



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

Department	: Zoology
Name of the Examination	: Final Examination 2023/2024
Academic Year	: 2023/2024
Course Code and Title	: ZYU5309/ZYE5309Paleobiology
Level	: 5
Date	: 09.04.2024
Time	: 9.30 a.m. – 11.30 a.m.
Duration	: Two hours

General Instructions to Candidates

1. Read all instructions carefully before answering the questions.
2. This question paper consists of **two (02) pages** and **Six (06) questions**.
3. Answer any **four (04) questions**.
4. The answer for each question should commence from a new page.
5. Use blue or black ink to write your answers.
6. Draw fully labelled diagrams where necessary.
7. Write the numbers of the questions you answered on the front page of the answer script.
8. Clearly write your index number in the answer script.
9. Do not bring in or have in possession unauthorized materials, including mobile phones and other electronic devices, or violate other examination rules.
10. Handover your answer script at the end of the examination.

Answer any four (04) questions

1. 1.1. Define the terms; Paleobiology, Paleontology, and Geology (15 marks)
1.2. Discuss the contribution of paleobiology to the fields of Zoology, Evolutionary Biology, and Conservation Biology (65 marks)
1.3 Discuss the challenges in the research of Palaeobiology in Sri Lanka (20 marks)
2. Write a comprehensive account of the 5 mass extinction events that shaped the history of Earth (100 marks)
3. 3.1 Describe the main **levels** of animal distribution over the world (30 marks)
3.2 Describe the main **patterns** of animal distribution around the world (30 marks)
3.3 Discuss the **barriers** to animal distribution (40 marks)
4. Write an account of the Aruwakkalu and Thabbowa fossil sites in Sri Lanka emphasizing the geological times, locations, and type of fossils available in those sites. (100 mark)
5. Compare and contrast between the (50 marks x 2)
 - a) Apes and hominins
 - b) Macrofossils and Microfossils
6. Write short notes on any two (02) of the following (50 marks x 2)
 - a) Geological Time Scale
 - b) Formation of fossils
 - c) Theory of Plate Tectonic
 - d) Biological evolution of life
