

Reg. No.

--	--	--	--	--	--	--	--	--	--



**BFTFTC 353**

**Credit Based VI Semester B.Sc. (Food Technology) Degree  
Examination, September 2022  
(2020 – 21 and Earlier Batches)  
ENZYME TECHNOLOGY**

Time : 3 Hours

Max. Marks : 80

**PART – A**

1. Answer **any ten** of the following. **(2×10=20)**
- What is competitive inhibition ?
  - What is IUBMB ?
  - What is “Active site of the enzyme” ?
  - How the rate of enzyme activity is expressed ?
  - What is immobilized enzyme reactor ?
  - Bioenergetics.
  - Significance lactose free milk.
  - List the uses of cellulase.
    - Mention the uses of glucose oxidase.
    - Mention causes of enzyme specificity.
  - What is ficin ?
    - List any two uses of Glucoamylase.

**PART – B**

Answer **any four** of the following choosing **one full** question from **each** Unit.

**Unit – I**

2. a) Write a note on nomenclature of enzymes. **(3+5+7=15)**  
b) Write a note on measurement of enzyme activity.  
c) Give a detailed account on allosteric enzyme.

**OR**

3. a) Write a note on enzyme classification. **(3+5+7=15)**  
b) What is covalent modification ? Explain.  
c) Discuss the enzyme kinetics involving single substrate.

**P.T.O.**

**Unit – II**

4. a) Describe disadvantages of chemical catalysis. **(4+4+7=15)**  
b) Describe enzyme specificity.  
c) Give a detailed account on design and configuration of immobilized enzyme reactor.

OR

5. a) Describe conditions under which cell free enzymes are used. **(4+4+7=15)**  
b) Explain the procedure of optimization of enzyme assay.  
c) Give an account on importance of immobilized enzymes in food industry.

**Unit – III**

6. a) What is saccharification ? Importance of enzymes in saccharification. **(4+4+7=15)**  
b) Describe the mechanism of action of alpha amylases.  
c) Give a detailed account on heat stable enzymes.

OR

7. a) Write a note on pectic enzymes. **(4+4+7=15)**  
b) Explain the importance of pectin degrading enzymes in brewing.  
c) Describe the superiority of enzymatic methods over conventional methods in bakery industry.

**Unit – IV**

8. a) Write a note on sources of proteases. **(3+5+7=15)**  
b) What is the function of tyrosinase ? Explain.  
c) Describe the role of enzymes in fruit processing.

OR

9. a) Describe mechanism and applications of catalase. **(4+4+7=15)**  
b) Describe source and mechanism of acid phosphatases.  
c) Give a detailed account on enzymes in cheese preparation.
-