

M. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2024**SEMESTER 2 - AQUACULTURE AND FISH PROCESSING****COURSE : 21P2AQCT07 - PHYSIOLOGY AND PATHOLOGY OF FINFISH AND SHELL FISH***(For Regular 2023 Admission and Improvement/Supplementary 2022/2021 Admissions)*

Duration : Three Hours

Max. Weights: 30

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

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| 1. Define alkalosis. | (An, CO 3, CO 4) |
| 2. What are oviparous fishes? | (U, CO 5) |
| 3. Comment on 'Exuvia Entrapment Disease. | (U, CO 2, CO 3, CO 4) |
| 4. What is gyrodactylus? | (U, CO 2, CO 3, CO 4) |
| 5. Explain Infectious diseases with examples. | (An, CO 2, CO 3, CO 4) |
| 6. What is platybasic?. | (U, CO 5) |
| 7. How much is the recommended dosage of ovaprim for injecting into carps? | (U, CO 5) |
| 8. What are agastric fishes? | (U, CO 5) |
| 9. Explain the use of common salt in disease prevention. | (U, CO 2, CO 3, CO 4) |
| 10. Gillrot. | (U, CO 2, CO 3, CO 4) |
| | (1 x 8 = 8) |

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

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| 11. Explain the treatments against sporozoan disease. | (U, CO 3, CO 4) |
| 12. Explain the importance of thyroid gland. | (U, CO 1, CO 5) |
| 13. Explain androgenic gland. | (U, CO 5) |
| 14. What is the significance of ammonia in fish? | (U, CO 1, CO 5) |
| 15. What are the common clinical signs that you can observe in diseased fishes in ponds. | (U, CO 3, CO 4) |
| 16. Give an account on osmoconformers. | (U, CO 7) |
| 17. What is blue slime disease? | (U, CO 3, CO 4) |
| 18. What is zoonoses? | (U, CO 5) |
| | (2 x 6 = 12) |

PART C
Answer any 2 questions

Weights: 5

19. What are the principle and practice of induced breeding in fishes? Explain. (U, CO 5, CO 8)
20. Explain physiology of digestion and absorption in fishes. (An, CO 1, CO 5)
21. Discuss about vaccination in aquaculture. (U, CO 3, CO 4)
22. Explain the immune system in fishes. (U, CO 3, CO 4)
- (5 x 2 = 10)**

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Understand the basic physiology of fin fish and shell fish and its relation to cultural conditions	U	12, 14, 20	9
CO 2	Identification of pathogens in aquacultural organisms	U	3, 4, 5, 9, 10	5
CO 3	Understand the classification of disease in aquaculture systems	U	1, 3, 4, 5, 9, 10, 11, 15, 17, 21, 22	22
CO 4	Describe the disease control of fin and shellfish, remedial and prophylactic measures	U	1, 3, 4, 5, 9, 10, 11, 15, 17, 21, 22	22
CO 5	Comparative study of physiological characters of fin fish and shell fish	E	2, 6, 7, 8, 12, 13, 14, 18, 19, 20	22
CO 7	Understand the ecophysiology and environmental requirements for the metabolism of aquatic organisms	U	16	2
CO 8	Understand the principles and application of eye stalk ablation and hypophysation in fin fish and shell fish hatcheries	U	19	5

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