Reg. No	Name	22P1010
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## M. Sc. DEGREE END SEMESTER EXAMINATION: OCTOBER 2022

## **SEMESTER 1 : AQUACULTURE AND FISH PROCESSING**

## COURSE: 21P1AQCT01: TAXONOMY AND BIOLOGY OF COMMERCIAL AND CULTIVABLE FIN FISH AND SHELL FISHES

	(For Regular - 2022 Admission and Supplementary - 2021 Admission)	
Durat	ion : Three Hours	Max. Weights: 30
	PART A	
	Answer any 8 questions	Weight: 1
1.	Sketch and label a placoid scale.	(A)
2.	Distinguishing features of Order Clupeiformes	(An)
3.	Give the scientific names of any four commercially important crabs in India	. (R)
4.	Define a polytypic genus	(R)
5.	Outline the informations besides measurements are required while describing a new species.	(U)
6.	Explain Condition factor.	(U)
7.	Define haemocyanin	(R)
8.	What is the functional importance of neuormast organ?	(R)
9.	Define Weberian ossicles	(R)
10.	Define Parr.	(U) (1 x 8 = 8)
	PART B	
	PART B Answer any 6 questions	Weights: 2
11.		Weights: 2
11. 12.	Answer any 6 questions	_
	Answer any 6 questions  Discuss the morphology of a typical lobster with a suitable diagram.  Distinguish the different types of fins in fishes and its importance in the	(E) (An)
12.	Answer any 6 questions  Discuss the morphology of a typical lobster with a suitable diagram.  Distinguish the different types of fins in fishes and its importance in the identification of fishes.  What is meant by size at first maturity? Give an account of various maturity	(E) (An)
12. 13.	Answer any 6 questions  Discuss the morphology of a typical lobster with a suitable diagram.  Distinguish the different types of fins in fishes and its importance in the identification of fishes.  What is meant by size at first maturity? Give an account of various maturity stages of fishes.	(E) (An) y (R)
<ul><li>12.</li><li>13.</li><li>14.</li></ul>	Answer any 6 questions  Discuss the morphology of a typical lobster with a suitable diagram.  Distinguish the different types of fins in fishes and its importance in the identification of fishes.  What is meant by size at first maturity? Give an account of various maturity stages of fishes.  Explain the fecundity estimation in fin fishes	(E) (An) Y (R) (U)
<ul><li>12.</li><li>13.</li><li>14.</li><li>15.</li></ul>	Answer any 6 questions  Discuss the morphology of a typical lobster with a suitable diagram.  Distinguish the different types of fins in fishes and its importance in the identification of fishes.  What is meant by size at first maturity? Give an account of various maturity stages of fishes.  Explain the fecundity estimation in fin fishes  Explain the food and feeding in bivalves	(E) (An) (Y) (R) (U) (U)
<ul><li>12.</li><li>13.</li><li>14.</li><li>15.</li><li>16.</li></ul>	Answer any 6 questions  Discuss the morphology of a typical lobster with a suitable diagram.  Distinguish the different types of fins in fishes and its importance in the identification of fishes.  What is meant by size at first maturity? Give an account of various maturity stages of fishes.  Explain the fecundity estimation in fin fishes  Explain the food and feeding in bivalves  Briefly discuss about coramandal coast  Define mud banks. Explain its formation and impact on the fisheries along	(E) (An) (Y) (R) (U) (U) (E)
12. 13. 14. 15. 16. 17.	Answer any 6 questions  Discuss the morphology of a typical lobster with a suitable diagram.  Distinguish the different types of fins in fishes and its importance in the identification of fishes.  What is meant by size at first maturity? Give an account of various maturity stages of fishes.  Explain the fecundity estimation in fin fishes  Explain the food and feeding in bivalves  Briefly discuss about coramandal coast  Define mud banks. Explain its formation and impact on the fisheries along the coast of Kerala  Design branchial formulas for freshwater prawn and shrimp.	(E) (An) (Y) (R) (U) (U) (E) (U) (Cr) (2 x 6 = 12)
12. 13. 14. 15. 16. 17.	Answer any 6 questions  Discuss the morphology of a typical lobster with a suitable diagram.  Distinguish the different types of fins in fishes and its importance in the identification of fishes.  What is meant by size at first maturity? Give an account of various maturity stages of fishes.  Explain the fecundity estimation in fin fishes  Explain the food and feeding in bivalves  Briefly discuss about coramandal coast  Define mud banks. Explain its formation and impact on the fisheries along the coast of Kerala  Design branchial formulas for freshwater prawn and shrimp.	(E) (An) (Y) (R) (U) (U) (E) (U) (Cr)

(An)

Catogorise on the classification of the cartilaginous fishes

20.

21. Explain the structure and function of respiratory system and accessory respiratory organs in fin fishes

(U)

22. Discuss on food and feeding habits of fishes

(Cr) (5 x 2 = 10)

**OBE: Questions to Course Outcome Mapping** 

CO	Course Outcome Description	CL	Questions	Total Wt.
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Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;