

Reg. No .....

Name .....

23P4022

**M. Sc. DEGREE END SEMESTER EXAMINATION : MARCH 2023**

**SEMESTER 4 : AQUACULTURE AND FISH PROCESSING**

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

*(For Regular - 2021 Admission)*

Duration : Three Hours

Max. Weights: 30

**PART A**

**Answer any 8 questions**

**Weight: 1**

1. What is glazing? (R, CO 1)
  2. What is hurdle technology ? (E)
  3. What is pannelling? (U, CO 2)
  4. What is Tempura batter? (U, CO 5)
  5. Unsaponifiable matter of oil. (R, CO 4)
  6. What is pearl essence? (U, CO 4)
  7. Which are the properties of packaging material used for freeze dried fish products. (U, CO 3)
  8. What is ambergris? (R)
  9. What is carrageenan? (U, CO 4)
  10. What is fan-tail round prawns? (U, CO 4)
- (1 x 8 = 8)**

**PART B**

**Answer any 6 questions**

**Weights: 2**

11. What is tunnel freezing ? Explain its working . (U, CO 1)
  12. What is value added fish products ? What are their role in sea food industry ? (U, CO 5)
  13. Describe the preparation of fish sauce. (R, CO 6)
  14. Explain the physical and sensory qualities of coated products. (R, CO 5)
  15. What is isinglass ? How it is processed ? (U, CO 4)
  16. What is smoke ? What are the major components of smoke ? (R, CO 3)
  17. Differentiate sterilization and pasturization. (An, CO 2)
  18. Differentiate cold smoking and hot smoking with examples. (R, CO 3)
- (2 x 6 = 12)**

**PART C**

**Answer any 2 questions**

**Weights: 5**

19. What is agar ? How agar is extracted ? What are its applications ? (R, CO 4)
  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. What are the problems encountered in dried fish ? What are the remedies for these problems ? (R, CO 3)
  22. What is irradiation ? What are the application of gamma irradiation for safety and quality improvement ? (U, CO 6)
- (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	1, 11, 20	8
CO 2	Understand the changes in the fish composition in relation to spoilage	U	3, 17	3
CO 3	Understand the freezing technology of fish	U	7, 16, 18, 21	10
CO 4	Understand the canning of fish	U	5, 6, 9, 10, 15, 19	11
CO 5	Understand the curing and drying of fish	U	4, 12, 14	5
CO 6	Understand the value added fish products	U	13, 22	7

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