

**M.Sc. 3rd Semester Examination, 2010**

**BOTANY**

PAPER—XIV

*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*

**Write the answers to questions of each Unit  
in separate books**

**UNIT—I**

**[ Marks : 20 ]**

**Answer all questions**

**1. Answer any five questions from the following : 1 × 5**

**(i) What is traverse ?**

*(Turn Over)*

- (ii) Define map and plan.
- (iii) What is the function of a prism in prismatic compass?
- (iv) Write the great principles of survey.
- (v) What is advance growth?
- (vi) What is Irregular Shelterwood System?
- (vii) Define coppice forest with examples.

2. What is local attraction? In a running compass survey following bearings were taken. Find out the stations affected by local attraction and correct the bearings.

1 + 4

Line	F.B.	B.B
<i>AB</i>	340°	160°
<i>BC</i>	87°	268°30'
<i>CD</i>	175°30'	353°
<i>DA</i>	265°	86°

*Or*

What are the advantages of plane table survey?  
Write the procedure of conducting plane table survey. 2 + 3

3. What is Shelterwood System? How the periodic block is created? Explain the pattern of felling and treatments of different periodic blocks. 1 + 2 + 3

*Or*

What is Group System? Explain the pattern of felling and nature of crop under this system. 2 + 3 + 1

4. Write short notes on any *two* of the following : 2 x 2
- (i) Principles of diagonal scale
  - (ii) Alternate strip system
  - (iii) Choice of silviculture system.

UNIT—II

[Marks: 20 ]

Answer Q.No.5 and any three from the rest

5. Answer any *five* questions from the following : 1 × 5

(i) What is yield table ?

(ii) What is protected forest ?

(iii) What is F.P.C ?

(iv) What is working circle ?

(v) What is Normal Growing Stock ?

(vi) What is CAI ?

(vii) What is a compartment in forest management ?

6. Describe the method of calculation of NGS in a clear felling system based on yield table. 5

7. What do you mean by Rotation of highest income ? How is it calculated ? How it differs from the Financial rotation ? 2 + 2 + 1

8. Give salient feature of the Indian Forest Act, 1927. 5

9. Write short notes on any *two* of the following : 5

(i) Working plan

(ii) Benefits to community under JFM

(iii) Sustained yield.