

A-863

Total Pages : 3

Roll No.

MSCBOT-607

M.Sc. BOTANY (MSCBOT)

[Forest Ecology (Elective Course)]

4th Semester Examination, 2024 (June)

Time : 2:00 Hrs.

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 answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section-A

Long Answer Type Questions 2×19=38

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.

1. How do you measure the biomass and primary productivity of a forest ecosystem ? Discuss any four methods in detail.
2. What do you understand by sedimentary cycle of nutrients ? Discuss the phosphorus cycle in detail and also highlight the anthropogenic impacts on it.
3. Discuss the impact of forest on precipitation apportionment.
4. What is ecological succession ? Discuss its major types and basic processes (steps) of succession in detail.
5. What is climate change ? Discuss the major causes and impact of climate change in detail.

Section–B

Short Answer Type Questions 4×8=32

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.

1. Write a short note on shifting cultivation in India.

2. Write a short note on :
 - (i) Primary Productivity
 - (ii) Gross Primary Productivity
 - (iii) Net Primary Productivity
 - (iv) Secondary Productivity
3. Discuss the various factors which influence the accumulation of litter in forest ecosystems.
4. What do you understand by detritus food chain ? Briefly define its properties.
5. Briefly describe the litterbags technique in the measurement of litter decomposition.
6. What do you understand by atmosphere ? Describe the layers of the earth's atmosphere.
7. Discuss the role of mycorrhizae in nutrient cycling.
8. Discuss the characteristic features of *Shorea robusta* and its uses.
