Reg. No ..... Name **25P4023**

MSc DEGREE END SEMESTER EXAMINATION- MARCH 2025

SEMESTER 4 : AQUACULTURE AND FISH PROCESSING

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

(For Regular - 2023 Admission and Supplementary 2022/2021 Admissions)

Duration : Three Hours Max. Weights: 30

PART A

Answer any 8 questions **Weight: 1**

1.	What is Tempura batter?	(U, CO 5)
2.	What are the sources of gamma rays?	(U, CO 6)
3.	What is mean by demineralisation of prawn shell?	(R, CO 4)
4.	What is fish hydrolysates?	(R, CO 4)
5.	What is Maillard reaction?	(R, CO 3)
6.	Ice crystal formation during slow freezing.	(An, CO 1)
7.	What is chitin?	(U, CO 4)
8.	What are the application of chitin / chitosan?	(U, CO 4)
9.	Which are the cryoprotectants used in surimi.	(U, CO 4)
10.	Define Z value.	(U, CO 2)

(1 x 8 = 8)

PART B

Answer any 6 questions **Weights: 2**

11.	Explain the quality deterioration in cured fish.	(U, CO 3)
12.	Describe the packaging methods for dried fish.	(R, CO 3)
13.	What are the advantages and disadvantages of canning fish in retort pouch ?	(E, CO 2)
14.	What are the advantages of coated fish products ?	(R, CO 5)
15.	Explain the preparation of alginic acid? What are its uses ?	(U, CO 4)
16.	What is radicidation ? How much is the dose and also mention the purpose of radicidation ?	(U, CO 6)
17.	Describe the packaging of coated products.	(U, CO 5)
18.	Comment on the role of tripolyphosphate treatment prior to freezing of shrimps.	(An, CO 1)

(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.	What are the changes in lipids during frozen storage ? How these changes can be monitored ? Describe the methods to reduce these changes?	(An, CO 1)
21.	Discuss on any four traditional fish preservation methods in detail. Explain the major spoilages associated with dried fish.	(An, CO 3)
22.	Describe methods to utilize waste from Fish processing industry.	(An, CO 4)

(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	6, 18, 20	8
CO 2	Understand the changes in the fish composition in relation to spoilage	U	10, 13	3
CO 3	Understand the freezing technology of fish	U	5, 11, 12, 21	10
CO 4	Understand the canning of fish	U	3, 4, 7, 8, 9, 15, 22	12
CO 5	Understand the curing and drying of fish	U	1, 14, 17	5
CO 6	Understand the value added fish products	U	2, 16, 19	8

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