

**A-873**

Total Pages : 3

Roll No. ....

**BOT-503**

**M.Sc. BOTANY (MSCBOT)**

**(Gymnosperms, Taxonomy of  
Angiosperms and Anatomy)**

1st Year Examination, 2024 (June)

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. Write a detailed account on economic importance of Gymnosperms.
2. Differentiate between the development of female gametophytes in cycadales and gnetales.
3. Discuss any phylogenetic system of classification studied by you giving its merits and demerits.
4. What are permanent tissues ? Describe the different types of simple permanent tissues with suitable diagrams and their functions in plants.
5. What do you understand by biodiversity ? Discuss the causes of loss of biodiversity and methods to restore the biodiversity.

### **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. What is endemism ? Describe the causes of endemism.
2. Explain this sentence that “Ginkgo biloba is a living fossil”.
3. Describe contributions of Linnaeus and Bentham and Hooker.

4. Explain briefly the root-shoot transition.
5. Discuss the structure of male strobilus of Gnetum.
6. Explain the secondary growth in dicot stems.
7. Give comparative account of family Ranunculaceae and Magnoliaceae
8. Write short notes on the following :
  - (a) Sap wood and heart wood
  - (b) Biosystematics
  - (c) Parenchyma tissues
  - (d) Casparian strips

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