

Khulna University

School: Life Science

Discipline: Fisheries and Marine Resource Technology

Program: BSc in Fisheries

Examination: 1st Year 1st

Session: 2024-2025

Course Code: 0831 06 FMRT 1101

Course Title: Fisheries Zoology

Total Marks: 60

Time: 3.0 hours

Credit: 03

* The figures in the margin indicate full marks

*Use separate answer script for each section

Section-A

There are FOUR questions in this section. Answer any THREE questions.

	Marks
Q. 1 a) State the concept of Fisheries Zoology. [L1; CLO2]	02
b) Elaborate the scope and importance of Zoology in Fisheries Science. [L2; CLO2]	04
c) Classify animals based on their coelom development and germ layers, and provide one example for each type. [L2; CLO1]	04
Q. 2 a) Differentiate between Annelida and Coelenterata based on their key identifying features. [L4; CLO1]	02
b) List three commercially important finfish and three shellfish of Bangladesh with their scientific names. [L1; CLO1]	03
c) Write down the names and functions of different external body parts of a typical Chondrichthyes fish. [L2; CLO1]	05
Q. 3 a) Summarize the feeding habits and behavior of <i>Macrobrachium rosenbergii</i> . [L2; CLO1]	02
b) Explain the external morphology of a giant freshwater prawn with a suitable diagram. [L2; CLO1]	06
c) Why do coral reefs call the 'rainforest of the sea'? [L1, 3; CLO1]	02
Q. 4 a) How does cuttle fish move through water? Explain the significance of its propulsion system. [L2; CLO 1]	03
b) Draw a suitable diagram of cuttlefish and identify its external features. [L3; CLO1]	05
c) How does a starfish capture and digest a bivalve mollusk? Explain. [L2; CLO1]	02

Section-B

There are FOUR questions in this section. Answer any THREE questions.

Q. 5 a) Briefly discuss the economic importance of fish. [L2; CLO2]	04
b) Enumerate the basis and basics of natural selection. [L3; CLO3]	04
c) What is regarded as the 'golden age of fish' and why? [L2; CLO1]	02
Q. 6 a) How does multiple species reciprocally affect the evolution of each other? Explain. [L3; CLO2]	03
b) Briefly describe the mechanisms of evolution. [L2; CLO2]	04
c) Distinguish between macro-evolution and micro-evolution. [L2; CLO1]	03
Q. 7 a) Distinguish between divergent and convergent evolution. [L2; CLO2]	03
b) What are the triggering factors for adaptive radiation? [L4; CLO4]	03
c) Describe the diversity of cichlid fishes according to feeding strategy with appropriate figures. [L3; CLO4]	04
Q. 8 a) "Survival of the fittest" is a misleading concept. Justify the statement. [L3; CLO4]	03
b) What is meant by 'fitness' in evolutionary biology? [L1; CLO2]	02
c) Enlist the structural modifications of fishes for adaptation. [L1; CLO2]	02
d) How do aquatic animals adapt to different salinity habitats? [L2; CLO3]	03