

## Chemical Equilibrium

Sr	Questions	Answers Choice
1	Increasing temperatur efavors	A. Exothermic reaction B. Endothermic reaction C. Formation of solid D. Reverse in all cases
2	A large K value indicates.	A. Prodcuts are favored B. Reactants are favored C. No reaction D. Slow reaction
3	Untis of Kc depend on	A. Catalyst B. Reaction stoichimometty C. Activation energy D. Delta H
4	In a reversible reaction.	A. Products do not reform reactants B. Rate of forward reaction is always higher C. Both forward and reverse reactions occur D. Products are in excess
5	If Delta n is positive, then Kp is	A. Greater than Kc B. Less than Kc C. equal Kc D. Zero
6	Consider the gas phase equilibrium sysem represented by teh equation $2\text{H}_2\text{O} \rightleftharpoons 2\text{H}_2 + \text{O}_2$ Givent that the forward reactio is endothermic, which of the following chagnes will decrease the equilibrium amount of $\text{H}_2\text{O}$ .	A. Adding more oxygen B. Adding a solid phase catalyst C. Decreasing the volume of the container D. Increaseing the temperature at constant pressure
7	Le Chatelier's Principle applies to.	A. Irreversibel reactions B. Static equilibrium C. Dynamic equilibrium D. Precipitation reactions
8	Reaction in Haber process is	A. Endothermic B. Exothermic C. Irrversible D. Neutral
9	A reversibel reaction is one which	A. Proceeds to completion B. Occurs only in one direction C. Proceeds in both directions D. Has no products
10	The reversibel reation cannot be achieved in	A. Open system B. Closed system C. Both a and b D. None of these
11	Decreasing pressure shifts equilibrium towards.	A. Sides with mroe gas moleules B. Side with fewer gas molecules C. Liquids D. Solids
12	Salts of weak acid + strong base are.	A. Basic B. Acidic C. Amphoteric D. Neutral
13	$K_c = 0.040$ at $450\text{ }^\circ\text{C}$ for the teh given reaction, evaluate $K_p$ for the reaction. $\text{Pcl}_5 \rightleftharpoons \text{PCl}_2 + \text{Cl}_2$	A. 0.40 B. 2.4 C. 0.64 D. 0.052
14	Which statement is true at dynamic equilibrium.	A. No reactio is occurring B. Concentrations are changing C. Rates of forward and reverse reactions are equal D. Rate forward reaction < reverse

15	Unit of $K_c$ depend on	A. Change in concentration B. Change in number of moles of gas C. Change in pressure D. Change in Entropy
16	Which of the following is an irreversible reaction.	A. Haber process B. Precipitation of AgCl C. Synthesis of ammonia D. Esterification
17	If $K_c > 1$ , the reaction.	A. Favors products B. Favors reactants C. Is at equilibrium D. Does not occur
18	$K_p$ is used for.	A. Solid state reactions B. Gaseous reactions C. Aqueous reactions D. Liquid reactions
19	If $Q > K$ , the reaction	A. Shift left B. Moves forward C. At equilibrium D. Stops
20	Law of mass action is applicable to.	A. Reversible reaction B. Combustion reactions C. Irreversible reactions D. Endothermic reactions only