

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



Department	: Zoology
Level	: Level- 5
Name of the Examination	: Final Examination
Course Code and Title	: ZYU5301- Fish biology & Fishery management
Academic Year	: 2025/2026
Date	: 2026.01. 12
Time	: 9.30am -11.30 am
Duration	: Two hours (02hrs)
Index number	:

General Instructions

1. Read all instructions carefully before answering the questions.
2. This question paper consists of **06** questions in **02** pages.
3. Answer any **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.
5. Relevant log tables are provided 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.

Answer any four (04) questions

- (1) Discuss the relationship between different structural modifications in digestive systems and feeding habits in fishes.
- (2) Discuss how reproductive parameters are used to study and understand reproductive strategies in fishes.
- (3) Explain the respiratory strategies used by fishes living in various aquatic habitats.
- (4). Describe the fishing methods used to harvest marine small pelagic fishes in the coastal waters of Sri Lanka.
- (5) (a) Briefly explain the yield models that have been developed to estimate the potential fish yield.
(b) The catch and effort data of *Oreochromis mosambicus* in a reservoir for five months are as follows.

Month	Fishing effort No. of boats/day	Total catch (kg)
January	05	200
February	10	300
March	15	350
April	20	400
May	25	75

Assuming that the catch per unit (CPUE) and fishing effort have a linear relationship, calculate the optimum effort and maximum sustainable yield of the above fishery

- (6) Write Short notes on any **two (02)** of the following :
 - a). Factors that affect the growth of fish
 - b). Methods that are used to estimate the fish population size.
 - c). Fish swim bladder and its functions
 - d). Health benefits of polyunsaturated fatty acids in fish muscle.
