

Time: 3 Hours

Marks: 80

Note:

1. Q. No-1 is compulsory
2. Attempt any 3 questions from remaining five questions
3. All Questions Carry Equal Marks.
4. Illustrate your answers with suitable diagram wherever necessary.

- | | | |
|------------|---|-----------|
| Q1. | a) Explain in detail Nomenclature and Classification of enzymes | 10 |
| | b) Explain how enzyme activity is studied using spectrophotometer | 10 |
| Q2. | a) Explain the kinetics of Competitive inhibition of enzymes | 10 |
| | b) Explain in detail the different models of Enzyme Substrate interactions | 10 |
| Q3. | Write the applications of enzymes in
i) Leather Industry
ii) Food Industry
iii) Detergent Industry
iv) Therapeutics | 20 |
| Q4. | a) Derive Line weaver Burke and EadieHofstee plot | 10 |
| | b) Explain in detail enzyme based reactor classification | 10 |
| Q5. | Write short notes for the following
i) Allosteric Enzymes
ii) CSTR
iii) Activation energy
iv) Effect of pH on enzyme activity | 20 |
| Q6. | Explain the importance of Coupled kinetic enzyme assays with suitable examples | 20 |
