

19. (a) Discuss on the wood formation.

Or

(b) Describe the anatomical structure of wood.

20. (a) Explain the physical properties of wood.

Or

(b) Narrate the microscopic characteristics of softwood.

SECTION C — (3 × 10 = 30)

Answer any THREE questions.

21. Write an essay on forest types in South India.
22. Explain the various silviculture operations for the industrial production of wood.
23. Discuss participatory forest management.
24. Write an essay on types of wood and their characteristics.
25. How the variability of anatomical structure changes the wood structure.

S.No. 2638

P 22 BOE 1 A

(For candidates admitted from 2022–2023 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Botany — Elective

FORESTRY AND WOOD TECHNOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (20 marks)

Answer ALL questions.

- I. (A) Multiple choice questions. (5 × 1 = 5)
  1. NBPGR is related to
    - (a) Forest plantation
    - (b) Germplasm conservation
    - (c) Maintenance of nursery
    - (d) Social forestry
  2. The branch of study that deals about forests and woods, with an understanding of forest ecosystems and silvicultural system followed is called
    - (a) Silgology
    - (b) Sericulture
    - (c) Silvology
    - (d) Forest Management

3. Which one of the following movements was carried out for the conservation of forests and the environment?
- Forest movement
  - Ganga Action Plan
  - Tehri Andolan
  - Chipko Andolan
4. Major part of annual rings is formed by
- Spring wood
  - Autumn wood
  - Both (a) and (b)
  - Porous wood
5. \_\_\_\_\_ is grown as an energy crop for use in power stations.
- Agroforestry
  - Community forest
  - Short rotation forestry
  - Reserve Forest
- (B) Fill in the blanks. (5 × 1 = 5)
6. \_\_\_\_\_ is an area where the earth is covered mainly by large number of trees.
7. \_\_\_\_\_ wood is used for paper production.
8. \_\_\_\_\_ forest management is integration of ecological economic and socio-culture.
9. Age of the tree is measured by \_\_\_\_\_.
10. Annual rings appear in irregular \_\_\_\_\_.

- II. Answer ALL the questions in a sentence or two. (5 × 2 = 10)
- Define Monoculture.
  - Define Silviculture.
  - What is agroforestry?
  - What is secondary growth?
  - Define Hard wood and sapwood.

## SECTION B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b).

16. (a) Explain branches of forest and its classification.
- Or
- (b) Write a comparative account on natural and manmade forest.
17. (a) Briefly explain the species selection for silviculture.
- Or
- (b) Write a general account on forest certification.
18. (a) Enumerate forest health and its management.
- Or
- (b) Write notes on agroforestry.