MBOT-504

Biochemistry

M.Sc. Botany (MSCBOT-20)

1st Semester Examination June 2022

Time: 2 Hours Max. Marks: 40

Note: This paper is of Forty (40) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section - A

(Long Answer – type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Ten (10) marks each. Learners are required to answer any two (02) questions only.

$$[2 \times 10 = 20]$$

- Q.1. What are lipids? Describe mechanisms of β oxidation of fatty acids.
- Q.2. Explain the principle of Thermodynamics in detail.
- Q.3. Give the classification of proteins on the basis of structure.

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- Q.4. Name the different mechanisms of enzyme catalysis and describe acid-base catalysis.
- Q.5. Discuss the structure & function of plant cell membrane in detail.

Section - B

(Short-answer-type questions)

Note: Section 'B' contains Eight (08) short-answertype questions of Five (05) marks each. Learners are required to answer any Four (04) questions only.

$$[4 \times 5 = 20]$$

- Q.1. Discuss membrane & transport lipids.
- Q.2. Lock and key hypothesis of enzyme action.
- Q.3. Describe structure and function of t-RNA.
- Q.4. What is nucleoside & nucleotides? Give examples.
- Q.5. Classify amino acids on the basis of nutrition.
- Q.6. What are the function of carbohydrates?
- Q.7. What is the significance of mitochondria in plant cells?
- Q.8. With the help of labeled diagram, describe the Watson & crick model of DNA.
