



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Sciences
Second Year – Semester II Examination – October/November 2017

BOT 2203 – FLORA OF SRI LANKA

Time: Two (02) hours

Answer **four (04)** questions, **including question No. 1.**

1. a) **With only the aid of a labeled diagram**, illustrate the vertical structure of a typical climatic climax forest vegetation remaining in the south-western lowlands of Sri Lanka. **(30 marks)**
b) Describe **six (06)** characteristic features of the typical flora in the above community, illustrating the ecological significance of each feature. **(30 marks)**
c) State briefly the significance of the mossy-cap of Sri Lanka emphasized by the biogeographer Wolfgang Werner. **(20 marks)**
d) Describe the '*Strobilanthes* cycle' which occurs in the Horton Plains National Park, emphasizing major biotic interactions that take place during the process. **(20 marks)**
2. *Wewa* is a unique heritage from the ancient civilization of Sri Lanka.
a) Illustrate the structure and the flora associated with the structural variation of a typical *Wewa* ecosystem of Sri Lanka. **(70 marks)**
b) Describe briefly the ecosystem services rendered by *Wewa* ecosystems. **(30 marks)**
3. a) Describe the two main hypotheses on the origin of *Patana* grasslands of Sri Lanka. **(40 marks)**
b) Describe briefly the distribution and the floristic composition of different types of *Patanas* described by Mueller-Dombois and Perera (1971). **(30 marks)**
c) Some ecologists have classified Savannas in Sri Lanka under forest vegetation. Support this classification highlighting floristic evidence. **(30 marks)**

4. a) Describe using examples, the structure and composition of the unique forest vegetation found in north-western and south-eastern coastal extremes of the dry zone of Sri Lanka. **(70 marks)**
- b) Explain briefly, the present status and importance of preserving the above system. **(30 marks)**
5. Mangroves of Sri Lanka is an assemblage of taxonomically unrelated tropical evergreen, plants (trees and shrubs), which share common adaptations to the prevailing conditions of the environment they grow in.
- a) Comment on the above statement by describing the composition of Sri Lankan mangrove flora and their adaptations to the habitat. **(80 marks)**
- b) List **ten (10)** ecological/economic importance of mangrove flora. **(20 marks)**

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