R09

Code No: C0310

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I - Semester Examinations March/April 2011
ENZYME ENGINEERING & TECHNOLOGY
(BIOTECHNOLOGY)

Time: 3hours **Max.Marks:60**

Answer any five questions
All questions carry equal marks

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1. What are the various factors affecting rate of enzyme reactions? [12]

2. Mention any three different techniques that can be used to determine the active sites of enzymes. [12]

3. Discuss the effect of temperature & PH on rate constants & protein structure. [12]

4. Explain stopped flow rapid mixing technique used for studying enzyme - catalyzed reactions. [12]

5. Comment on the following
   a) Michael's – Men ten equation.
   b) Energetics of substrate binding [6+6]

6. Briefly explain immobilization of biocatalysts & their applications [12]

7. Write short notes on
   a) Mechanism of action of lysozyme [6+6]
   b) Enzyme kinetics at interface.

8. Describe the applications of enzymes as analytical reagents. [12]

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