

**K-371**

Total Pages : 3

Roll No. ....

**MBOT-509**

**Plant Physiology**

M.Sc. Botany (MSCBOT)

2nd 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. What is stress? How do plants respond to water stress?
2. Define seed dormancy. Describe the different types of seed dormancy and their causes.
3. Give the details of the mechanism of light reaction of Photosynthesis.
4. What is nitrogen fixation? What are the different types of nitrogen fixation?
5. What are plant growth regulators? Describe the physiological roles of Gibberellins.

### **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. CAM plants.
2. What are trace elements? Indicate their major functions and deficiency symptoms in plants.
3. Role of light in flowering.

4. Write a short note on Auxins.
  5. What is fermentation? How is it differ from aerobic respiration?
  6. Difference between  $C_3$  and  $C_4$  plants.
  7. Write a short note on Florigen.
  8. Write a short note on structure of stomata.
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