

R09

Code No: C0309

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech I Semester Examinations March/April-2011

BIOCATALYSIS AND ENZYME MECHANISM

(BIOTECHNOLOGY)

Time: 3hours

Max.Marks:60

**Answer any five questions
All questions carry equal marks**

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1. What are biocatalysts? Discuss the properties of biocatalysts & advantages of Biocatalysts over conventional catalysts. [12]
2. Discuss Michaelis Menten kinetics? Write a note on significance of M.M Parameters. [12]
3. Discuss the basics of stereochemistry? Write a note on applications of lipases& Esterases in pharma industry. [12]
4. What is enzyme catalysis? Write a note on mechanism of enzyme catalysis? [12]
5. Explain the mechanism of biosynthesis of biocatalysts. [12]
6. a) What are Enantiomers?
b) Role of water in enzyme reactions in organic solvents.
c) Trans esterification & inter esterification. [12]
7. Explain the role of Enzymes as Analytical agents. [12]
8. Discuss the methods used for investigating the kinetics of enzyme catalysed reactions. [12]
