Total Pages: 3 Roll No.

MBOT-503

Gymnosperms, and Plant Anatomy

M.Sc. Botany (MSCBOT)

1st 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. Write a detailed account on distribution of gymnosperms in India.

- **2.** Write a detailed account of reproductive characters of gymnosperms.
- **3.** Write a detailed account on root-stem transition.
- **4.** Explain the vegetative shoot apex in angiosperms.
- **5.** Write a detailed note on epidermal tissue system.

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. Write a short note on advanced characters of gymnosperms.
- **2.** Describe manoxylic and pycnoxylic wood.
- **3.** Write a short note on fossil history of gymnosperms in India.
- **4.** Write a short note on polyembryony in Pinaceae.
- **5.** Differentiate between apical and lateral meristems.

- **6.** Write briefly about hydathodes.
- **7.** "Hydrophytes are well adapted to their surroundings" support the statement by giving reasons.
- **8.** Write a short note on anomalous secondary growth in monocot stems.

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