

M.Sc. DEGREE END SEMESTER EXAMINATION - NOVEMBER 2024**SEMESTER 1 : AQUACULTURE AND FISH PROCESSING****COURSE : 24P1AQCT04 : AQUACULTURE ENGINEERING***(For Regular 2024 Admission and Improvement/Supplementary 2023/2022/2021 Admissions)*

Duration : Three Hours

Max. Weights: 30

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

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| 1. Economic factors considered in site selection. | (U, CO 1) |
| 2. Describe anger boring method. | (U, CO 3) |
| 3. What is the significance of UV light in aquaculture? | (U, CO 4) |
| 4. Give examples for mechanical filters. | (U, CO 4) |
| 5. Name brackish water resources. | (U, CO 8) |
| 6. What are drainage ditches? | (U, CO 2) |
| 7. How grain size of soil is significant in aquaculture? | (U) |
| 8. What are the stages of survey operation? | (U, CO 3) |
| 9. What is Bio-fouling? | (U, CO 7) |
| 10. Write the application of the of following in aquaculture engineering : | |
| a. Bulldozer | |
| b. Excavator | (U, CO 4) |
| c. Rollers | |

(1 x 8 = 8)**PART B****Answer any 6 questions****Weights: 2**

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| 11. Explain the areas Suitable for Mariculture. | (U, CO 1) |
| 12. Explain the layout and design of pen. | (U, CO 1) |
| 13. Give an account on the uses of survey. | (An, CO 2) |
| 14. Write short notes on automatic feeders. | (U, CO 8) |
| 15. What are the factors affecting sedimentation in a pond. | (U, CO 3) |
| 16. Explain different types of blowers. | (U, CO 8) |
| 17. Comment on the significance of "Sluice gate." | () |
| 18. Main parts of a cage farm. | (U, CO 1) |

(2 x 6 = 12)**PART C****Answer any 2 questions****Weights: 5**

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| 19. With sketches explain slipping of dike, shean of dike and pond lining. | (U, CO 2) |
| 20. Write an essay on methods of soil compaction and seepage reduction. | (U, CO 3) |
| 21. Site selection for a fresh water aquaculture farm. | (U, CO 1) |
| 22. What are aerators? Explain the different types of aerators. | (U) |

(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Describe the criteria for selection of site for freshwater, brackish water and mariculture systems.	U	1, 11, 12, 17, 20	12
CO 2	Understand the engineering principles which is helpful in design and construction of aqua farms	U	6, 13, 18	8
CO 3	Evaluate the basic features of soil by sampling method for classification ,distribution and strength	U	2, 8, 15, 19	9
CO 4	Understanding the working of different aquaculture equipment including hand tools	U	3, 4, 10	3
CO 7	Understanding the management pond and hatcheries	U	9	1
CO 8	Understand the application of feeding systems in aquaculture	U	5, 14, 16	5

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