

UNIVERSITY OF COLOMBO – SRI LANKA
FACULTY OF ARTS
SPECIAL DEGREE EXAMINATION IN ARTS (GEOGRAPHY) – PART-II
SECOND SEMESTER END EXAMINATION – 2018/2019
GYG 3253 – Biogeography
Two hours

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

01. i). Briefly define Biogeography (04 Marks)
- ii). Explain how biogeography addresses the combination of organism and space, using examples. (06 Marks)
- iii). Discuss the different methods and approaches applied in biogeographical research using examples. (10 Marks)
02. i). Briefly explain the characteristics of life. (04 Marks)
- ii). Explain the early ideas and theories of the origin of life with examples. (06 Marks)
- iii). Discuss how different theories and ideas on the origin of life, help in highlighting the main characteristics of a life, with appropriate examples. (10 Marks)
03. i). Briefly explain what evolution of life is. (04 Marks)
- ii). Explain the criticisms on “Lamarck’s theory” (1744-1829) on evolution of life using examples. (06 Marks)
- iii). “Biogeography provides positive evidences for Darwin’s theory (1809-1882) on evolution”. Critically discuss this statement using appropriate examples. (10 Marks)

04. i). Briefly explain the components, processes and interactions of an aquatic ecosystem.
(04 Marks)
- ii). Explain how the energy flows through an aquatic ecosystem using a diagram and values.
(06 Marks)
- iii). Discuss how the relationships of components of ecosystems improve temporally through the ecological succession using examples from aquatic succession.
(10 Marks)
05. i). Explain briefly how does Carolus Linnaeus (1707-1778) formally classify and name the organisms based on their genus and species.
(04 Marks)
- ii). Explain the following characteristics of R.H. Whittaker (1920-1980) five kingdom classification using examples.
a) development of the body of organisms
b) behavioral patterns of organisms
c) evolution of organisms
(06 Marks)
- iii). Discuss the adaptation abilities of species for different geographical environments using examples from life kingdom.
(10 Marks)
06. i). Briefly explain the differences between soil profile, horizons, pedan and series using diagrams.
(04 Marks)
- ii). Explain the properties of soils using examples.
(06 Marks)
- iii). Discuss the importance of studying soil properties in biogeographical studies using appropriate examples.
(10 Marks)
