



RAN-2503001305041005

B.Sc. (Biotechnology) (NCF-NEP) (Sem. V) Examination March - 2026
Enzymology (Minor)

Time: 1 Hour]

[Total Marks: 25

સૂચના : / Instructions (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the above details on your answer book	Seat No.: <table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table> Student's Signature						

Q.1. Short Question/One-Word Answer (Any 5 out of 6)

05

- Define: First order reaction
- Define: Coenzyme
- If 2000 enzyme molecules catalyses formation of 20,000 product molecules in one second, the turnover number will be _____.
- Name the enzyme used for the removal of blood clots from blood vessels.
- State True or False: Low K_m value means low affinity.
- The enzyme used for the production of cheese is _____?

Q.2. Short Note (Any 2 out of 3)

10

- Explain the function of following enzymes with suitable examples:
 - Hydrolase
 - Transferase
 - Ligase.
- Write a short note on effect of Temperature and pH on enzyme activity.
- Write short note on the Active site of enzyme.

Q.3. Short Note (Any 2 out of 3)

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- Explain Michaelis Menten equation and terms K_m and V_{max} .
- Draw Lineweaver burk plot (LB plot) and write its advantages and disadvantages.
- What are competitive inhibitors? Draw Velocity Vs Substrate plot and Lineweaver burk plot for competitive inhibitor.