P-34

Total Pages: 3 Roll No.

MSCBOT-503

Pteridophytes, Gymnosperms and Palaeobotany

M.Sc. Botany (MSCBOT)

1st Semester Examination, 2023 (June)

Time: 2 Hours] 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 answer 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 Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 19 = 38)$

1. Discuss the various methods of reproduction in pteridophytes.

- **2.** Describe the structure and life history of *Equisetum* by giving suitable diagrams.
- **3.** Give the general characteristics of gymnosperms.
- **4.** What do you understand by fossils? Explain the process of formation and preservation of fossils in detail.
- **5.** Write a detailed essay on geological time scale.

SECTION-B

(Short Answer Type Questions)

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. (4×8=32)

- 1. Discuss the evolution of stelar system in pteridophyta.
- **2.** Give a detailed account of distribution of gymnosperms in India.
- **3.** Enlisted the differences between bennettitales and cycadales.
- **4.** Describe the heterospory and its significance.
- **5.** Write about the gametophyte of *Isoetes*.

- **6.** Thallus of *Azolla*.
- **7.** Describe the female reproductive structure of *Pinus* with suitable diagram.
- **8.** Manoxylic wood and pycnoxylic wood.