

Exam.Code:0912

Sub. Code: 6329 ✓

2054

B.E. (Biotechnology) Eighth Semester  
BIO-812: Enzyme Catalyzed Organic Synthesis ✓

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

1. Write briefly:

- a) What are the ACE inhibitors?
- b) What is stereoselective biocatalyst?
- c) Define extracellular enzyme? Give four examples.
- d) Define enzyme activity and specific enzyme activity?
- e) Enzymes involved for synthesis of organic solvents, explain? (5x2)

UNIT - I

2. a) pH play important role in enzyme activity, explain? (4,6)
- b) "Chirality and Biological Activity"- with examples explain statement. (4,6)
3. a) Explain effect of substrate and enzyme concentration on enzyme activity.
- b) List taking advantages and disadvantages of biocatalyst with suitable example. (4,6)
4. a) Briefly write notes on Industrial applications of enzyme.
- b) Discuss the different type of enzyme inhibition.
- c) What is the degree of enzyme inhibition? Explain substrate inhibition? (4,3,3)

UNIT - II

5. Explain Calcium-Channel Blockers and Potassium channel openers. (10)
6. Define the term of enzyme immobilization? What are advantages and disadvantages? Discuss the various methods for immobilizing enzymes. (10)
7. Explain any two:
  - a) Antiviral compounds.
  - b) Anticancer drug.
  - c) Anticholesterol drug. (2x5)

x-x-x