

Reg. No.:



W7213

University of Kerala

Third Semester FYUGP Degree Examination, November 2025

Discipline Specific Elective

ZOOLOGY

UK3DSEZOO201 - Fisheries Science I-Taxonomy and Fishery Biology

Academic Level: 200-299

2024 Admission

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark Each.Answer all questions

Qn No.	Question	CL	CO
1	Which of the following fish shows ovoviviparity? Options : A)Scoliodon B)Sardinella C)Sea horse D)Gambusia	RE	1
2	A ribbon-like structure with tiny teeth in the buccal cavity of sepia is called Options : A) a) Gizzard B)b) Caecum C) c) gills D) d) Radula	RE	1
3	In marine finfishes, pelagic eggs are usually characterized by: Options : A)Large yolk, heavy shell, sink to bottom B)Small yolk, buoyant, often transparent C)Attached to vegetation, demersal habit D)Protected by parental care	UN	4
4	Which of the following best defines protandry? Options : A)An organism that begins life as a female and changes to male B)An organism that begins life as a male and changes to female C)An organism that reproduces only once before dying D)An organism with both male and female organs	UN	3
5	What is the purpose of studying the Relative Gut Length of fish? Options :	UN	2

Qn No.	Question	CL	CO
	A) To estimate feeding frequency B) To understand feeding habits (herbivore, carnivore, omnivore) C) To determine spawning frequency D) To identify species		
6	The presence of long coiled intestine in fishes generally indicates Options : A) Carnivorous diet B) Herbivorous diet C) Omnivorous diet D) Parasitic habit	UN	1

Part B.8 Marks. Time: 24 Minutes. (Cognitive Level: Understand (UN)/Apply (AP)) Short Answer. 2 marks each. Answer all questions

Qn No.	Question	CL	CO										
7	Match the larval stages <table><thead><tr><th>Column A</th><th>Column B</th></tr></thead><tbody><tr><td>1. Shrimp</td><td>A. Phyllosoma → Puerulus → Juvenile</td></tr><tr><td>2. Crab</td><td>B. Trochophore → Veliger → Juvenile</td></tr><tr><td>3. Lobster</td><td>C. Nauplius → Zoea → Mysis → Post larva</td></tr><tr><td>4. Bivalve</td><td>D. Zoea → Megalopa → Juvenile</td></tr></tbody></table>	Column A	Column B	1. Shrimp	A. Phyllosoma → Puerulus → Juvenile	2. Crab	B. Trochophore → Veliger → Juvenile	3. Lobster	C. Nauplius → Zoea → Mysis → Post larva	4. Bivalve	D. Zoea → Megalopa → Juvenile	UN	4
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8	Differentiate between Karyotyping and DNA barcoding.	UN	1										
9	10) Explain how truss morphometric analysis helps in fish taxonomy.	AP	1										
10	What is hermaphroditism in fishes?	AP	3										

Part C. 28 Marks. Time: 60 Minutes (Cognitive Level: Apply (AP)/Analyse (AN)/Evaluate (EV)/Create (CR)) Long Answer. 7 marks each. Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A) Prepare a note on taxonomic procedures used for the identification of finfishes OR B) Explain the role of modern taxonomical tools such as karyotyping and DNA barcoding in resolving taxonomic ambiguities in finfishes and shellfishes.	AP	1, 1
12	A) Classify feeding habits of fishes and examine various factors influencing feeding.	AN	2, 2

Qn No.	Question	CL	CO
	OR B) Analyze how feeding intensity in fishes changes with growth and sex, using a suitable example.		
13	A) Explain the methods used to estimate fecundity and Gonadosomatic index. OR B) Describe the diverse reproductive strategies exhibited by fishes and assess the significance of each with examples.	EV	3, 3
14	A) Construct a descriptive essay on the early larval stages of shrimps, crabs, lobsters, and bivalves. OR B) Prepare a detailed account of egg types and embryonic development in finfishes, with suitable examples.	CR	4, 4