

FORESTRY

PAPER—I

Time Allowed : Three Hours

Maximum Marks : 200

QUESTION PAPER SPECIFIC INSTRUCTIONS

Please read each of the following instructions carefully before attempting questions

There are EIGHT questions in all, out of which FIVE are to be attempted.

Question Nos. 1 and 5 are compulsory. Out of the remaining SIX questions, THREE are to be attempted selecting at least ONE question from each of the two Sections A and B.

Attempts of questions shall be counted in sequential order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

All questions carry equal marks. The number of marks carried by a question/part is indicated against it.

Neat sketches may be drawn, wherever required.

Answers must be written in ENGLISH only.

(Main) Indian Forest Services
2025
EXAMINATION-2025

SECTION—A

1. Answer the following : 8×5=40
- (a) How does light affect the forest vegetation? Explain with suitable examples.
- (b) Describe the felling pattern adopted under uniform system.
- (c) Write the scientific names and uses of eight mangrove species.
- (d) Discuss the silvicultural characters of *Acacia nilotica* and *Cedrus deodara*.
- (e) Give the phenological characters of *Tectona grandis* and *Albizia lebbek*.
2. (a) Describe the external factors of environment which affect the germination of seeds in the natural forests. 15
- (b) Describe the methods of regeneration followed under clear felling system with suitable examples. 15
- (c) (i) Write the advantages of simple coppice system and coppice with standard system.
- (ii) Differentiate between coppice of two rotations system and shelterwood coppice system. 10
3. (a) Describe briefly the following :
- (i) Site quality
- (ii) Hardening
- (iii) Tending
- (iv) Thinning
- (v) Grading 15
- (b) Describe the habitats and characteristics of mangroves. Discuss their ecological values. 15
- (c) Write the distribution and economic importance of *Dalbergia sissoo* and *Emblica officinalis*. 10

4. (a) Write the major characteristics of cold deserts. Describe two cold deserts of India. 15
- (b) Describe the regeneration of the following tree species :
 (i) *Shorea robusta*
 (ii) *Azadirachta indica*
 (iii) *Hardwickia binata* 15
- (c) Explain any two of the following :
 (i) Periodic blocks
 (ii) Felling cycle
 (iii) Felling series
 (iv) Taungya 10

SECTION—B

5. Answer the following : 8×5=40
- (a) Write the scientific names and uses of eight tree species suitable each for temperate and arid climate agroforestry plantations.
- (b) What are the characteristics of trees suitable for watershed management?
- (c) Write in brief the following :
 (i) Objectives of social forestry
 (ii) Multipurpose trees and their characteristics
- (d) Enumerate the various measures to control noise pollution.
- (e) Define tree improvement. What are the basic steps involved in the genetic improvement of a given tree species?
6. (a) Describe an agroforestry model suitable for hill farming system. How does it increase the productivity of degraded hills? 15
- (b) Discuss in brief the mechanical composition of soil. 15
- (c) Define the following :
 (i) Seed orchard
 (ii) Exotics
 (iii) Plus tree
 (iv) Progeny test
 (v) Elite tree 10

7. (a) What do you mean by Forest Genetic Resources (FGR)? How do you conserve them? 10
- (b) Enumerate the guiding principles to finalize the choice of tree species for afforestation of denuded areas where soil conservation measures are implemented. 15
- (c) Describe the serious effects of global warming. 15
8. (a) Explain the various classes of threat to the biodiversity. 15
- (b) Describe the significance of 'plant introduction' as one of the major methods of tree improvement. 15
- (c) Discuss the benefits of Joint Forest Management (JFM). Write the guidelines suggested for ensuring meaningful participation of women in JFM. 10
