Total Pages : 3

Roll No.

MBOT-504

Biochemistry

M.Sc. Botany (MSCBOT)

1st Semester Examination, 2023 (Dec.)

Time : 2 Hours]

[Max. Marks : 35

Note : This paper is of Thirty Five (35) 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 Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only. (2×9½=19)

- **1.** Give a detail account on nomenclature and classification of enzymes.
- **2.** Write about the characteristics, functions and classification of lipids.
- **3.** Write about the structure, properties and classification of amino acids.
- **4.** Discuss various forms of structure of protein with suitable diagrams.
- **5.** Give a detail account on structure and function of biological membranes.

SECTION-B

(Short Answer Type Questions)

- **Note :** Section 'B' contains Eight (08) short answer type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only. (4×4=16)
- **1.** Explain in brief about chemical composition of biological membranes.
- 2. Write the difference between DNA and RNA.

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- 3. Write a short note on mechanisms of protein synthesis.
- 4. What is nucleotides and nucleosides? Describe in brief.
- 5. Write short note on any *two* :
 - (a) Conjugated proteins.
 - (b) Transamination.
 - (c) Peptide bond.
- 6. Write a short note on first law of thermodynamics.
- 7. What are co-factors of enzymes? Explain in brief.
- 8. Write a short note on β -oxidation of lipids.