

The Open University of Sri Lanka
Faculty of Natural Sciences
B.Sc/ B. Ed Degree Programme



Department	: Botany
Level	: Level 05
Name of the Examination	: Final Examination
Course Title and Code	: FOREST MANGEMENT AND ITS CONSERVATION-BYU5307
Academic Year	: 2024/2025
Date	: 05. 12.2024
Time	: 9.30 a.m. – 11.30 a.m.
Duration	: Two (02) Hours

General Instructions

1. Read all instructions carefully before answering the questions.
2. This paper contains **six (06) questions** and is expected to **answer four (04)** questions.
3. All questions carry equal marks.
4. Answer to each question should commence from a new page.
5. Involvement in any activity that is considered as an exam offense will lead to punishment
7. Clearly state your index number in your answer script

1. "The dry zone comprises approximately 70% of Sri Lanka's total land area."

- a) List the major forest types found in Sri Lanka based on climatic, geological, and edaphic (soil-related) factors.
- b) Describe the key characteristics of natural forests in the dry zone of Sri Lanka.
- c) Using a tabular format, compare the characteristics of forests across three ecological zones: dry zone, wet lowland, and wet montane regions.

2. Write short notes on the following:

- a) Wood-destroying fungi: Types, patterns of damage, and remedial measures.
- b) Role of microbes in the nitrogen cycle of forest ecosystems.
- c) Characteristics of pioneer and climax species in lowland tropical forests.
- d) Tree species in agroforestry systems: Benefits and key characteristics.

3.

- a) Define a silvicultural system.
- b) List the main silvicultural practices used in managing even-aged and uneven-aged forests and forest plantations.
- c) Describe the shelterwood system in forestry.
- d) Propose suitable silvicultural practices for managing natural tropical forests in Sri Lanka.

4. "Sustainable utilization of forest resources requires integrated forest management practices."
Discuss this statement by explaining the following:
- a) Steps involved in scientific tree felling.
 - b) Methods of timber sawing.
 - c) Techniques used in timber seasoning.
 - d) Methods of timber preservation.
- 5.
- a) Define forest conservation and protection.
 - b) Outline the methods and techniques of forest conservation.
 - c) Describe the development of Sri Lanka's forest policy and legislative framework, from pre-independence to present.
 - d) Assess how community involvement strengthens forest conservation strategies in Sri Lanka, using specific examples.
6. "Sustainable Use of Wood and Non-Wood Forest Products for Future Forestry Development"
- a) List wood-based products used in construction and furniture industries.
 - b) Describe the manufacturing process of cement-bonded particle board.
 - c) Classify non-wood forest products (NWFPs) with examples from Sri Lanka, including:
 - Main categories
 - Brief description of each category
 - Local examples
 - d) Analyze the challenges and opportunities for developing non-wood forest products in Sri Lanka.

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