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RNLKWC/P.G./CBCS/IVS/401/22

2022

BOTANY

[P.G.]

(M.Sc. Fourth Semester End Examination-2022)

PAPER-401

Full Marks: 40

Time: 02 Hrs

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

Unit – I

Silviculture & Mensuration

Group-A

1. Answer any FOUR questions from the following: 1x4= 4

- a) What are girth classes?
- b) Define silviculture.
- c) How topographic factors affect the growth of the vegetation?
- d) What do you mean by canopy of a forest ?
- e) What are edaphic factors?
- f) What is form factor?
- g) What is frost injury?

(2)

Group-B

2. Answer any TWO questions from the following: 4x2 = 8

- a) Discuss the role of light in forest formation. 4
- b) Write the relationship between PAN formation and PAN growth. 2+2
- c) Give the comparative account between artificial and natural regeneration. 4
- d) Describe the methods to study the form of trees. 4

Group -C

3. Answer any ONE question of the following: 1x8 = 8

- a) Define mensuration. Discuss the principles for the measurement of tree height. How will you measure the diameter and girth of tree? 1+3+4
- b) Write down the role of edaphic factors that influence forest formation.

Unit – II

Silviculture system & Forest Management

Group-A

1. Answer any FOUR questions from the following: 1x4= 4

- a) What is the utility of thinning?
- b) States ther basic principles of forest conservation?
- c) What is coppice with standard system?
- d) What is meant by working plan?

(3)

- e) What is meant by periodic block?
- f) Define selection system.
- g) What do you mean by Taungya regeneration?

Group-B

2. Answer any TWO questions from the following: 4x2 = 8

- a) Briefly describe the High forest system.
- b) Give the outline classification of silvicultural system.
- c) Write a short note on JFM.
- d) Discuss briefly the process of forest management.

Group -C

3. Answer any ONE question of the following: 1x8 = 8

- a) Discuss on the National Forest Policy, 1988. What are the different patterns of felling in shelterwood system? 4+4
- b) What are the different objectives of natural regeneration? What is SYM? Differentiate between sustainable yields and periodic yields. 3+1+4