A–1210

Total Pages : 3 **Roll No. .....**

MSCBOT-508

M.Sc. Botany (MSCBOT)

Plant Development

Examination February, 2026

Time : 2:00 Hrs. Max. Marks : 70

Note* :–** This paper is of Seventy (70) 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 (2×19=38)

***Note* :–** Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. What is plant tissue ? Describe different types of tissues found in Angiosperms.

2. What do you understand by wood ? Briefly classify the wood on the basis of seasons, location and type of plants.

3. What is anomalous secondary growth ? Describe anomalous secondary growth in Boerhaavia and Salvadora stem.

4. What are stomata ? Describe the types of stomata and their development in dicots in the light of modern research.

5. Give a general account on anatomy of C3 and C4 plant leaves. Discuss how C3 and C4 plants differ in their anatomy.

Section–B

Short Answer Type Questions (4×8=32)

Note **:–** Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Write a short note on different types of roots in plants.

2. Differentiate between the following :

   (a) Tracheids and vessels.

   (b) Primary xylem and secondary xylem.

3. Describe anatomy of Monocotyledonous and Dicotyledonous stem with well labelled diagram.

4. Discuss the formation of annual rings and their relation with seasonal activity.

5. Write short notes on any *two* of the following :

   (a) Branch traces and branch gaps

   (b) Mesophyl

   (c) Velamen

6. Write a brief note on different type of anomality found in plants.

7. Describe different types of vascular bundles in plants.

8. Explain the different components of periderm.

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