2010

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 to the questions 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 pole ?

    (b) What is good seed year ?

(c) What is Podosolization?

(d) What is seedling coppice?

(e) What do you mean by Pureforest?

(f) Define Shelterbelt.

(g) Define non-saline-alkali soil.

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

   (a) Factors of seedling establishment under natural regeneration.

   (b) Forest types of West Bengal.

   (c) Frost injury of trees.

   (d) Soil formation.

3. Answer any *one* of the following :

   (a) How altitude affects the forest? Explain the influence of parental rock on forest and tree species.?

   5+5

   (b) What is agro-forestry? Discuss the role of wild as well as domestic animals on the forest.

   2+4+4

Unit—II

(*Forest Mensuration*)

[Marks—20]

Answer *all* questions.

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

   (a) What is normal form factor ?

   (b) What is site quality ?

   (c) What is crop diameter ?

   (d) What is eye height ?

   (e) What is Hubes's formula ?

   (f) What is stand table ?

   (g) What is Lorrey's formula ?

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

   (a) Write merit and demerits of Newton's formula.

   (b) What is stratified random sampling ? Where is it applicable ?

   (c) What is the functional air bubble and mirror in Abney's level ?.

   (d) Differentiate between normal and absolute Form Quotient.

6. Explain the method of determination of age of a trees. Why is it done ?

9+1

Or

What is volume table ? Discuss the types and merits of different volume tables.

1+9

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