



Q.1. Answer the following short questions:

(15x2=30)

- a) What is Thixotropy phenomenon?
- b) What do you mean by critical micelle concentration (CMC)
- c) How Tyndall effect is observed? What is emulsification?
- d) Define Zeta potential.
- e) Name different types of sols.
- f) Differentiate between electrophoresis and electroosmosis.
- g) Differentiate between physical and chemical adsorption.
- h) Define enzyme catalysis with a suitable example.
- i) Write any two postulates of Langmuir adsorption isotherm.
- j) What is the effect of surface area on adsorption.
- k) What is homogeneous catalysis. Write two examples?
- l) Enzymes as catalysts are specific in nature, justify.
- m) What is meant by enzyme inhibition?
- n) Write two points of difference between colloids and sols.
- o) What do you mean by colloidal dispersion.

Answer the following questions.

(3x10=30)

Q. No. 02.

- a) Name different methods for molar mass determination of colloids. Explain one method in detail.
- b) Discuss heterogeneous kinetics of single system reactions.

Q. No. 03.

- a) Explain different properties of colloids.
- b) Explain in detail Eley Rideal mechanism.

Q. No. 04.

- a) What are colloids and how they are prepared & purified.
- b) Explain Michaelis- Menton mechanism for enzyme catalysis.