Reg. No ..... Name **25P2041**

M.Sc. DEGREE END SEMESTER EXAMINATION - APRIL 2025

SEMESTER 2 : AQUACULTURE AND FISH PROCESSING

COURSE : **24P2AQCT07/21P2AQCT07 : PHYSIOLOGY AND PATHOLOGY OF FINFISH AND SHELL FISH**

(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**

1.	Give an account on Y- organ.	(U, CO 5)
2.	What is meant by obligatory food.	(U, CO 1, CO 5)
3.	Fin rot.	(An, CO 2, CO 3, CO 4)
4.	Ich disease.	(U, CO 2, CO 3, CO 4)
5.	Effects of Anchor Worms on culture animals.	(An, CO 2, CO 3, CO 4)
6.	What are the functions of Dopamin?	(U, CO 5)
7.	What is sekoke.	(U, CO 2, CO 3, CO 4)
8.	Assessment of vaccines.	(U, CO 2, CO 3, CO 4)
9.	Write notes on Breeding hapa.	(U, CO 5)
10.	What is Ampullae of Lorenzini?	(U, CO 5)

(1 x 8 = 8)

PART B

Answer any 6 questions **Weights: 2**

11.	Explain Yolk sac dropsy.	(An, CO 2, CO 3, CO 4)
12.	What are molting hormone?	(U, CO 5)
13.	Give an account on the significance of urea in fishes.	(U, CO 1, CO 5)
14.	Differentiate between the kidneys of marine teleost and fresh water teleost.	(U, CO 1, CO 5)
15.	What is Necrosis?	(An, CO 2, CO 3, CO 4)
16.	Briefly explain neurohaemal organs.	(U, CO 5)
17.	Give an account on luminescent bacterial infection.	(U, CO 3, CO 4)
18.	Differentiate between bilateral and unilateral eye stalk ablation.	(U, CO 8)

(2 x 6 = 12)

PART C

Answer any 2 questions **Weights: 5**

19.	Explain the biology of neuron co ordination in fishes.	(E, CO 1, CO 5)
20.	Explain the strategies to prevent the occurance of disease in shrimp hatcheries	(An, CO 3, CO 4)
21.	Write on the vitamin deficiency diseases of fishes.	(U, CO 3, CO 4)
22.	What are the principles and methods of prophylaxis and chemotherapy of 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	2, 13, 14, 19	10
CO 2	Identification of pathogens in aquacultural organisms	U	3, 4, 5, 7, 8, 11, 15	9
CO 3	Understand the classification of disease in aquaculture systems	U	3, 4, 5, 7, 8, 11, 15, 17, 20, 21, 22	26
CO 4	Describe the disease control of fin and shellfish, remedial and prophylactic measures	U	3, 4, 5, 7, 8, 11, 15, 17, 20, 21, 22	26
CO 5	Comparative study of physiological characters of fin fish and shell fish	E	1, 2, 6, 9, 10, 12, 13, 14, 16, 19	18
CO 8	Understand the principles and application of eye stalk ablation and hypophysation in fin fish and shell fish hatcheries	U	18	2

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