Total Pages : 3

Roll No. ....

# MSCBOT-607

Forest Ecology (Elective Course)

M.Sc. Botany (MSCBOT) 4th Semester Examination, 2023 (June)

### 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. Candidates should limit their answer to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

## 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.

(2×19=38)

1. Describe the process of decomposition in detail. Throw light on the factors affecting the process of decomposition.

P-45/MSCBOT-607

- 2. What do you understand by nutrient loss? Write a detailed note on nutrient losses in ecosystem due to fire.
- **3.** Define the climate change. Explain the causes and impacts of climate change in detail.
- **4.** Classify major forest types of India based on Champion and Seth classification.
- 5. What are sedimentary cycles? Explain phosphorous cycle with the help of diagram.

### 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. Highlight the differences between grazing and detritus food chain.
- 2. What do you understand by biomass accumulation in plants?
- **3.** Justify the statement that "trees are multi-tasking water engineers".

P-45/MSCBOT-607 [2]

- 4. Write short notes on the following :
  - (a) Ammonification.
  - (b) Litter fall.
- 5. Discuss the characteristics features of pine trees?
- 6. Write a brief note on forest succession.
- 7. Briefly describe the trophic level.
- 8. Write the significance of photosynthetic pathways.