

# 3. ENZYMES

1 x 4 = 4 Marks

## ROOT POINTS

- Enzymes** are proteins which catalyse **bio-chemical reactions** in cells.
- Almost all enzymes are proteins.
- Some nucleic acids like ribozymes behave like enzymes.
- Holo enzymes contain protein part called **apoenzyme** and non-protein part called **co-factor**.
- Co-factors** are three types (a) Prosthetic groups (b) Co-enzymes (c) Metal ions. [IPE]
- An active site of an enzyme is a crevice into which the substrate fits.
- Enzymes, through their **active site**, catalyse reactions at **high rate**.
- Enzymes get **damaged** at **high temperatures** (say above 40°C)
- Enzymes **isolated** from organisms, living in **sulphur springs** retain their catalytic power even at 80°–90°C.
- Thermal stability** is an important quality of such enzymes.
- The chemicals which stop the activities of the enzymes are called **Enzyme inhibitors**. [IPE]
- They are 3 types (a) Competitive inhibitors (b) Non-competitive inhibitors (c) Feed back inhibitors.

## FRUITY Qs OF IPE

1 x 4 = 4 Marks

- Write briefly about enzyme inhibitors.
- Explain different types of cofactors.

## ENZYMES INHIBITORS

