

# CSM : 16

## FORESTRY

### PAPER - I

Time Allowed : 3 hours

Full Marks : 100

*Marks for each question is indicated against it.*

*Attempt any 5 (five) questions taking not more than 3 (three) questions from each Part.*

#### PART A

1. (a) What are the main processes involved in natural regeneration by seed? Discuss in brief the factors responsible for the establishment of the seedlings. (10)
- (b) What is thinning? Explain the effects of thinning on physiological and mensurational aspects of tree growth. (10)
2. Define the term silvicultural system. Explain the objectives of formulating a silvicultural system for a forest stand. Discuss the salient features of Selection system with its merits and demerits. (3+3+4+5+5=20)
3. Give a detailed account of establishment and rehabilitation of degraded mangrove formations in India. (10+10=20)
4. Write notes on the following:
  - (a) Method of propagation and economic importance of *Tectona grandis*. (10)
  - (b) Nursery practices and management of *Shorea robusta*. (10)

#### PART B

5. Write short notes on the following: (4×5=20)
  - (a) Environmental services of Urban Forestry
  - (b) Status of Joint Forest Management in Mizoram
  - (c) Integration of livestock in agroforestry
  - (d) Role of forests in tribal livelihood
6. Discuss in detail how forests help in building up of soil organic matter, soil conservation and ground water recharge. (20)

7. Write short notes on the following: (4×5=20)
- (a) Acid rain and its impact on forest vegetation
  - (b) Seed orchards and management
  - (c) Concept of sustainable development
  - (d) Environmental Impact Assessment
8. Give a brief account of different methods of *in-situ* and *ex-situ* conservation of forest species. (20)

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