



CBCS SCHEME

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Fifth Semester B.E. Degree Examination, June/July 2024 Enzyme Technology and Biotransformation

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain the enzyme purification methods. (10 Marks)
b. Discuss the use of enzymes and its classification criteria. (10 Marks)

OR

- 2 a. Explain the biocatalyst over chemical catalyst. (10 Marks)
b. Discuss the acid base catalysis of an enzyme. (10 Marks)

Module-2

- 3 a. Explain the mechanism of action of co-enzymes (NADH/FADH). (10 Marks)
b. Briefly explain the standardization methods for enzymes. (10 Marks)

OR

- 4 a. Explain the methods to study the stability of the enzymes. (10 Marks)
b. Discuss the importance of cofactors in enzymes. (10 Marks)

Module-3

- 5 a. Explain the immobilization methods for enzymes. (10 Marks)
b. Discuss the use of immobilized enzymes in different industries. (10 Marks)

OR

- 6 a. Briefly discuss the economic importance of immobilized enzymes. (10 Marks)
b. Describe the role of extremophiles in PCR applications. (10 Marks)

Module-4

- 7 a. Explain the construction of novel enzymes. (10 Marks)
b. Describe the biological importance of HMG COA reductase inhibitors. (10 Marks)

OR

- 8 a. Write a note on angiotensin converting enzymes ACE. (10 Marks)
b. Explain the role of enzymes in biotransformation of drugs. (10 Marks)

Module-5

- 9 a. Explain the production process of glucose syrup from starch by using enzymes. (10 Marks)
b. Explain the role of enzyme in food industry. (10 Marks)

OR

- 10 a. Discuss the use of enzymes in diagnostics. (10 Marks)
b. Enzymes as markers in Cancer disease. Explain. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.