

**PG CBCS**  
**M.SC. Semester-IV Examination, 2021**  
**BOTANY**  
**PAPER: BOT 401**

**Full Marks: 40**

**Time: 2 Hours**

**Write the answer for each unit in separate sheet**

**BOT 401.1**  
**(SILVICULTURE & MENSURATION)**

**Answer any TWO questions from the following: 10 x 2 = 20**

1. Define DBH. Write note on agro-forestry. Mention the different objectives of silviculture. 2+4+4
2. What are different formulas used to measure volume of a fallen log? Mention the different rules for measurement of diameter of a standing tree. 6+4
3. What are the different topographical factors? Mention the role of light in forest formation. Mention the advantages of slide calipers. 4+4+2
4. Discuss how wild animals and edaphic factors influence forest plants? 4+6

**BOT 401.2**  
**(SILVICULTURE SYSTEM & FOREST MANAGEMENT)**

**Answer any TWO questions from the following: 10 x 2 = 20**

1. What are the basic objectives of National Forest Policy-1988? Which strategies have been mentioned in this policy to cover the land with forest? 4+6
2. What is clear felling? Describe the methods of artificial regeneration by Taungya system. Write the advantages and disadvantages of this type of artificial forest regeneration. 2+5+3
3. Define thinning, pruning and pollarding. Distinguish between sustained yield and progressive yield in silviculture. 2+2+2+4
4. Briefly describe the benefits of J.F.M to the villagers. Mention the advantages and disadvantages of coppicing. 5+5

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