Roll No. ☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 01

Total No. of Questions : 08

M.Sc. MLS (Biochemistry)   (Sem.–1)
FUNDAMENTALS OF ENZYMOLOGY
Subject Code : MMLT-103-18
Paper ID : [75411]

Time : 3 Hrs.   Max. Marks : 50

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TEN marks.

1. Describe briefly nomenclature, classification and characteristics of enzymes.

2. What is feedback inhibition? Describe briefly reversible and irreversible covalent modifications of enzymes giving examples.

3. Derive the Michaelis Menten equation for determination of Km and Vmax of enzymes.

4. What is enzyme inhibition? Describe kinetics of competitive, uncompetitive and non-competitive inhibition.

5. What are immobilized enzymes? Describe the biotechnological applications of enzymes.

6. Describe the principles of diagnostic enzymology. Also highlight the clinical significance of SGOT, SGPT, LDH and CPK.

7. Describe the use of enzymes as thrombolytic agents, anti-inflammatory agents and in digestive aids.

8. Describe the general acid-base catalysis, covalent catalysis and role of metal ions in enzyme catalysis.