Total Pages: 3 Roll No.

MBOT-509

Plant Physiology

M.Sc. Botany (MSCBOT)

2nd Semester Examination, 2022 (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.

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. What do you understand by the "light" and "dark" reactions in photosynthesis?

- **2.** What is Vernalisation? Give some practical uses of this phenomenon?
- **3.** What are macro and micronutrients? Describe the effect of the deficiency of five macro and micronutrients each on plants.
- **4.** What are C3 plants? Describe in detail Calvin cycle.
- **5.** What are plant hormones? Describe the role of ethylene in fruit ripening.

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. Solution cultures.
- 2. Mechanism of stomatal transpiration.
- **3.** Differentiate between primary and secondary active transport.
- **4.** Applications of Gibberellins.

- **5.** Drought stress in plants.
- **6.** Write a short note on Phytochrome.
- **7.** Seed dormancy.
- **8.** Functions of Citric Acid Cycle.