

Short Questions

- (1) How a catalyst effects the energy of activation?
- (2) What is catalytic poisoning?
- (3) What are promoters? Give examples.
- (4) What is the effect of surface area on adsorption?
- (5) Define heterogeneous catalysis and give examples.
- (6) Write any two postulates of Langmuir adsorption isotherm.
- (7) Differentiate b/w physical and chemical adsorption.
- (8) What is meant by enzyme inhibition.
- (9) Define auto-catalysis. Give example.
- (10) What is peptization?
- (11) What do you mean by adsorption isotherms?
- (12) Define Zeta-Potential?
- (13) Define enzyme catalysis with a suitable example.
- (14) What is homogeneous catalysis. Write two examples.

(15) Enzymes as catalysts are specific in nature, justify.

Long Questions

- (1) What is adsorption? Discuss adsorption phenomenon. OR Discuss Langmuir adsorption isotherm.
- (2) Explain Michaelis-Menton mechanism for enzyme catalysis.
- (3) Explain Langmuir-Hinshelwood mechanism to study organic and inorganic reactions.
- (4) What are Adsorption isotherms. Explain.
- (5) Explain catalytic reaction of two gases on a solid surface by Eiley-Rideal mechanism.
- (6) What is enzyme catalysis? Derive the rate law expression for enzyme catalyzed reaction suffering uncompetitive inhibition.
- (7) What is catalysis? Discuss its types.