

**UNIVERSITY OF COLOMBO – SRI LANKA**  
**FACULTY OF ARTS**  
**SPECIAL DEGREE EXAMINATION IN ARTS (GEOGRAPHY) – PART-II**  
**SECOND SEMESTER END EXAMINATION – 2016/2017**  
**GYG 3253 – Biogeography**

**Two hours**

Answer **three (03)** questions only.

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01. “Biogeography uses both the methods and theories of geography and sciences to analyse and predict the relationship between abiotic and biotic factors in ecosystems”. Discuss your views on this statement using appropriate examples. (20 Marks)
02. Considering the characteristic of life, explain how early ideas of the origin of life have been developed experimentally in order to prove that the living things are produced by “living things”. (20 Marks)
03. Describe the development of the process of species diversity, interactions, accumulation of biomass and energy flow from a pioneer community to a climax community using the knowledge on ecological succession with diagrams. (20 Marks)
04. Discuss how biochemical reactions of living organisms contribute to recycling of matters in an ecosystem using either carbon or nitrogen cycle. (20 Marks)
05. Using appropriate examples from life kingdom, explain different adaptations methods of species to different environmental conditions. (20 Marks)
06. i. Explain the similarities and dissimilarities of following pairs using diagrams.  
a) Soil profile and soil horizons  
b) Soil pedon and soil series (06 Marks)
- ii. Assuming that you have assigned to identify color, texture and consistency of some soil samples in the premises of faculty of Arts, University of Colombo, propose a methodology to find out above properties of soil samples. (14 Marks)

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