

2022

M.Sc.

4th Semester Examination

BOTANY

PAPER—401

Full Marks : 50

Time : 2 Hours

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.

Illustrate the answers wherever necessary.

Unit 401.1 Silviculture and Mensuration

1. Answer any *two* questions. 2×2

(a) What is breast height? Mention its two advantages.

(Turn Over)

- (b) What is volume table?
- (c) Differentiate aspect and exposure.
- (d) What is girth class?

2. Answer any *two* questions. 2×4

- (a) Write note on agro-forestry.
- (b) Mention the role of light in forest formation.
- (c) Mention different objectives of silviculture.
- (d) What are the different topographical factors?

3. Answer any *one* question. 1×8

- (a) What are the different instruments used to measure height of a standing tree?
- (b) Mention different formulas for determination of volume of a wooden log.

**Unit 401.2 Silviculture System and
Forest Management**

4. Answer any *two* questions. 2×2
- (a) Differentiate between shade tolerant and intolerant species.
 - (b) Define forest management.
 - (c) What is the main principle of forest management?
 - (d) Mention the advantages of coppice system.
5. Write short notes on any *two* : 2×4
- (a) Treatments implemented in silviculture practices.
 - (b) Taungya.
 - (c) Variations of clear felling system.
 - (d) Objective of Forest conservation and management.

6. Answer any *one* question.

1×8

- (a) What is meant by shelterwood system in silviculture? Write down the pattern of felling in shelterwood system. Briefly discuss about the types of shelterwood system. 1+4+3
- (b) Mention the scopes of forest conservation. Discuss the Forest Policy of 1988. 2+6

[Internal Assessment - 10 Marks]
