

FORESTRY

PAPER—II

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.

Answers must be written in ENGLISH only.

Neat sketches may be drawn, wherever necessary.

SECTION—A

1. (a) Differentiate between forest working plan and forest management plan. 8
- (b) What is point sampling? How is it used in forest enumeration? 8
- (c) What are maps? How are they helpful in management of forests? 8
- (d) Explain briefly the reference point for measurement of diameter and girth of tree species. 8
- (e) What are the objectives and principles of forest management? 8
2. (a) Describe the methods for assessment of growing stock. 15
- (b) How does yield table differ from volume table? Describe the contents of yield table with justifications. 15
- (c) What is village forest committee? Explain its role in forest management. 10
3. (a) Give a list of materials used in construction of building and describe the characteristics of any two materials. 15
- (b) Describe the role of MAI (Mean Annual Increment) and CAI (Current Annual Increment) to decide rotation of a forest stand. 15
- (c) Describe the role of working plan in forest conservation. 10
4. (a) Describe the importance of forest management. How will it be operated in forest plantations? 15
- (b) Describe regeneration survey in natural forest and explain the significance of regeneration stock map. 15
- (c) What do you understand by bridges and culverts? Write the types of any two bridges with sketches. 10

SECTION—B

5. (a) Describe the major attributes of forest ecosystem. 8
- (b) What are gums? How do they differ from resins? Write the botanical names of two plants of each. 8
- (c) Write the components of vehicular air pollution and list the damages caused to roadside trees. 8
- (d) Write the botanical names of six tree species yielding essential oil. 8
- (e) Explain the fundamental principles involved in forest economics. 8
6. (a) What is cost-benefit? Explain demand and supply with respect to forestry. 15
- (b) Explain different types of biodiversity and describe various methods for its management. 15
- (c) Write on carbon sequestration and discuss the role of afforestation in absorptions of carbon dioxide (CO₂) from atmosphere. 10
7. (a) What constitute fire environment in a forest? Describe different types of forest fires and write the significance of fire line. 15
- (b) Compare different types of composite wood. Name the tree species which are mainly preferred for it. Write the future prospects of composite wood industry in the country. 15
- (c) Explain rotational grazing and discuss its significance to restore natural regeneration. 10
8. (a) Discuss the salient features of the Wildlife (Protection) Act, 1972 and write its significance in dealing with wildlife offences. 15
- (b) Explain the present status, scope and constraints of biofuel production in India. Write the botanical names of five tree-borne oilseeds. 15
- (c) What are the different types of plant classification systems? Name the one which is mostly followed in Indian herbaria. 10

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