## 2022

## M.Sc.

## **Second Semester**

CORE - 7

## **ZOOLOGY**

Course Code: MZOC 3.11 (Proteomic & Enzymology)

Total Mark: 70 Pass Mark: 28 Time: 3 hours Answer five questions, taking one from each unit. UNIT-I 1. Describe the secondary structure of protein. 14 2. (a) Explain the super-secondary structure of proteins. 7 (b) Give the importance of quaternary structure of proteins. 7 **UNIT-II** 3. Explain the different types of protein folding models with diagrams. 14 4. What is post translational processing of proteins? Explain in brief the several ways of post translational modification of proteins. 14 UNIT-III Explain the structural methods of X-ray crystallography and its applications. 14 6. Describe in detail about protein sequencing. 14

7+7=14

UNIT-IV

7. Give the classification and the properties of enzymes.

8. Describe the effect of different physico-chemical factors on enzyme activity.
UNIT-V
9. Give a detailed account on the Fischer's lock and key theory of enzymes.
14
10. Describe Michaelis-Menten equation and its derivatives. Add a note on ribozyme.
10+4=14