#### PG CBCS

#### M.Sc. Semester-IV Examination, 2022.

#### **BOTANY**

PAPER: BOT 401

# (SILVICULTURE&MENSURATION)

Full Marks: 40

Time: 2 Hours

# 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

Marks: 20

# **GROUP-A**

#### 1. Answer any two questions:

 $2 \times 2 = 4$ 

- a) Distinguish between stump height and bole.
- b) What are advatages and disadvantages of Abney's level.
- c) What is BH? What is the breast height used in India?
- d) Write down the objectives of silviculture.

#### **GROUP-B**

2. Answer any two questions:

2×4=8

- a) Mention two diameter measuring in instruments and their applications.
- b) How artificial regeneration can be done in a forest?
- c) Mention the different rules for measurement of height of a standing tree.
- d) What is volume table? Mention its utility.

2+2

2+2

#### **GROUP-C**

### 3. Answer any one question:

8×1=8

- a) Write down different formula for calculation of volume of fallen tree. Mention advantages and disadvantages of each one.
- b) Write short notes on (any one):
  - i) Role of wild animals in forest formation;
  - ii)Social forestry; and
  - ii) Topographic factors in forest formation.

(P.T.O.)

# BOT 401.2: SILVICULTURE SYSTEM & FOREST MANAGEMENT Marks: 20

# **GROUP-A**

#### 1. Answer any two questions:

- a) Define coppice with standard.
- b) What is pollarding?
- c) What is farm forestry?
- d) What is working plan in silviculture?

# GROUP-B

# 2. Answer any two questions:

- a) Distinguish between sustainable yield and progressive yield.
- b) Mention two disadvantages and two advantages of coppice regeneration.
- c) What does it mean by social forestry? Give an example of successful social forestry in your state.
- d) Distinguish between protected fores and reserve forest.

#### **GROUP-C**

# 3. Answer any one question:

8×1=8

 $2\times4=8$ 

- a) What are the basic objectives of national forestry-1988? In which year the forest was included in concurrent list? Which strategies have been mentioned to cover the total land area of the country under forest or tree? What is working circle?
  2+1+2+3
- b) Define forest management. How many types of coppice systems are practiced on the basis of felling pattern? Which factors affect the natural regeneration by coppice? What precautions are followed during felling? 2+1+3+2

