


## ECAT Chemistry Chapter 11 Reaction Kinetics

Sr	Questions	Answers Choice
1	With increases of 10°C temperature the rate of reaction doubles. This increase in rate of reaction is due to :	A. Decrease in activation energy or reaction. B. Decrease in number of collisions between reactant molecules. C. Increase in activation energy of reactants. D. Increase in number of effective collisions
2	In zero order reaction, the rate is independent of :	A. Temperature of reaction B. Concentration of reactants C. Concentration of products D. None of these.
3	The value of activation energy $E_a$ of a reaction can be determined from the value of slope of the straight line obtained by plotting a graph between $1/T$ and $\log k$ . the value of $E_a$ is equal to	A. Slope B. $1/\text{Slope}$ C. Slope $\times R$ D. Slope $\times 2.303 R$
4	In exothermic reaction decrease in potential energy of the products will result in	A. Decreases in kinetic energy of the particles B. Increases in kinetic energy of the particles C. No change in kinetic energy D. Decreases in activation energy
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Small change in concentration of product B. Small time interval C. Co-efficient of the reactant D. Co-efficient of the product
6	Optical rotation method is used when	A. Reaction involve ions B. Change of refractive indices C. Reactions involving change of optical activity D. None of the above
7	Which statement is true about order of reaction :	A. Order of reaction can only be determined by an experiment. B. Order of reaction can be determined from a balance equation only. C. Order of reaction increase by increasing temperature. D. Order of reaction must be in whole number and not in fraction.
8	In thermal decomposition of $N_2O$ the half life period for two different initial concentrations of $N_2O$ are (i) 255 second for initial $N_2O$ 290 mm Hg (ii) 212 second for initial $N_2O$ 360 mm Hg then it is	A. Zero order B. First order C. Second order D. Third order
9	In the hydrolysis of $CH_3COOC_2H_5$ the acid produced is	A. Inhibitor B. Catalyst C. Auto catalyst D. None of above
10	For a chemical reaction to take place the particles must have sufficient energy for the effective collisions, the energy is called	A. Average energy B. Activation energy C. Potential energy D. Collision energy
11	If the rate of reaction is independent of the concentration of the reactant, the reaction is of	A. Zero order B. First order C. Second order D. Third order
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 2 B. 3 C. 4 D. 9

13	A white precipitate of silver chloride immediately formed on addition of :	<p>A. Silver nitrate solution to sodium chloride solution.</p> <p>B. Silver chloride solution to sodium nitrate solution.</p> <p>C. Silver nitrate solution to potassium chloride solution</p> <p>D. Silver nitrate solution to hydrogen chloride solution.</p>
14	The unit of rate constant is the same as that of the rate of reaction in :	<p>A. First order reaction.</p> <p>B. Second order reaction.</p> <p>C. Zero order reaction.</p> <p>D. Third order reaction.</p>
15	_____ are called biocatalysts	<p>A. Organic acids</p> <p>B. Organic bases</p> <p>C. Enzymes</p> <p>D. All</p>
16		<p>A. 1st order</p> <p>B. 2nd order</p> <p>C. Zero order</p> <p>D. 3rd order</p>
17	The effective activity of a metal catalyst is increased if it is in	<p>A. Solid form</p> <p>B. Liquid state</p> <p>C. Gaseous state</p> <p>D. Finely divided form</p>
18	It is common observation that rates of chemical reactions differ :	<p>A. Greatly.</p> <p>B. A little bit.</p> <p>C. Moderately.</p>
19	Hydrogenation of vegetable oils is accelerated by Ni catalyst. The catalytic activity of Bi is increased by a promoter or activator which is	<p>A. Na and K</p> <p>B. Na and Hg</p> <p>C. Hg and Zn</p> <p>D. Cu and Te</p>
20	Which of the following is not affected by light	