

Reaction Kinetics

Sr	Questions	Answers Choice
1	A zero order reaction has rate	A. Proportional to [A] B. Independent of [A] C. Proportional to time D. Zero
2	Unit of k for second order reaction is	A. mol dm ⁻³ B. s ⁻¹ C. mol ⁻¹ dm ³ s ⁻¹ D. mol ⁻² dm ⁶ s ⁻¹
3	In presence of catalyst ΔH	A. Increases B. Decreases C. Double D. Unchanged
4	Which of the following methods measures reaction rate.	A. Conductivity B. Titration C. Volume of gas D. All of these
5	Half life formula for 1st order reaction is	A. 0.693 /k B. k x t C. 1 /k D. 2 k
6	Unit of rate constant for zero order reaction is	A. mol dm ⁻³ s ⁻¹ B. s ⁻¹ C. mol ⁻¹ dm ³ s ⁻¹ D. mol ⁻² dm ⁶ s ⁻¹
7	Half life of zero order reaction is	A. Constant B. Proportional to [A] C. Inversely proportional with [A] D. Independent to rate constant
8	Energy profile shows	A. Concentration B. Temperature C. Energy vs reaction progress D. Time
9	Unit of rate constant for first order reaction is	A. mol dm ⁻³ B. mol ⁻¹ dm ³ s ⁻¹ C. s ⁻¹ D. J mol ⁻¹
10	If we double the concentration of a reactant, the rate increases by four times, the reaction is.	A. First Order B. Second Order C. Third Order D. Zero order
11	Unit of rate for gaseous reaction are.	A. mol dm ⁻³ s ⁻¹ B. atm C. mol D. kg s ⁻¹
12	Overall order is sum of	A. Coefficients B. Exponents in rate law C. Moles D. Products
13	Rate of fastest	A. At start B. In middle C. At end D. After completion
14	The order of a chemical reaction, that is dependent of concentration is.	A. Second order reaction B. First order reaction C. Zero order reaction D. Pseudo first order reaction
15	Rate constant dependent of	A. Time B. Temperature C. Concentration D. Catalyst

D. Catalyst

16 In energy profile diagram a catalysts.

- A. Increase activation energy
- B. Decreases activation energy
- C. Provide new pathway
- D. Both b and c

17 In a chemical reaction, a catalyst.

- A. Alters Delta H
- B. Lowers activation energy
- C. Is consumed
- D. Forms product

18 The rate of reaction .

- A. Increase as the reaction proceeds
- B. Decreases as the reaction proceeds
- C. Remains the same as the reaction proceeds
- D. May decrease or increase as the reaction proceeds

19 The lowest step in a mechanism is

- A. Fast step
- B. Activation step
- C. Rate determining step
- D. Initiation step

20 Which factor affects rate of reaction.

- A. Concentration
- B. Temperature
- C. Surface Area
- D. All of these