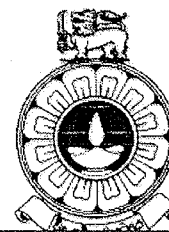


The Open University of Sri Lanka  
Faculty of Natural Sciences  
BSc Degree Programme



Department	: Zoology
Level	: 5
Name of the Examination	: Final Examination
Course Code and Title	: <b>ZYU5300</b> <b>Aquatic Biology</b>
Academic Year	: 2023 - 2024
Date	: 23 October 2023
Time	: 09.30 a.m. to 11.30 a.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** page.
  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 on your answer script.
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1. a. Describe how the specific properties of water affect living organisms.  
b. (i) What are the factors that affect the primary productivity of a freshwater lake?  
(ii) Briefly explain how the factors stated above affect primary productivity.
2. Explain how the physical and chemical properties of lentic habitats contribute to maintaining a higher diversity and abundance of organisms than in lotic habitats.
3. Explain the locomotory adaptations of animals that inhabit aquatic systems.
4. Describe how do physical and chemical characteristics of an estuary affect the life of estuarine organisms.
5. a. Briefly explain the major differences between pelagic fish and demersal fish.  
b. Briefly describe the defensive adaptations shown by marine organisms to escape from the predators.
6. Write short notes on any two (2) of the following:
  - a. Deep Sea organisms
  - b. Eutrophication
  - c. Upwelling
  - d. Ecological functions of mangroves