

Chemical Equilibrium

Sr	Questions	Answers Choice
1	Law of mass action was proposed by	A. Le chatelier B. Arrhenius C. Guldberg and Waage D. Dalton
2	Which is NOT a feature of dynamic equilibrium.	A. Closed system B. Constant Temperature C. Uequal reaction rates D. No net change
3	A large K value indicates.	A. Prodcuts are favored B. Reactants are favored C. No reaction D. Slow reaction
4	Salts of weak acid + strong base are.	A. Basic B. Acidic C. Amphoteric D. Neutral
5	NH ₄ Cl in water makes solution	A. Neutral B. Acidic C. Basic D. amphoteric
6	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
7	Which one of the following is not an example of reversible reaction.	A. Formation of ammonia B. Foramtion ow water C. Decomposition of PCl ₅ D. Decomposition of NO ₂
8	Contact process is used for	A. Sulfuric acid production B. Ammonia Synthesis C. Nitric Acid production D. Hydrogenation
9	Combustion of methane is.	A. Reversible B. Endothermic C. Irreversible D. Equilibrium process
10	Q < K implies.	A. Reaction proceeds forward B. quilibrium is established C. System stops D. Reaction fhifts in reverse
11	Consider the equilibrium 2H ₂ + O ₂ 2H ₂ O. If the concentration of H ₂ O is increased, the concentrations of H ₂ and O ₂ will	A. Increases B. Decrease C. Remain the same D. Change irregularly
12	For a specific reaction the valu eof the equilibrium constant, Kc?	A. Always remains the same at differrent reaction conditions B. Increases if the concentration of one ofthe product is increased C. Changes with changes in the temperature D. Increasees if the concentration of one of the ratants is increased
13	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
		A. Kc is directly proportional to temperature B. Kc is inversely proportional to

14	Which of the following statements correctly describes the effect of temperature on the equilibrium constant.	temperature. C. K_c depends on the enthalpy change of the reaction D. Temperature has no effect on the value of K_c
15	If $K_c > 1$, the reaction.	A. Favors products B. Favors reactants C. Is at equilibrium D. Does not occur
16	Equilibrium constant depends on	A. Pressure B. Temperature C. Volume D. Concentration
17	Na_2CO_3 in water gives.	A. Acidic solution B. Basic Solution C. Neutral solution D. Buffer
18	At equilibrium the observable properties.	A. Keep changing B. Fluctuate randomly C. Remain constant D. Oscillate
19	$K_p = K_c(RT)^{\Delta n}$ is used to relate.	A. K_p and K_c B. Temperature and pressure C. Energy and volume D. Gibbs free energy
20	The reversible reaction cannot be achieved in	A. Open system B. Closed system C. Both a and b D. None of these