

Reg. No .....

Name .....

24P4022

**M. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2024**

**SEMESTER 4 - AQUACULTURE AND FISH PROCESSING**

**COURSE : 21P4AQCT13 - FISH PROCESSING TECHNOLOGY**

*(For Regular - 2022 Admission and Supplementary - 2021 Admission)*

Duration : Three Hours

Max. Weights: 30

**PART A**

**Answer any 8 questions**

**Weight: 1**

1. What is adhesive batters? (U, CO 5)
2. What is caviar? (R, CO 4)
3. What is fan-tail deveined prawns? (R, CO 4)
4. What is algin? (R, CO 4)
5. Define the art of appertization? (R, CO 2)
6. What is food irradiation? (U, CO 6)
7. What is mean by deproteinisation of prawn shell? (U, CO 4)
8. What is Maillard reaction? (R, CO 3)
9. Histidine in fish . (U, CO 1)
10. What is isinglass? (U, CO 4)

**(1 x 8 = 8)**

**PART B**

**Answer any 6 questions**

**Weights: 2**

11. Quality evaluation of surimi. (An, CO 4)
12. What is thawing? give the classification of thawing methods of frozen seafoods. (U, CO 1)
13. Explain the major physical and quality related defects of battered and breaded products. (U, CO 5)
14. What is TDT? With the help of a chart explain the TDT in detail. (R, CO 2)
15. Write down the insect infestation in dried fish. (An, CO 3)
16. What are the different factors to be considered to improve the quality of dried fish? (R, CO 3)
17. What are the advantages of coating fish products? (R, CO 5)
18. What is the major microbial quality issue associated with dried foods and suggest the best method of sterilization of dried products for export? (R, CO 6)

**(2 x 6 = 12)**

**PART C**

**Answer any 2 questions**

**Weights: 5**

19. What is irradiation ? What are the application of gamma irradiation for safety and quality improvement? (U, CO 6)
20. Describe methods to manufacture fish meal. What are the uses of fish meal? Give the nutritional value of fish meal. (An, CO 4)
21. Describe different methods for preparing cured products. (R, CO 3)

22. What is the principle of freezing? Classify the freezing methods based on the medium used. Describe in detail the working of airblast freezers. (U, CO 1)  
(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Understand the handling of fishes both culture and capture	U	9, 12, 22	8
CO 2	Understand the changes in the fish composition in relation to spoilage	U	5, 14	3
CO 3	Understand the freezing technology of fish	U	8, 15, 16, 21	10
CO 4	Understand the canning of fish	U	2, 3, 4, 7, 10, 11, 20	12
CO 5	Understand the curing and drying of fish	U	1, 13, 17	5
CO 6	Understand the value added fish products	U	6, 18, 19	8

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