

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



Department	: Zoology
Level	: 3
Name of the Examination	: Final Examination
Course Code and Title	: ZLU1181/Biogeography
Academic Year	: 2019-2020
Date	: 07.11.2020
Time	: 1.30 pm- 3.30 pm
Duration	: 02 hrs
Index number	:

General Instructions

1. Read all instructions carefully before answering the questions.
 2. This question paper consists of **Six (06)** questions in **one (01)** page.
 3. Answer any **four (04)** questions only. All questions carry equal marks.
 4. Answer for each question should commence from a new page.
 5. Draw fully labelled diagrams where necessary
 6. Having any unauthorized documents/ mobile phones in your possession is a punishable offense
 7. Use blue or black ink to answer the questions.
 8. Circle the number of the questions you answered in the front cover of your answer script.
 9. Clearly state your index number in your answer script
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1.
 - i. Briefly describe the Sclater-Wallace Zoogeographic scheme [40 marks]
 - ii. Explain the patterns in species richness and endemism in Australian and Neotropical fauna through tectonic and glacial events. [60 marks]

2. Explain the three main ways in which organisms expand their range through dispersal [100 marks]

3. Differentiate between the following:
 - i. Microevolutionary processes and macroevolutionary processes [70 marks]
 - ii. Natural selection and species selection [30 marks]

4. Describe the current model of plate tectonics, explaining the four major features of the plate tectonics. [100 marks]

5.
 - i. Briefly explain the out-of-Africa model and the multiregional hypothesis [30 marks]
 - ii. Describe the probable reasons behind the rapid geographical distribution of
 - a) *H. erectus*
 - b) *H. sapiens*[70 marks]

6. Write short notes on any **TWO (2)** of the following [50 marks each]
 - i. The Island rule
 - ii. The Geographic template
 - iii. Close affinities of the Sri Lankan biota with those of India

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