Reg. No	Name	22P359
---------	------	--------

M. Sc. DEGREE END SEMESTER EXAMINATION: OCTOBER 2022 **SEMESTER 3: AQUACULTURE AND FISH PROCESSING**

COL	JRSE: 21P3AQCT11: CULTURE OF CRUSTACEANS, SEA WEEDS AND FISHERIES	TECHNOLOGY
	(For Regular - 2021 Admission)	
Durat	ion : Three Hours N	1ax. Weights: 30
	PART A	
	Answer any 8 questions	Weight: 1
1.	Which is the flavor bearing compound produced during degradation of ATP?	(R, CO 6, CO 7, CO 8)
2.	What is green tide related to seaweeds?	(R, CO 2, CO 3)
3.	In bacteria sporulation is not a method of multiplication. Why?	(U, CO 4, CO 5)
4.	What is conceptacle in Sargassum?	(R)
5.	What is Z line?	(R, CO 6, CO 7, CO 8)
6.	Explain enzymatic spoilage of seafood.	(U, CO 7)
7.	What is the relevance of ice quality in fish preservation?	(R, CO 6, CO 7, CO 8)
8.	Name the first larva of lobsters. Why it is commonly called as 'glass crab'?	(R, CO 1)
9.	What are the precautions required to maintain good survival rate during transportation?	(R, CO 1)
10.	What is the significance of liming?.	(R, CO 1) (1 x 8 = 8)
	PART B	
	Answer any 6 questions	Weights: 2
11.	Evaluate on autolysis and nucleotide catabolism.	(E, CO 6, CO 7, CO 8)
12.	Explain how fish is handled on board?	(U, CO 6, CO 7, CO 8)
13.	Discuss about prawn filtration in Kerala.	(E, CO 1)
14.	Evaluate the medical uses of sea weeds.	(E, CO 2, CO 3)
15.	Summarise on the water soluble vitamins in fish.	(U, CO 6, CO 8)
16.	Evaluate the sea weed resources of India.	(E, CO 2, CO 3)
17.	Discuss the life history of lobster with a suitable diagram .	(E, CO 1)
18.	Classification of microbial staining methods.	(U, CO 4, CO
		5) (2 x 6 = 12)

PART C

	Answer any 2 questions	Weights: 5
19.	Elaborate on the different types of ice used for chilled storage? How they are manufactured?	(Cr, CO 6, CO 7, CO 8)
20.	Examin the life history of Class Rhodophyceae with a suitable example.	(An, CO 2, CO 3)
21.	Discuss the status of crab culture in India. Detail the problems and prospects.	(E, CO 1)
22.	Highlight the practices of microbial safety in fish handling, transportation and processing.	(E, CO 4, CO 5)
		$(5 \times 2 = 10)$

OBE: Questions to Course Outcome Mapping

СО	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Understand the culture of the economically important crustaceans and seaweeds	U	8, 9, 10, 13, 17, 21	12
CO 2	CO 2 Identification of economically important sea weeds PO2, PSO2 E	E	2, 14, 16, 20	10
CO 3	Describe the methods of processing and extraction of different seaweed products	U	2, 14, 16, 20	10
CO 4	Understanding the fundamental principle of bacteriology	U	3, 18, 22	8
CO 5	Describe spoilage causing microorganisms of fish and fishery products	U	3, 18, 22	8
CO 6	Sensory evaluation of fresh fish and fish products	Е	1, 5, 7, 11, 12, 15, 19	14
CO 7	Analysing post mortem changes in fish PO2 ,PSO3 An	An	1, 5, 6, 7, 11, 12, 19	13
CO 8	Describing handling of fish onboard, landing centres, retail outlets and pre-processing centres	U	1, 5, 7, 11, 12, 15, 19	14

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;