

A-047

Total Pages : 3

Roll No. -----

MBOT-504

Biochemistry

M.Sc. Botany (MSCBOT)

1st Semester, Examination 2024 (June)

Time: 2:00 hrs

Max. Marks: 35

Note : This paper is of Thirty five (35) marks divided into Two (02) Section 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 (9.5) marks each. Learners are required to answer any Two (02) questions only.

[2x9.5=19]

P.T.O.

- Q.1. What are oligosaccharides? Give the structure and function of important oligosaccharides in plants.
- Q.2. What are carbohydrates? Describe in brief its types and functions.
- Q.3. Explain about the biosynthesis of amino acids with special reference to GS and GOGAT.
- Q.4. Give a detailed account of classification of proteins with suitable examples.
- Q.5. What are nucleic acids? Describe the structure and functions of DNA.

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.

[4x4=16]

- Q.1. Describe the Fluid Mosaic model of biological membranes.
- Q.2. What are RNA? Describe its types.
- Q.3. Write a note on DNA replication and transcription.
- Q.4. Describe the functions of lipids.

- Q.5. Write short note on any two:
- a. Derived proteins
 - b. Glutamate synthase
 - c. Lock and key hypothesis of enzyme.
- Q.6. Write a short note on second law of thermodynamics.
- Q.7. Discuss about the properties of Enzymes.
- Q.8. Write a short note on procedure of column chromatography.
