

Reg. No

Name

23P150

M. Sc. DEGREE END SEMESTER EXAMINATION : NOVEMBER 2023

SEMESTER 1 : AQUACULTURE AND FISH PROCESSING

COURSE : 21P1AQCT04 : AQUACULTURE ENGINEERING

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

Duration : Three Hours

Max. Weights: 30

PART A

Answer any 8 questions

Weight: 1

1. What are Parallel ponds? (U, CO 2)
2. Describe cohesive soil. (U, CO 3)
3. What is tide guage? (U, CO 1)
4. What is cartridge filters? (U, CO 4)
5. Raft vs rack culture. (U, CO 1)
6. Give examples for mechanical filters. (U, CO 4)
7. Name the use of following:
 - a. Bulldozer
 - b. Excavator
 - c. Rollers(U, CO 4)
8. What is total hardness? (U, CO 1)
9. Name brackish water resources. (U, CO 8)
10. Define Surveying. (U, CO 3)

(1 x 8 = 8)

PART B

Answer any 6 questions

Weights: 2

11. Write a note on erosion in dikes and its control. (U, CO 3)
12. Write short notes on ammonia removal. (U, CO 8)
13. Difference between cost of construction of a square and rectangular ponds. (E, CO 2)
14. What are surface aerators? (U, CO 4)
15. What are the merit and demerits of cage culture? (U, CO 1)
16. Explain the sea water supply system. (U, CO 8)
17. Different types of water flow control devices used in aquaculture. (U, CO 1)
18. Explain water quality requirement for aquaculture. (U, CO 1)

(2 x 6 = 12)

PART C

Answer any 2 questions

Weights: 5

19. Write an essay on classification of soils and describe the types of soils suitable for aquaculture farms. (U, CO 3)
20. Site selection for a fresh water aquaculture farm. (U, CO 1)

21. What are filters? Explain the different types of filters. (U, CO 4)
22. Write an essay on pond layout designing and construction for the farming of fish. (U, CO 2)
- (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	3, 5, 8, 15, 17, 18, 20	14
CO 2	Understand the engineering principles which is helpful in design and construction of aqua farms	U	1, 13, 22	8
CO 3	Evaluate the basic features of soil by sampling method for classification ,distribution and strength	U	2, 10, 11, 19	9
CO 4	Understanding the working of different aquaculture equipment including hand tools	U	4, 6, 7, 14, 21	10
CO 8	Understand the application of feeding systems in aquaculture	U	9, 12, 16	5

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