

K-544

Total Pages : 3

Roll No.

MSCZO-504

BIO-CHEMISTRY

M.Sc. Zoology (MSCZO)

1st Semester Examination, 2023 (Dec.)

Time : 2 Hours]

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)

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.

(2×19=38)

1. Discuss the structure, classification and uses of polysaccharides.
2. Describe in detail the biosynthesis of fatty acids.
3. Describe the chemistry, biochemical functions, daily requirements, sources and deficiency manifestations of Vitamin C.
4. Write an account of various factors affecting enzyme activities.
5. What are proteins? Discuss different levels of protein structure and their biological functions.

SECTION-B

(Short Answer Type Questions)

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. (4×8=32)

1. Differentiate between α -helix and β -helix secondary structure of proteins.
2. Write about cholesterol degradation.

3. Illustrate citric acid cycle.
 4. Explain deamination and transamination.
 5. Write notes on :
 - (a) Concept of entropy.
 - (b) First law of thermodynamics.
 6. Discuss about various high energy compounds.
 7. Write notes on :
 - (a) Essential amino acids.
 - (b) Functions of monosaccharides.
 8. Give an account of various buffering mechanisms of the body.
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