MCC/21/M-SC/SENT IV/BOT/1

PG (CBCS) M.Sc. Semester- IV Examination, 2023 BOTANY

PAPER: BOT 401

(SILVICULTURE, FOREST MENSURATION, SILVICULTURE SYSTEM & FOREST MANAGEMENT)

Full Marks: 40

Time: 2 Hours

BRARY

Write the answer for each unit in separate sheet

The figures in the right-hand margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

BOT 401.1 SILVICULTURE & MENSURATION

GROUP-A

1. Answer any **TWO** of the following questions:

 $2\times2=4$

- a) How is DBH measured on a tree?
- b) What is crown length?
- c) Define edaphic factors.
- d) Define form factor.

GROUP-B

2. Answer any **TWO** from the following questions:

 $2 \times 4 = 8$

- a) Write a note on social forestry.
- b) "Sowing method is cheaper and cost-effective method than planting for artificial regeneration of forest". Explain it.
- c) Mention the role of light in forest formation.
- d) What are the different topographical factors?

GROUP-C

3. Answer any **ONE** of the following questions:

 $1 \times 8 = 8$

- a) Define agroforestry. What is importance of agroforestry?
 Classify and briefly describe the agroforestry system according to Nair (1987).
- 2+2+4
- b) Mention different formulas for determination of volume of a wooden log.

(P.T.O)

BOT 401.2 SILVICULTURE SYSTEM & FOREST MANAGEMENT

GROUP-A

- 4. Answer any **TWO** from the following questions:
 - a) Define Pollarding in silviculture system.
 - b) What is periodic block?
 - c) Define working plan in silviculture.
 - d) What is forest management?



GROUP-B

5. Answer any **TWO** from the following questions:

 $2\times4=8$

 $2 \times 2 = 4$

- a) Write a short note on regeneration by Taungya.
- b) Distinguish between reserved forest and protected forest.
- c) What is the purpose of standard in coppice with standard system?
- d) Enumerate the basic objectives and management strategies mentioned in National Forest Policy, 1988.

GROUP-C

6. Answer any **ONE** from the following questions:

 $1 \times 8 = 8$

2+2+4

- a) Define Joint Forest Management. What are the major features of JFM? What types of benefits are to be given to the fringe forest groups?
- b) Describe the method of felling and regeneration in simple coppice system. 4+4
