Total Pages : 3

Roll No. .....

# **BOT-504**

### **Biochemistry and Plant Physiology**

M.Sc. BOTANY(MSCBOT

Ist Year Examination, 2022 (June)

Time : 2 Hours]

#### Max. Marks : 80

**Note :** This paper is of Eighty (80) 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 Twenty (20) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 20 = 40)$ 

**1.** Write a detailed note on structure and function of Plasma membrane.

C056 / BOT-504

[P.T.O.

- **2.** Write briefly about Michaelis-Menten Kinetics and factors affecting the rate of enzyme reaction.
- **3.** Describe various forms of structure of proteins with suitable diagrams.
- 4. Describe Kreb's cycle and its significance in detail.
- 5. Explain the mechanism of light reactions of photosynthesis.

#### SECTION-B

### (Short Answer Type Questions)

- **Note :** Section 'B' contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any Four (04) questions only.  $(4 \times 10 = 40)$
- **1.** Describe the Pentose Phosphate Pathway and explain its role.
- 2. Write a short note on Glycolysis.
- **3.** Write short note on second law of Thermodynamics.
- 4. Describe the following :
  - (a) Functions of Carbohydrates.
  - (b) Peptide bonds.
- C056/BOT-504 [2]

- 5. Write briefly about classification of lipids.
- 6. Describe the Nucleotides and Nucleosides.
- 7. Explain the following :
  - (a) Seed dormancy.
  - (b) Functions of IAA and IBA.
- **8.** Explain the various steps in translation.