

**2023**

**M.Sc.**

**4th Semester Examination**

**BOTANY**

**PAPER : BOT-401.1 & 401.2**

*Full Marks : 40*

*Time : 2 hours*

*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers  
in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

Answer from **both** the Sections.

**SECTION—I**

**( BOT-401.1 )**

**( SILVICULTURE AND MENSURATION )**

Answer from **all** the Groups as directed.

**GROUP—A**

Answer *any two* questions from the following :

2×2=4

1. What do you mean by pole height?

( 2 )

2. What is pan formation?
3. What is farm forestry?
4. Define pool frost.

### GROUP—B

Answer *any two* questions from the following :

4×2=8

5. Write a short note on social forestry.
6. Mention the role of temperature of forest formation.
7. What are the different methods of regeneration of a forest?
8. What are the different instruments used to measure height of a standing tree?

( 3 )  
GROUP—C

Answer *any one* question from the following :

8×1=8

9. What are the different formulae used to measure volume of a fallen log?
  
10. Write down the role of different biotic factors that influence forest formation.

( 4 )  
SECTION--II  
( BOT-401.2 )

( SILVICULTURE SYSTEM AND  
FOREST MANAGEMENT )

Answer from **all** the Groups as directed.

**GROUP—A**

Answer *any two* questions from the following :

2×2=4

1. Define sustained yield.
2. Which concept emerged at Helsinki World Forestry Congress and in which year?
3. Define silviculture.
4. What is alternate strip clearcut system?

**GROUP—B**

Answer *any two* questions from the following :

4×2=8

5. Write the concept of Joint Forest Management (JMF).

( 5 )

6. State the scope of forest conservation.
7. Write the purpose of standard in coppice system.
8. Mention the methods of artificial regeneration in clear felling system.

### GROUP—C

Answer *any one* question from the following .

8×1=8

9. What is coppice system in silviculture? Write down the types of coppice system. Briefly discuss about the method of felling and regeneration in simple coppice system.

1+3+4=8

10. Discuss the basic objectives that govern the National Forest Policy. 8

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