

## Equilibria

Sr	Questions	Answers Choice
1	A reverse reaction is one that	<p>A. Speeds up gradually</p> <p>B. Proceeds from left to right</p> <p>C. In which reactants react to form products</p> <p>D. Slow down gradually</p>
2	In an irreversibel reaction equiirbrium is.	<p>A. The forward reaction will be fovoured</p> <p>B. No effect on forward or backward reaction</p> <p>C. No effect on bakcwards reaction</p> <p>D. The backward reaction will be favoured</p>
3	The colour of hydrated copper (II) sulphate solid is.	<p>A. Black</p> <p>B. Pink</p> <p>C. White</p> <p>D. Blue</p>
4	Whcih is true about the equilibrium state?	<p>A. The forard reaction stops</p> <p>B. Both forward and reverse reactions stop</p> <p>C. Both foward and reverse reactions continue at the same rate</p> <p>D. The reverse reaction stops</p>
5	The forward reaction takes place from	<p>A. Right to left</p> <p>B. Left to right</p> <p>C. Both a and b</p> <p>D. None of these</p>
6	When a reaction will be come a reversible one?	<p>A. If the actvation energy of the forward reaction is comparrble to that of backward reaction</p> <p>B. If the activation energy of the forward reaction is higher than that of backward reaction</p> <p>C. If the activationenergy of the forward reaction is lower than that of backward reaction</p> <p>D. If the enthalpy change of both the reactions is zero.</p>
7	Such reaction which continue in both directins are called.	<p>A. Dynamic</p> <p>B. Irreversible</p> <p>C. Reversible</p> <p>D. Non- reactive</p>
8	The characteristics of reversible reactions are the following except.	<p>A. Product nver recombine to form reactants</p> <p>B. They never complete</p> <p>C. They have a double arrow between reactants and products</p> <p>D. The proceed in both ways</p>
9	Predict which components of the amosphere react in the presence of lightening.	<p>A. N2 and H2O</p> <p>B. O2 and H2O</p> <p>C. N2 and O2</p> <p>D. CO2 and O2</p>
10	The colour of anhydrous cobalt(II) cholride solid	<p>A. White</p> <p>B. Black</p> <p>C. Pink</p> <p>D. Blue</p>
11	An Inorganic chemistry places one mle of $\text{PCl}_5$ in container A and one mole of each $\text{Cl}_2$ and $\text{PCl}_3$ in container B. Both the containers were sealed and heated to the same temperture to reach the stte of equilibrium Guess about the composition of mixtures in both the containers.	<p>A. Both the containers wil have zero concentration of its reactants.</p> <p>B. Both the containers wil hae the same composition of mixtures</p> <p>C. Container A will have more concentraion of <math>\text{PCl}_3</math> than B.</p> <p>D. Container A will have less concentraion of <math>\text{PCl}_3</math> than B.</p>
		A. Concentration of any reactant or

12	Concentration of reactants and product at equilibrium remains unchanged if	<p>product is not changed          B. Temperature of the reaction is not changed          C. Pressure or volume of the system is not changed          D. All of the above are observed</p>
13	In chemical reaction, the substances that combine are called.	<p>A. Masses          B. Materials          C. Products          D. Reactants</p>
14	Why the gas starts coming out when you open a can of fizzy drink.	<p>A. Because the solubility of the gas increases          B. Because the gas is dissolved under pressure hence it comes out when pressure is decreased          C. Because the gas is insoluble in water          D. Because the solubility of the gas decreases at high pressure.</p>
15	Which compound is used as a thinner in paint industry?	<p>A. H<sub>2</sub>O          B. C<sub>2</sub>H<sub>3</sub>OH          C. CH<sub>3</sub>COOC<sub>2</sub>H<sub>5</sub>          D. CH<sub>3</sub>COOH</p>
16	What will happen to the concentrations of the product if a reversible reaction at equilibrium is not disturbed.	<p>A. They will keep on increasing          B. They will keep on decreasing          C. They will remain constant          D. They will remain constant for some time and then start decreasing</p>
17	The new substance formed in a chemical reaction is.	<p>A. Reverse          B. Reactant          C. Forward          D. Product</p>
18	Industrially, ammonia is produced by which process.	<p>A. Halogenation          B. Solvay process          C. Haber Process          D. Hydrogenation</p>
19	In an irreversible reaction equilibrium	<p>A. Never established          B. Established quickly          C. Established slowly          D. Established when reaction stops</p>
20	What will happen if the rates of forward and reverse reactions are very high	<p>A. The reaction will be practically irreversible          B. The equilibrium point will reach very soon          C. The equilibrium point will reach very late          D. The reaction will not attain the state of dynamic equilibrium</p>