



**RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES**

**Bachelor of Science in Applied Sciences
Third Year – Semester II Examination – January/February 2023**

BOT 3204 – FLORA OF SRI LANKA

Time: Two (02) hours

Answer FOUR (04) questions, including question No. 1.

1. a) Name the **eight (08)** climatic sub-zones of Sri Lanka as recognized and described by Mueller-Dombois (1968). **(16 marks)**
 - b) Outline the prevalence of different forest types in Sri Lanka based on traditional climatic sub-zonation and altitudinal variation within them. **(20 marks)**
 - c) Describe briefly the following of the main forest formation in the warm lowland wet zone of Sri Lanka.
 - i. Salient features of flora, as adaptations to the habitat. **(30 marks)**
 - ii. Vertical structure, to minimize competition and to use sunlight efficiently. **(34 marks)**
2. a) Outline the **maritime floristic communities** of Sri Lanka. **(40 marks)**
 - b) Discuss the adaptations possessed by woody perennial species in above mentioned communities to survive in the prevailing environmental conditions. **(60 marks)**
3. a) Explain briefly the following terms.
 - i. Primary succession.
 - ii. Secondary succession.
 - iii. Mesarch succession.
 - iv. Xerarch succession. **(20 marks)**
 - b) Describe the successional stages of an **abandoned wewa ecosystem** in the dry zone of Sri Lanka towards its typical terrestrial climatic climax vegetation. **(80 marks)**

4. a) Describe briefly the floristic diversity of **marine communities** of Sri Lanka. (50 marks)
- b) Discuss the ecological and economic importance of marine communities, using examples. (50 marks)
5. a) Present schematically the classification of the grasslands of Sri Lanka. (30 marks)
- b) Discuss briefly the **two (02)** major hypotheses for the origin of upland grasslands in Sri Lanka. (30 marks)
- c) Describe briefly the **five (05)** ecological macro-zones of the upland grasslands of Sri Lanka, as designated by Mueller-Dombois and Perera (1971). (40 marks)

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