	A. 1 B. 0 C. 2 D. Less than 0