



RAN - 2503000504018001

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B. Sc. (NCF - NEP) (Sem. IV) Examination April - 2025

Major - 1 Bioscience (Microbiology)

Paper - III BM-MJ1- 401 Theory - Enzymology (New)

Time: 1 Hour]

[Total Marks: 25

સૂચના : / Instructions

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નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book

Name of the Examination:

B. Sc. (NCF - NEP) (Sem. IV)

Name of the Subject :

Major - 1 Bioscience (Microbiology) Paper - III BM-MJ1- 401 Theory - Enzymology (New)

Subject Code No.: **2503000504018001**

Seat No.:

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Student's Signature

- (2) Draw neat and labelled diagrams wherever necessary.
(3) Figures to the right indicate full marks of the question

Q.1. Multiple choice questions. (Any Five)

5

- The enzyme which hydrolyses starch to maltose is:
 - Protease
 - Amylase
 - Lactase
 - Maltase
- Which of the following is not a type of specificity?
 - Substrate specificity
 - Reaction specificity
 - Koshland specificity
 - Stereo specificity
- Which of the following is produced with the combination of apoenzyme and coenzyme:
 - Holoenzyme
 - Enzyme substrate complex
 - Prosthetic group
 - Enzyme product complex
- Which enzyme was first produced industrially?
 - Bacteria enzyme
 - Yeast enzyme
 - Fungal enzyme
 - Streptomyces

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[1]

[P.T.O.]

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5. Blocking of enzyme action by blocking its active site is called as:
- Allosteric inhibition
 - Feedback inhibition
 - Competitive inhibition
 - Non-competitive inhibition
6. When the velocity of enzyme activity is plotted against substrate concentration, which of the following is obtained?
- Hyperbolic curve
 - Parabola
 - Straight line with positive slope
 - Straight line with negative slope

Q.2. Write an essay on - Enzyme specificity. 10

OR

Q.2. Answer the following questions 10

- Describe Fischer Lock and Key Hypothesis.
- Explain the effect of pH and temperature on the enzyme activity.

Q.3. Discuss in detail different types of enzyme inhibition. 10

OR

Q.3. Answer the following questions 10

- Describe in brief advantages of immobilized enzymes.
- What is allosteric regulation? Explain with an example.