

**M. Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER 2024****SEMESTER 3 : AQUACULTURE AND FISH PROCESSING****COURSE : 21P3AQCT10 : AQUARICULTURE, AQUACULTURE ECONOMICS MANAGEMENT AND ADMINISTRATION***(For Regular 2023 Admission and Supplementary 2022/2021 Admissions)*

Duration : Three Hours

Max. Weights: 30

**PART A****Answer any 8 questions****Weight: 1**

1. Explain COD. (An)
2. Explain monopolistic competition. (R, CO 7, CO 8)
3. What is net worth? (U, CO 7)
4. What are protein skimmers? (A, CO 4)
5. What is Pay back period? (An, CO 7, CO 8)
6. Name any two aquarium fishes showing parental care? (E, CO 1)
7. Name four indigenous ornamental fishes. (A, CO 5)
8. Give the scientific name: Fighter fish, Tiger barb, Neon tetra, Discus. (R)
9. Write notes on submerged aquatic plants. (An)
10. What is the scignificance of BOD in a culture system? (E, CO 8)  
**(1 x 8 = 8)**

**PART B****Answer any 6 questions****Weights: 2**

11. How would you design a biological filter in a marine aquarium? (An, CO 4)
12. What are the causes of increased levels of ammonia in aquarium tank? (A, CO 4, CO 5)
13. What is Budgeting? (An, CO 7, CO 8)
14. Give an account on the water quality parameters of a hatchery. (E, CO 7, CO 8)
15. Demand determinants for non-durable consumer goods. (An, CO 7, CO 8)
16. What are different types of manpower and skilled labours needed in a farm? (E, CO 7, CO 8)
17. Discuss about the routine drugs, medicine and chemicals used for fish health and hygiene. (An, CO 6)
18. Transportation of ornamental fishes. (R)  
**(2 x 6 = 12)**

**PART C****Answer any 2 questions****Weights: 5**

19. Explain different types of aquarium filters and its principle. (R, CO 4, CO 5)
20. Explain the law of diminishing returns with the help of a diagram. (An, CO 7)
21. Write an essay on the hatchery production of clown fishes. (U, CO 1)
22. Explain disease management of Ornamental fishes. (A, CO 6)  
**(5 x 2 = 10)**

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Identification and breeding of ornamental fin fishes.	A	6, 21	6
CO 4	Study of construction and maintenance of aquarium	Cr	4, 11, 12, 19	10
CO 5	Setting up of aquarium tanks.	A	7, 12, 19	8
CO 6	Identification of common diseases in aquarium fishes and management	A	17, 22	7
CO 7	Application of production economics in aquaculture	An	2, 3, 5, 13, 14, 15, 16, 20	16
CO 8	Analyze market demand for aquaculture products by conducting consumer surveys.	U	2, 5, 10, 13, 14, 15, 16	11

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