

M.Sc. 3rd Semester Examination, 2012

BOTANY

PAPER – BOT- 302

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 Reconnaissance survey ?

- (ii) What is tie line ?
- (iii) What is well conditioned triangle ?
- (iv) What is seeding felling ?
- (v) Mention the factors responsible for the number of P.Bs.
- (vi) Which is the more ecological silviculture system ?
- (vii) What is simple coppice system ?
- (viii) What is "Reduced Bearing" ?

2. Why is a prism used in Prismatic compass ? In a running compass survey following bearings were taken. Find out the stations affected by local attraction and write the correct bearings : 1 + 4

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

Or

What is the difference between Map and Plan ?
Write down the instruments required for plane table
survey . Write the length of Gunter's Chain in meters
and feet. 2 + 2 + 1

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

Or

Define clear felling system. Explain with the
sketch the clear strip system. Where and why this
system is applied ? 1 + 3 + 1

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

- (i) Principle of Diagonal scale construction ;
- (ii) Choice of silviculture system ; and
- (iii) Irregular Shelterwood 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 Protection Forest ?

(ii) What is conservation ecology ?

(iii) Why is "core zone" created in National Park ?

(iv) Which are the Act and clause used to declare a Reserve Forest ?

(v) Define working circle.

(vi) What is sustained yield ?

(vii) What is F.P.C ?

(viii) What is Normal forest ?

6. Discuss the concept of "Coupes" and "Cutting section" in Forest Management.

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7. How the Financial Rotation differs from Rotation of highest income? State the factors for regulating rotation. 3 + 2
8. Define CAI and MAI. Discuss their significance in Forest Management. 2 + 3
9. Write short notes on any *two* of the following : $2\frac{1}{2} \times 2$
- (i) Objectives of Forest Management ;
 - (ii) Technical rotation ; and
 - (iii) Benefits of J. F. M.
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