

## Reaction Kinetics

Sr	Questions	Answers Choice
1	Which one reduces activation energy.	A. Catalyst B. Inhibitor C. Product D. Reactant
2	At equilibrium Delta G is	A. Zero B. Positive C. Negative D. Maximum
3	Unit of half life is	A. mol B. s C. mol dm <sup>-3</sup> D. J
4	Unit of rate constant for zero order reaction is	A. mol dm <sup>-3</sup> s <sup>-1</sup> B. s <sup>-1</sup> C. mol <sup>-1</sup> dm <sup>3</sup> s <sup>-1</sup> D. mol <sup>2</sup> dm <sup>6</sup> s <sup>-1</sup>
5	Higher pressure increases rate for	A. Solids B. Gases C. Liquids D. All phases
6	The units of the rate constant (k) for a reaction depend on the	A. Activation energy of the reaction B. Temperature of the reaction C. Overall order of the reaction D. Stoichiometry of the balanced chemical equation
7	Effective collisions are those that.	A. Have enough energy and proper orientation B. Are elastic C. Are in vacuum D. Produce no change
8	Half life of zero order reaction is	A. Constant B. Proportional to [A] C. Inversely proportional with [A] D. Independent to rate constant
9	Rate constant dependent of	A. Time B. Temperature C. Concentration D. Catalyst
10	Half life of first order reaction	A. Become zero B. Increases with [A] C. Is independent of [A] D. Decreases with [A]
11	Energy profile shows	A. Concentration B. Temperature C. Energy vs reaction progress D. Time
12	Which of the following methods measures reaction rate.	A. Conductivity B. Titration C. Volume of gas D. All of these
13	Consider two reactions with different activation energies at the same temperature, The reaction with the lower activation energy will have	A. A smaller rate constant B. A larger rate constant C. The same rate constant D. A rate constant that depends on the enthalpy change
14	Which increases with rise in temperature?	A. Activation energy B. Enthalpy C. Collision frequency D. Molecular weight

15	Enzyme is a	A. Solid catalyst B. Homogeneous catalyst C. Biological catalyst D. Promoter
16	Unit of k for second order reaction is	A. mol dm <sup>-3</sup> B. s <sup>-1</sup> C. mol <sup>-1</sup> dm <sup>3</sup> s <sup>-1</sup> D. mol <sup>-2</sup> dm <sup>6</sup> s <sup>-1</sup>
17	In an energy profile, peak represents.	A. Reactants B. Activated complex C. Products D. Catalyst
18	On an energy profile diagram the presence of a catalyst is represented by	A. A high peak representing the activation energy B. A lower peak representing the activation energy C. A change in the energy level of the reactants or products D. A shift in the equilibrium position
19	Rate of reaction is measured as.	A. Increase Temperature B. Change in concentration per unit time C. Total energy of reactants D. Change in volume per mole
20	Effect of temperature on rate is	A. Negligible B. Linear C. Exponential D. Logarithmic