

(2)

- (b) Write short notes on the following :
- (i) Rubredoxin (Rd) (1 Fe – 0S) protein
 - (i) Ferredoxin (FD) (2 Fe – 2S) protein

Unit-II

2. (a) How cytochrome 450 converts a hydrocarbon into an alcohol ?
- (b) Write notes on the structural behaviour and enzymatic activity of:
- (i) Xanthine oxidase
 - (ii) Carboxy peptidase

OR

- (a) Describe the crown ethers and cytodextrin based enzyme model.
- (b) Discuss the structural behaviour and enzymatic activity of:
- (i) Superoxide dismutase
 - (ii) Catalase

Unit-III

3. (a) Discuss the structure and biological functions of FMN and FAD.
- (b) Explain the following :
- (i) Effect of immobilisation of enzymes
 - (ii) Application of immobilisation of enzymes in medicinal and industrial chemistry

OR

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(3)

- (a) Discuss the structure and biological functions of co-enzyme-A and NADP^+ .
- (b) Explain the following :
 - (i) Classification of enzymes by IUB report
 - (ii) Concept and identification of active sites by the use of inhibitors

Unit-IV

4. (a) What is biopolymer interaction ? Describe various types of binding process in biological cell.
- (b) Explain the following :
 - (i) Functions of nerve conduction
 - (ii) Hydrogen ion titration curve

OR

- (a) Write notes on irreversible thermodynamic treatment of membrane transport
- (b) Describe the following terms :
 - (i) Osmotic pressure in membrane equilibrium
 - (ii) Donnan membrane equilibrium