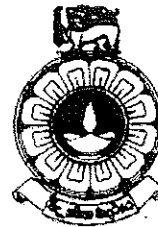


The Open University of Sri Lanka
Faculty of Natural Sciences
B.Sc Degree Programme



00069

Department	: Zoology
Level	: 5
Name of the Examination	: Final Examination
Course Code and Title	: ZYU5300/ZLE3180/ZLU3180 Aquatic Biology
Academic Year	: 2020 - 2021
Date	: 13 December 2021
Time	: 01.30 p.m to 03.30 p.m
Duration	: 2 hrs

General Instructions

1. Read all instructions carefully before answering the questions.
2. This question paper consists of **06 (six)** questions in **one** pages.
3. Answer any **04 (four)** 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

1. a. Explain how specific properties of water facilitate existence of life on earth.
b. Describe the significance of different forms of Nitrogen for aquatic life.
2. Diversity and abundance of organisms are normally higher in lentic habitats when compared to lotic habitats. Explain how physical and chemical properties of lentic habitats contribute to maintain a higher diversity and abundance of organisms in lentic habitats than in lotic habitats.
3. Explain the adaptations shown by aquatic insects to consume atmospheric oxygen.
4. a. Describe the zonation found in rocky shores of Sri Lanka.
b. Briefly explain how organisms are adapted to overcome the harsh environmental conditions in the intertidal zone.
5. a. Buoyancy is one of the essential features needed to live in the pelagic zone of the ocean. Explain the different mechanisms shown by organisms that live in the pelagic zone for buoyancy.
6. Write short notes on any **two (2)** of the following:
 - a. Deep sea organisms
 - b. Sedimentation in estuaries
 - c. Osmoregulators
 - d. Adaptations of mangroves