

A-238

Total Pages : 3

Roll No.

MSCZO-504

M.Sc. ZOOLOGY (MSCZO)

(Bio-Chemistry)

1st Semester Examination, 2024 (June)

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section-A

(Long Answer Type Questions) 2×19=38

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. Define and classify Carbohydrates with suitable examples. Mention various function of Carbohydrates.
2. Define complex lipids. Give detailed account of Phospholipids.
3. Describe the chemistry, biochemical functions, daily requirements, sources and deficiency manifestations of any one water insoluble vitamin.
4. Describe in detail the mechanism of enzyme action.
5. Discuss the organization of protein structure. Give an account of determination of primary structure of proteins.

Section–B

(Short Answer Type Questions) 4×8=32

Note :– Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Explain the following :
 - (a) Glycogenolysis
 - (b) Glycosidic bonds
2. Give an illustration of Electron Transport Chain (ETC).
3. Explain synthesis and utilization of ketone bodies.

4. Write note on the following :
 - (a) beta-pleated sheets
 - (b) Peptide bonds
5. Name the vitamins with coenzyme activities. Discuss the biological importance of flavoproteins.
6. Write about importance of second law of thermodynamics.
7. Describe the classification and nomenclature of Enzymes.
8. Discuss about high energy compounds with special reference to “ATP”.
