

**2009**

**M.Sc.**

**2nd Semester Examination**

**BOTANY**

**PAPER—VIII**

*Full Marks : 40*

*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.*

**(Write the answers Question of each Unit in separate books)**

**Unit—I**

**(Silviculture)**

**[ Marks—20 ]**

**Answer all questions.**

1. Answer any five of the following : 1×5
- (a) What is sapling?
  - (b) What is silvics?

**(Turn Over)**

- (c) What is montane temperate?
- (d) What is aspect?
- (e) What does it mean by high forest?
- (f) What is pool frost?
- (g) What is saline soil?

2. Write short notes on any *two* of the following :  $2\frac{1}{2} \times 2$

- (a) Artificial regeneration ;
- (b) Thinning ;
- (c) Microclimate ; and
- (d) Pan formation.

3. Answer any *one* of the following :

- (a) What are factors of locality? Explain the processes of soil formation. How the forest is classified on the basis of rainfall?

2+4+4

- (b) What does it mean by Forest types of India? Explain the reasons of accumulation of salts in soil.

5+5

**Unit—II**

**(Forest Mensuration)**

[ Marks—20 ]

Answer all questions.

4. Answer any *five* of the following : 1×5

- (a) What is BH ?
- (b) What is girth class ?
- (c) What is form height ?
- (d) What is top height ?
- (e) What is volume table ?
- (f) What is Forest inventory ?
- (g) How the crop diameter is calculated ?

5. Answer any *two* of the following :  $2\frac{1}{2} \times 2$

- (a) What are the objectives of Forest Mensuration ?
- (b) What are the uses of trigonometric principles in forest mensuration ?
- (c) Write the rules of diameter measurement (any *four*).
- (d) How the height of a tree is measured without instrument ? (any *one* method).

6. Answer any one of the following :

- (a) What is quarter girth formula? Discuss its formulation, merits and demerits. Why this formula is preferred for volume-calculation?

$$2+4+1\frac{1}{2}+1\frac{1}{2}+1$$

- (b) Which instrument is used for height measurement? Explain the measurement of height of a tree by this instrument. How the crop height is determined?

$$1+6+3$$

---