

2013

M.Sc.

2nd Semester Examination

BOTANY

PAPER—BOT-202

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.

UNIT — I

(Silviculture)

(Marks : 20)

- 1. Answer any five questions :** 1×5
- (a) What is Shelterbelt?
 - (b) What is Sapling?
 - (c) Write two light demander species.

(Turn Over)

- (d) What is Podsolization?
- (e) Define pure forest.
- (f) Define bioclimate.
- (g) Why thinning is done in forest?
- (h) What is Forestry?

2. Answer the following questions (any two) : $2\frac{1}{2} \times 2$

- (i) Write briefly the objective of Silviculture.
 - (ii) On the basis of temperature how the forest is classified in India?
 - (iii) Explain the role of aspect and exposure on the distribution of tree species.
3. What is biotic factor? Explain the role of men and his animals on forest growth and establishment. 2+8

Or

What is Coppice? Describe the natural regeneration obtained by Coppice.

UNIT — II

(Forest Mensuration)

(Marks : 20)

4. Answer any *five* questions : 1×5
- (a) What instrument is used to measure the diameter of a tree?
 - (b) What is 3, 4 and 5 method?
 - (c) What is Smalian's formula?
 - (d) What is crop diameter?
 - (e) What is top height?
 - (f) What is normal form factor?
 - (g) What is form Quotient?
 - (h) Write two instruments used to measure the height of a tree based on similar triangle principle.
5. Answer the following questions (any *two*) : $2\frac{1}{2} \times 2$
- (a) What is volume table prepared on the basis of variables?
 - (b) Explain the difference of diameter and diameter class.
 - (c) Write the rules of diameter measurement.

6. Answer any *two* of the following : 5×2

- (i) How the height of a tree is measured ?
 - (ii) Explain the merits and demerits of the Quarter girth formula.
 - (iii) Explain the use and application of Lorenz's formula.
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