S-1049

Total Pages: 3 Roll No.

BOT-551

Cell Biology, Genetics, Biostatistics and Ecology

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 are Biogeochemical Cycles? Describe in detail about Nitrogen cycle.

- **2.** Define Ecosystem. Describe the structure and types of Ecosystem.
- **3.** Write an essay on morphology of Chromosomes.
- **4.** Give a detailed note on Chemistry of DNA with diagram.
- **5.** Describe the normal biological spectrum of Raunkiaer's system of classification based on the position of the buds.

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. Differentiate between Food chain and Food web.
- **2.** Write a short note on Fluorescence Microscope.
- **3.** Differentiate between Local Area Network (LAN) and Wide Area Network (WAN).
- **4.** Write a short note on water pollution.
- **5.** Write a short note on Chloroplasts.

- **6.** Write in brief about Standard Deviation.
- 7. Write in brief about Induced Gene Mutations.
- **8.** Write a short note on Characteristics of Community ecology.

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