## CBCS SCHEME

USN					

18BT53

## Fifth Semester B.E. Degree Examination, Feb./Mar. 2022 **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. Quoting an example, explain the 3 stages of Covalent Catalysis. (10 Marks) b. Based on charges, explain any 2 strategies for determination of purity of enzymes. (10 Marks)  OR 2 a. Differentiate between Enzymes and Chemical Catalysts. (10 Marks) b. Compare the isolated enzyme and whole cell system of biotransformation. (10 Marks) b. Compare the isolated enzyme and whole cell system of biotransformation. (10 Marks) b. Write a detailed note on parameters that are considered for standardization and optimization of enzyme assays.  OR 4 a. What are Coenzymes? Explain the mechanism and significance of TPP and biotin. (12 Marks) b. Write a certaical note on enzyme catalyzed reaction, explain Initial Velocity studies.  (88 Marks)  Module-3 b. Write a critical note on effect of solute diffusion on kinetics of immobilized enzyme.  (10 Marks) b. Write a critical note on effect of solute diffusion on kinetics of immobilized enzyme.  (10 Marks) b. Explain any two chemical reactions used in immobilization of enzymes of covalent binding.  (10 Marks) b. Explain the biological importance of HMG. Co. A reductase inhibitors. Add a note on its clinical significance.  OR  8 a. Write a critical note on Acetyl cholinesterase.  b. Write a critical note on Acetyl cholinesterase.  b. Write short notes on:  i) Angiotensin Converting enzyme.  ii) Immuno Reactive Trypsinogen.  (12 Marks)  Module-5  9 a. What is the importance of enzymes in the diagnosis of cancer?  (10 Marks)  Discuss the role of enzymes in detergent preparation.  OR		N	ote: Answer any FIVE full questions, choosing ONE full question from each mo	odule.
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10 a. Write short notes on: 1) SGOT 11) Glucose Oxidase. (10 Marks)	* ^			4035
	10	a.	Write short notes on: 1) SGO1 11) Glucose Oxidase.	(10 Marks)

b. Explain the application of protease in Food and Leather Industry. (10 Marks)