

QP CODE: 24020101



Reg No :

Name : .....

# B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2024

### **Second Semester**

B.Sc Zoology Model II Aquaculture

## **Vocational Course - ZA2VOT04 - BIOLOGY OF FISHES**

2017 ADMISSION ONWARDS

791DE1B5

Time: 3 Hours Max. Marks: 60

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#### Part A

Answer any **ten** questions.

Each question carries **1** mark.

- 1. Name four types of meristic data used in taxomomic studies.
- 2. What is operculum?
- 3. What is Branchial Chamber?
- 4. What is a Suprabranchial chamber?
- 5. What is Hepatic Portal System?
- 6. Distinguish between Foramen of Munro and Aqueduct of Sylvius.
- 7. Which are the hormones influencing osmoregulation in fishes?
- 8. Distinguish between anadromous and catadromous migration with examples.
- 9. Explain ciliary feeding in bivalves.
- 10. Explain buccal mass in Cephalopods.
- 11. Write down the equations for absolute and relative growth rate and explain the terms.
- 12. Distinguish between dark bands and light bands in growth estimation.

 $(10 \times 1 = 10)$ 

#### Part B

Answer any six questions.

Each question carries 5 marks.



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- 13. Explain with suitable diagrams the different types of scales seen in fishes.
- 14. Give a generalized description of a teleost alimentary canal. How does its structure vary according to the feeding habits of the fish?
- 15. What are the different types of swim bladders in teleosts? Enumerate the functions of the swim bladder.
- 16. Describe the structure of Visceral arches in teleosts.
- 17. Discuss swimming activity and types of locomotion in fishes.
- 18. Give an account of the natural feed of fishes with examples.
- 19. Explain the different types of feeding exhibited by fishes with suitable examples. Add a note on the natural food of fishes.
- 20. Define size at first maturity. How is it determined?
- 21. What is fecundity? Explain different methods for the determination of fecundity in fishes.

 $(6 \times 5 = 30)$ 

#### Part C

Answer any two questions.

Each question carries 10 marks.

- 22. With the help of a neat and labelled diagram, describe the structure and working of the Membranous Labyrinth in Teleosts.
- 23. What is Parental care? Explain the different types of parental care exhibited by fishes.
- 24. What are the feeding habits and feeding appendages of prawns? Describe the method of feeding in prawns.
- 25. What are the different types of reproduction seen in fishes? Elaborate on the different methods of studying reproduction in fishes.

 $(2 \times 10 = 20)$ 

