# **S-49**

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## MSCBOT-503

## Pteridophytes, Gymnosperms and Palaeobotany

M.Sc. Botany (MSCBOT)-21

1st Semester, Examination, 2022 (Dec.)

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.

# 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. Compare the classification of Pteridophytes given by Reimers (1954) followed by Sporne (1996) and Smith (2006) and co-workers.

- **2.** What do you understand by stele? Discuss the various type of steles occurred in stem and root in Pteridophytes.
- **3.** Give the economic importance of gymnosperm.
- **4.** What do you understand by fossils? Discuss the various types of fossils in detail.
- **5.** Give a general account on cycadales and Ginkgoals.

#### **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. Enlisted the general characteristics of Pteridophytes.
- **2.** Write a short note on *Rhyriia*.
- **3.** Briefly describe the strobilus of *Equisetum*.
- **4.** Discuss the characteristic features of Pentoxylales and contribution of scientists towards discovery and study of Pentoxylales.

- **5.** Draw a T.S. leaf of *Gnetum* with well labelled diagram.
- **6.** Manoxylic and pyenoxylic wood.
- 7. What is paleobotany? Describe its importance.
- **8.** Discuss any two scientific techniques for studying the fossils that you have studied.