S-56

Total Pages: 3 Roll No.

MSCBOT-602

Plant Ecology

M.Sc. Botany (MSCBOT)-21

3rd 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. What is population? Describe its different characteristics with suitable examples.

- **2.** Define biogeochemical cycles. Describe the global nitrogen or phosphorous cycle in detail.
- **3.** Define ecosystem and describe its types.
- **4.** What is ecological succession? Describe the process of ecological succession in pond or on a bare rock.
- **5.** Explain any two of the following in detail :
 - (a) Ozone layer and Ozone hole.
 - (b) Ecological Urbanization.
 - (c) Global warming and its effect.
 - (d) Acid rain and stone leprosy.

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.** Define the following terms:
 - (a) Environment.
 - (b) Atmosphere.
 - (c) Ozonosphere.
 - (d) Ionosphere.

| 2. | Explain causes of climate change. | | | | |
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| 3. | Write short notes on: | | | | |
| | (a) Ecesis. | | | | |
| | (b) Climax. | | | | |
| | (c) Allogenic succession. | | | | |
| | (d) Retrogressive succession. | | | | |
| 4. | Define El Niño and La Niña. Why these two events occur? | | | | |
| 5. | Discuss various theories of climax concept in succession. | | | | |
| 6. | What is 'air pollution'? Give an account of various types of air pollutants. | | | | |
| 7. | Write notes on: | | | | |
| | (a) Natality and mortality. | | | | |
| | (b) Survivorship curve. | | | | |
| | (c) Age pyramids. | | | | |
| | (d) Age structure. | | | | |
| 8. | Write an essay on 'eutrophication of aquatic habitats'. | | | | |
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