

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**

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]
