

A-0027

Total Pages : 3

Roll No.

MBOT-503

M.Sc. BOTANY (MSCBOT)

(Gymnosperms and Plant Anatomy)

1st Semester Examination, Session December 2024

Time : 2:00 Hrs.

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) 2×9½=19

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.

1. Write detailed notes on meristematic tissues and their organization.
2. Explain how does secondary growth takes place in a dicot root with the help of suitable diagrams.
3. Write short notes on the following :
 - (a) Epidermis
 - (b) Ground tissue
 - (c) Primary Phloem and Primary xylem
 - (d) Trichomes
4. Describe about anatomy and secondary growth of stem of *Ginkgo biloba*.
5. Describe the process of microsporogenesis and megasporogenesis in coniferales.

Section–B

(Short Answer Type Questions) 4×4=16

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.

1. Write an account of economic importance of gymnosperms.

2. Write short notes on the following :
 - (a) Geographical distribution of Cycadales.
 - (b) Geographical distribution of Coniferales in India.
3. Write short on Root-Stem transition.
4. Briefly describe about male and female strobili of *Ginkgo biloba*.
5. Write short notes on the following :
 - (a) Living Fossil
 - (b) Coralloid roots
6. Describe about reproductive structures of Cycads.
7. Briefly outline the anatomical features of a dicotyledenous root.
8. Define of the followings :
 - (a) Collenchyma
 - (b) Laticiferous tissues
