S-1050

Total Pages: 3 Roll No.

BOT-552

Medicinal Plants and Embryology of Angiosperms

M.Sc. Botany (MSCBOT)

2nd Year 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. What is self incompatibility? Define its mechanisms, advantage and biological significance of it.

- **2.** Explain the development of male gametophyte in angiosperms.
- **3.** Describe in detail the cultivation methods of *Aloe barbadensis*?
- **4.** What is ethanobotany? Define its concept and scope.
- **5.** Write a detail account on the following:
 - (a) Classify the crude drugs on the basis of phytochemicals.
 - (b) Importance of phytochemicals in modern medicine and its significance.

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.** Write an Essay on "Why and how to conserve the medicinal plants of India"?
- **2.** Write a short notes on the following :
 - (a) Apospory.
 - (b) Synergids.

- (c) Medicinal value of Ashwagandha.
- (d) Different types of ovule in angiospermic plants.
- **3.** Explain the applied aspects of palynology.
- **4.** Write short note on types of embryo sacs in ongiospermic plants.
- **5.** Explain the following :
 - (a) Functions of endosperms.
 - (b) Ciypreservation.
- **6.** Write a brief note on importance of ethnobotany.
- **7.** Write a short note on microsporogenesis.
- **8.** Write notes on following (any four):
 - (a) CITES.
 - (b) IUCN
 - (c) False Polyembryony.
 - (d) Parthenocarpy.
 - (e) Ex-situ conservation.
 - (f) Secondary metabolites.