

CSM – 31/17
Forestry
Paper – II

Time : 3 hours

Full Marks : 300

The figures in the right-hand margin indicate marks.

*Candidates should attempt Q. No. 1 from Section – A and Q. No. 5 from Section -- B which are compulsory and any **three** of the remaining questions selecting at least **one** from each Section.*

SECTION – A

1. Discuss any **three** of the following : 20×3 = 60
 - (a) The role of Greening India Mission (GIM) in reference to current state of Indian forests.
 - (b) Preservation and protection of animal life to the extent that the food chain is not disturbed, is the most efficient way of utilizing this natural resource.
 - (c) There is no sphere of human life, where the utility of forest resources is not evident.
 - (d) Education, research and extension challenges in forestry sector.

2. (a) Discuss the important agro-forestry systems/ practices existing in different agro-climatic zones of the country with suitable examples. 20
- (b) Why do plantations fail ? Explain, in detail, with examples. 20
- (c) Explain the salient features of National Forest Policy, 1988 and highlight the changes in current policy over 1952 policy. 20
3. (a) What were the drawbacks of social forestry programme ? Explain the role of industry, schools, banks, NGOs, etc. in afforestation programme. 20
- (b) Name the different tribes in the country with their specific characteristics and establish their relationship with forest development. 20
- (c) Explain the forestry extension strategies for plantation and community development. 20
4. (a) What do you understand by high density short rotation forestry ? Enlist the suitable fast growing tree species with their productivity potential and scope for plantations. 20

- (b) Explain D & D exercise in Agro-forestry ?
Discuss the criteria of a good agro-forestry
model. 20
- (c) Discuss the importance of minor forest
produce in Indian economics and role of JFM
in their management. 20

SECTION – B

5. Answer any **three** of the following : 20×3 = 60
- (a) Describe different methods for plus tree
selection.
- (b) What is a yield table ? Discuss its way of
preparation and importance.
- (c) What are gums and resins ? List the important
gums and resins in India along with the name
of the source tree.
- (d) Why provenance testing is important in tree
breeding ? Explain.
6. (a) Why scientific logging is important ? Explain
general rules followed during felling of trees
in forest. 20
- (b) How maps are helpful in forestry ? Explain
role of survey in their preparation. 20

- (c) Enlist different physical and mechanical properties of wood and explain the factors influencing wood strength. 20
7. (a) Discuss the different sampling methods used for enumeration in forests. 20
- (b) Why the seasoning is important? Give its principles. Enlist different methods of wood seasoning. 20
- (c) Describe the natural defects in timber. 20
8. (a) Compare anatomy of soft woods and hard woods. Support with suitable diagrams. 20
- (b) Describe the collection and processing of bidi leaves. 20
- (c) Differentiate between the following and also support your answer with suitable examples : 4×5 = 20
- (i) Gums and resins
 - (ii) Tans and dyes
 - (iii) Form factor and taper
 - (iv) Sample plot and seed stand
 - (v) Temporary and permanent roads

