

ECAT Chemistry Chapter 11 Reaction Kinetics

Sr	Questions	Answers Choice
1	Question Image	A. Three times B. Six times C. Nine times D. Two times
2	The sum of the exponents of the conc. terms in the rate equation is called	A. Rate of reaction B. Order of reaction C. Specific rate constant D. Average rate
3	In an experiment the concentration of a reactant 'A' is doubled the rate increases four times. If concentration is tripled, then rate increases nine times. Thus the rate is proportional to _____ of concentration of 'A'	A. Square root B. Square C. Twice D. Cube
4	Dilatometer method is useful for the reaction that involve :	A. Small volume changes in solutions B. Change in refractive indices C. Where reactants absorb U.V, visible or infrared radiation
5	The example of a photo chemical reaction is photosynthesis has order of reaction :	A. 1 B. 2 C. 0 D. 3
6	The reaction rate is expressed in the units of	A. $\text{mol dm}^{-3} \text{s}^{-1}$ B. mol dm^{-3} C. $\text{mol dm}^{-3} \text{N}^{-1} \text{s}^{-1}$ D. $\text{dm}^{-3} \text{s}^{-1}$
7	A white precipitate of silver chloride immediately formed on addition of :	A. Silver nitrate solution to sodium chloride solution. B. Silver chloride solution to sodium nitrate solution. C. Silver nitrate solution to potassium chloride solution D. Silver nitrate solution to hydrogen chloride solution.
8	Activation energy is the difference of energy between the energy of the reactant and	A. The product B. The activated complex C. Both a and b D. None of these
9	The experimental relationship between a reaction rate and the concentration of reactants is known as	A. Order B. Molecularity C. Rate constant D. Rate law
10	A zero order reaction is one in which :	A. Rate is not affected by changing concentration of reactants. B. concentration of reactants do not change with the passage of time. C. Reactants do not react. D. One reactants in large excess.
11	Rate of chemical reaction depends upon :	A. The number of total collisions per second. B. Number of molecules taking part in a chemical reaction. C. Number of fruitful collisions per second D. Number of fruitless collisions per second.
12	If the rate equation of a reaction $2A + B \rightarrow \text{Products}$ is , Rate = $K[A][B]$, and A is present in large excess, then order of reaction is :	A. 1 B. 2 C. 3 D. Above
		A. I_{A} elements are more soft than I_{A} B. I_{A} elements are non-

13	Group I-A elements react with water fastly than the reaction of group II-A elements because	metals C. I_Aelements have 1 electron in their outermost s-orbital and are strongly electropositive D. I_Aelements make ionic bond
14	If the rate of decay of radioactive isotope decreases from 200 cpm to 25 cpm after 24 hours, what is its half life :	A. 8 hours B. 6 hours C. 4 hours D. 3 hours
15	_____ are called biocatalysts	A. Organic acids B. Organic bases C. Enzymes D. All
16	The number of atoms or molecules whose concentrations determine the rate of the reaction is called	A. Molecularity B. Order C. Rate of reaction D. Rate constant
17	To determine the rate of reaction chemically a graphical method is applied. A graph is plotted between the amount or reactant decomposed or product formed against the time. The rate $\frac{dx}{dt}$ at any time is equal to	A. k B. Tangent C. $\frac{1}{a}$, a is initial conc. D. $\frac{1}{a^2}$
18	Value of rate constant k is specific for a reaction, and varies from reaction to reaction. The value of k of a reaction changes with	A. Time B. Temperature C. Concentration of reactants D. Order of reaction
19	In thermal decomposition of N ₂ O the half life period for two different initial concentrations of N ₂ O are (i) 255 second for initial N ₂ O 290 mm Hg (ii) 212 second for initial N ₂ O 360 mm Hg then it is	A. Zero order B. First order C. Second order D. Third order
20	If half life period of a reaction is independent of the concentration of the reactants, then the reaction is	A. Zero order B. First order C. Second order D. Order is in fraction