ECAT Chemistry Chapter 8 Chemical Equilibrium

Sr	Questions	Answers Choice
1	What happens when reaction is at equilibrium and more reactant is added :	A. Forward reaction rate is increased. B. Forward reaction rate is decreased. C. Backward reaction rate is increased. D. Equilibrium remains unchanged.
2	Question Image	A. Le-chatlier's principle B. Only adding catalyst C. Decreasing pressure D. Decreasing temperature
3	The solubility of $KClO_3$salt in water is decreased by adding	A. NaClO₃ B. NaCl C. KClO₄ D. KCl
4	Question Image	A. Increase in concentration of 1 B. Decrease in concentration of I₂ C. Increase in temperature D. Increase in total pressure
5	The rate at which a substance reacts is directly proportional to its active mass and the rate of reaction is directly proportional to the product of the active masses of reacting substances, is called	A. Law of conservation of energy B. Le-Chateliers principle C. Law of mass action D. None of these
6	Question Image	A. Moles per dm³ B. Partial pressures C. Number of moles D. Mole fractions
7	Question Image	
8	The rate of reaction :	A. Remain same as reaction proceeds. B. May decrease or increase as reaction proceeds . C. Increase as reaction proceeds. D. Decreases as reaction proceeds.
9	Which of the following is a characteristic of a reversible reaction?	A. It never proceeds to completion B. It can be influenced by a catalyst C. It proceeds only in the forward direction D. Number of moles of reactants and products are equal
10	pKb value of NH_4OH is 4.74. If the concentration of NH_4OH is 1 molar containing 0.1 molar NH_4Cl, then pH of this buffer will be	A. 3.74 B. 10.26 C. 4.74 D. 9.26
11	Question Image	A. 1 B. 10 C. 5 D. 0.33
12	Base buffer solution can be prepared by mixing	A. Weak acid and its salt B. Strong acid and its salt with weak base C. Weak base and its salt with strong acid D. Strong base and its salt with weak acid
13	When the rate of formation of reactants is equal to the rate of formation of products, this is known as	A. Chemical reaction B. Chemical equilibrium C. Chemical kinetics D. None
14	Question Image	A. Favour the formation of N₂O₄ B. Favour the decomposition of

		N₂O₄ C. Not alter the equilibrium D. Stop the reaction
15	Question Image	A. Reversible reaction B. Irreversible reaction C. Spontaneous reaction D. None of these
16	According to Le-Chatelier's principal, adding heat to a solid and liquid in equilibrium will cause the	A. Amount of solid to decrease B. Amount of liquid to decrease C. Temperature to rise D. Temperature to fall
17	In a reversible chemical reaction having two reactants in equilibrium, if the concentration of the reactants are doubled then the equilibrium constant will	A. Also be doubled B. Be halved C. Becomes one fourth D. Remains the same
18	The solubility product of AgCl is 2.0 x 10^{-10}mole ^{2}dm^{-6}. The maximum concentration of Ag^{+}ions in the solution is	A. 2.0 x 10⁻¹⁰mole dm⁻³ B. 1.41 x 10⁻⁵mole dm⁻³ C. 1.0 x 10⁻¹⁰ D. 4.0 x 10⁻²⁰mole dm⁻³
19	The concentration of reactants is increased by x, then equilibrium constant K becomes	A. ln K/x B. K/x C. K + x D. K
20	Question Image	A. 32 B. 64 C. 16 D. 4