

ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	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
2	Dilatometric method is used for rate determination when	A. Reactions involving change of optical B. Reactions involving change of optical activity C. Reactions involving small volume change D. None of above
3	Refractometric method is used when	A. Reactions involving absorption of I.R. or U. V B. Reactions involving change of refractive index C. Reactions involving ions D. Change of optical activity
4	If a reactant or product of a reaction absorbs radiation, then physical method for determining the rate of reaction is	A. Spectrometry B. Refractometry C. Conductivity measurement D. Optical method
5	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. $\tan \theta$ C. $1/a$, a is initial conc. D. $1/a^2$
6	The reaction rate is expressed in the units of	A. $\text{mol dm}^{-3} \text{s}^{-1}$ B. mol dm^{-3} C. $\text{mol dm}^{-3} \text{N}^{-1}$ D. $\text{dm}^{-3} \text{s}^{-1}$
7	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
8	The unit of rate constant k is the same as that of the rate of reaction in	A. First order reaction B. Second order reaction C. Third order reaction D. Zero order reaction
9	Question Image	
10	Question Image	A. Rate is independent of concentration of water since it is in excess B. Rate is independent of concentration of ester since it is in excess C. Rate depends upon the concentration of acid catalyst added D. Rate = $k[\text{CH}_3\text{COOC}_2\text{H}_5]^2$
11	When initial concentration of reactants and order of reaction is given, then its half life period can be calculated by the equation	
12	If initial concentration of the reactants and half life period of the reaction is known, then we can determine	A. Average rate of reaction B. Order of reaction C. Rate constant k D. Instantaneous rate
13	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
14	When the rate of reaction is entirely independent of the conc. of reaction molecules then order of reaction is	A. Zero B. First C. Second D. Third
		A. Order of reaction

15	The experimental relationship between a reaction rate and the concentration of reactants is called	<p>B. Rate law</p> <p>C. Activated complex</p> <p>D. Molecularity</p>
16	Question Image	<p>A. Rate = $k[\text{FeCl}_3][\text{KI}]^2$</p> <p>B. Rate = $k[\text{Fe}^{+3}][\text{Cl}^{-1}][\text{KI}]$</p> <p>C. Rate = $k[\text{Fe}^{+3}][\text{Cl}^{-1}][\text{K}]$</p> <p>D. Rate = $k[\text{KI}]^3[\text{FeCl}_3]^2$</p>
17	Question Image	<p>A. First order</p> <p>B. Pseudo first order</p> <p>C. Second order</p> <p>D. Zero order</p>
18	Question Image	<p>A. Zero</p> <p>B. 1</p> <p>C. 2</p> <p>D. 1.5</p>
19	The rate of reaction is denoted by	<p>A. $\frac{dc}{dp}$</p> <p>B. $\frac{dc}{ac}$</p> <p>C. $\frac{dc}{dT}$</p> <p>D. $\frac{dc}{dt}$</p>
20	The sum of the exponents of the conc. terms in the rate equation is called	<p>A. Rate of reaction</p> <p>B. Order of reaction</p> <p>C. Specific rate constant</p> <p>D. Average rate</p>
21	In the hydrolysis of $\text{CH}_3\text{COOC}_2\text{H}_5$ the acid produced is	<p>A. Inhibitor</p> <p>B. Catalyst</p> <p>C. Auto catalyst</p> <p>D. None of above</p>
22	The rate of reaction between two specific time intervals is called	<p>A. Instantaneous rate</p> <p>B. Average rate</p> <p>C. Specific rate</p> <p>D. Ordinary rate</p>
23	The rate of reaction determined at a given time is called	<p>A. Average rate</p> <p>B. Instantaneous rate</p> <p>C. Specific rate</p> <p>D. Overall rate</p>
24	In the rate equation when the concentration of reactants are unity, then rate is equal to	<p>A. Instantaneous rate</p> <p>B. Average rate</p> <p>C. Active mass of products</p> <p>D. Specific rate constant</p>
25	Question Image	<p>A. Small change in concentration of product</p> <p>B. Small time interval</p> <p>C. Co-efficient of the reactant</p> <p>D. Co-efficient of the product</p>
26	The unit of rate of reaction is	<p>A. mole dm^{-3}</p> <p>B. mole Kg^{-1}</p> <p>C. moles $\text{dm}^{-3}\text{sec}^{-1}$</p> <p>D. grams dm^{-3}</p>
27	Which statement is not correct	<p>A. Enzymes catalyst a specific reaction</p> <p>B. Enzymes show catalytic activity at a specific temperature</p> <p>C. The catalytic activity of enzymes is stopped if optimum pH is changed</p> <p>D. The catalytic activity is poisoned by a co-enzymes</p>
28	A substance which increases the rate of a reaction without being consumed during the reaction is called	<p>A. An autocatalyst</p> <p>B. A catalyst</p> <p>C. A negative catalyst</p> <p>D. All of these</p>
29	Factor which slows down the rate of reaction is	<p>A. Small size of the particles of the reactant</p> <p>B. High temperature of reaction</p> <p>C. More concentration of reactant</p> <p>D. Lowering the temperature</p>
30	Activation energy is the difference of energy between the energy of the reactant and	<p>A. The product</p> <p>B. The activated complex</p> <p>C. Both a and b</p> <p>D. None of these</p>