FORESTRY PAPER - I

Time Allowed: 3 hours

Maximum Marks: 100

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instruction carefully before attempting questions)

There are eight (8) questions - four (4) questions each in Part A & B. Each question carries 20 marks.

Marks for each question is indicated against it.

Compulsory questions:

- (a) Question No. 1 from Part-A and
- (b) Question No. 5 from Part-B [Compulsory questions No. 1 & 5 have 4 (four) Sub-questions carrying 5 marks each.]

Total No. of questions to be attempted:

5 (five) questions.

[A candidate shall attempt 2 (two) compulsory questions from Part A and B. Out of the remaining 6 (six) questions, 3 (three) are to be attempted taking at least 1 (one) but not more than 2 (two) questions from each Part]

Word Limit:

- (a) Compulsory questions carrying 5 marks shall have a limit of 150 words.
- (b) There shall be no word limit for the remaining questions.

PART-A

1. Write notes on the following:

 $(4 \times 5 = 20)$

- (a) Give a brief account of silvicultural requirements and seed propagation methods of teak.
- (b) Why the locality factors are considered important for any silvicultural operation?
- (c) Nursery techniques.
- (d) What is the importance of pruning in a forest plantation? Analyse briefly various reasons of plantation failures.
- 2. What are the main processes involved in natural regeneration by seed? Discuss various operations which help in obtaining natural regeneration of a forest tree species. (6+14=20)
- 3. Describe different grafting methods used for the forest tree species.

(20)

4. What are the general silvicultural principles? Briefly describe tending operation in silviculture systems in India. (5+15=20)

PART - B

5. Answer the following questions:

 $(4 \times 5 = 20)$

- (a) What are the roles of agroforestry in soil and water conservation?
- (b) What is the significance of symbiotic microbes in soil amelioration and plant nutrition?
- (c) How agroforestry practice leads to increase in soil fertility?
- (d) Social forestry and its impact in village economy.
- 6. Define soil conservation. Briefly describe various types, forms and consequences of soil erosion. How do forests help in conserving soils? (2+13+5=20)
- 7. Discuss the impact of forest degradation on environmental conservation. Explain the impact of various human activities on environmental conservation in India. (10+10=20)
- 8. Discuss the role of trees and forests on environmental conservation. Describe the impact and control measures of greenhouse effect and acid rain on environmental conservation. (10+10=20)

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