ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Which technique is used to determine the absorption of radiations?	A. Dilatometer method<o:p></o:p> B. Optical rotation method<o:p></o:p> C. Spectrometry<o:p></o:p> D. Refractometric method<o:p></o:p>
2	The rate of reaction :	A. Decreases as the reaction proceeds B. Increases as the reaction proceeds C. May decrease or increase reaction proceeds D. Remains same as the reaction proceeds
3	Dilatometer method is useful for the reaction that involve :	A. Small volume changes in solutions B. Change in infractive indices C. Where reactants absorb U.V, visible or infrared radiation
4	The rate of reaction b/w two specific time intervals is called :	A. Instantaneous rate of reaction. B. Average rate of reaction. C. Rate of a reaction. D. Minimum rate of a reaction.
5	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
6	Half life period of a first order reaction is independent of:	A. Presence of catalyst. B. Conditions of temperature C. Initial concentration of the compound D. All of above
7	The unit of the rate constant is the same as that of rate of reaction in :	A. Third order reaction B. Second order reaction C. First order reaction D. Zero order reaction
8	The rate equation for a reaction is Rate =k[A]. what are unit of K ?	A. Mole-1 dm³ S⁻¹ <o:p></o:p> B. Mole dm³ S⁻¹ <o:p></o:p> C. Moledm³<o:p></o:p> D. S⁻¹<o:p></o:p>
9	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.
10	A pseudo uni-molecular reaction has order of reaction :	A. 3 B. 2 C. 1 D. 0
11	Rate law of an equation is obtained :	A. From a balance equation. B. Can be calculated theoretically as well as determined experimentally. C. It is only calculated theoretically. D. Experimentally.
		A. 1

12	The example of a photo chemical reaction is photosynthesis has order of reaction :	B. 2 C. 0 D. 3
13	It rate law of an equation is written as$dx/dt=K[A][B]$?	A. Reaction is independent of the concentration of A and B. B. Product is decreasing with passage of time. C. Reactant in increasing with passage of time. D. Reactant is increasing with passage of time.
14	Hydrolysis of ethyl-acetate (ester) has order of reaction :	A. 3 B. 2 C. 1 D. 1
15	The unit rate of constan K is$mole^{-1}$ $dm^3S^{-1}$for a chemical reaction, the order of reaction is :	A. 3 B. 2 C. 1 D. 0
16	The unit of rate constant K is$mole^{-1}$ $dm^3$for a chemical reaction, the order of reaction is :	A. Order of reaction can determined by an experiment B. Order of reaction can determined from a balance equation only. C. Order of reaction can determined increases by increasing temperate. D. Order of reaction must be in whole number and not in fraction.
17	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.
18	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.
19	The change in concentration of reactant or product per unit time is called :	A. Rate constant. B. Rate of reaction. C. Rate equation. D. Rate law.
20	Which of the following may affect the rate constant (k) fro a reaction :	A. Change in concentration. B. Change in pressure. C. Change in pH. D. Change in temperature.
21	It is common observation that rates of chemical reactions differ :	A. Greatly. B. A little bit. C. Moderately.
22	Which of the following will affect the rate :	A. First step of reaction. B. Last step of reaction. C. Rate determining step. D. Fastest step.
23	The rate determining step is the :	A. Slowest step. B. Fastest step. C. Moderate step. D. Both (a) and (b).
24	All reactions occur in :	A. A single step. B. A series of steps C. Two steps. D. Both (a) and (b)
25	Which of the following reactions occur at moderate rate :	A. Rusting of iron B. Chemical weathering of stone work of buildings by acidic gases in atmosphere. C. Hydrolysis of an ester D. Fermentation of sugars
		A. Silver nitrate solution to sodium chloride solution. B. Silver chloride solution to sodium nitrate solution

26	A white precipitate ofsilver chlorideimmediately formed on additionof :	nitrate solution. C. Silver nitrate solution to potassium chloride solution D. Silver nitrate solution to hydrogen chloride solution.
27	A white precipitate ofsilver chlorideimmediately formed on additionof :	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.
28	The difference of potential of two electrodes when concentration of solution is 1M each at 25°C and1 atm is called :	A. Cell reaction. B. Electrode potential. C. Cell voltage. D. Standard cell potential.
29	Which of the following statement is incorrect about SHE(Standard hydrogen electrode):	A. Reduction potential of Cu⁺² is smaller than H⁺ions whenit is coupled with copper electrode. B. gas is passed in it at 1 atm pressure. C. Its oxidation potential and reduction potential is zero. D. It is made of platinum wire dipped in HCl solution
30	A half reaction can be defines as :	A. It always occurs at cathode. B. Involves only half of a mole of electrolyte. C. Occurs at one of the electrode. D. Goes only half way to completion.