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 M.Code: 75411

Date of Examination: 14-01-2023

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. Write a note on Michaelis-Menton equation. Give the calculation of Km and Vmax values.
- 2. Write a note on following:
  - i) Allosteric enzymes
  - ii) Monocyclic and multicyclic cascade system
  - iii) Acid base catalysis
- 3. Explain various applications of enzymes in medicine and industry.
- 4. Discuss the principle and clinical value of estimation of SGOT and SGPT.
- 5. Describe in detail the process of enzyme inhibition. Discuss its types with some suitable example.
- 6. Describe the mechanism of enzyme action. Discuss how activity of the enzyme is regulated.
- 7. Explain induced fit hypothesis of enzyme action. How enzyme action is regulated?
- 8. What is Activation energy? Discuss the role of various factors on the rate of enzyme catalyzed reaction.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

**1** M-75411 (S10)-2368