

PG (CBCS)  
M.SC. Semester- IV Examination, 2023  
ZOOLOGY  
PAPER: ZOO 403A  
(AQUACULTURE & FISH TECHNOLOGY AND INLAND AND MARINE  
FISHERIES)

Full Marks: 40

Time: 2 Hours

**Write the answer for each unit in separate sheet**

The figures in the right-hand margin indicate full marks.  
Candidates are required to give their answers in their own words as far as practicable.

**ZOO 403A.1**  
**AQUACULTURE & FISH TECHNOLOGY**  
**F.M. - 20**

**GROUP-A**

1. Answer any **TWO** of the following questions: 2×2=4
- What are the main advantages of integrated fish farming?
  - Write down the causative agents of Argulosis and Trichodiniasis infection in fish.
  - What is the contribution of aquaculture in National GDP?
  - What do you mean by Semi closed recirculating system?

**GROUP-B**

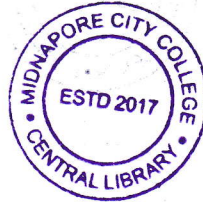
2. Answer any **TWO** from the following questions: 2×4=8
- Write a note on the advantages of paddy cum fish farming practices and future prospect.
  - Write the difference between extensive, semi-intensive and intensive aquaculture practices.
  - Briefly describe benefits of aquaculture from human perspective.
  - What are the problems of fish drying technique?

**GROUP-C**

3. Answer any **ONE** of the following questions: 1×8=8
- What is extension education? How extension education helps to improve fishermen community? 2+6
  - What is inbreeding depression? Describe briefly the hybridization techniques with example from fish. Add a note on constraints of gynogenesis. 2+4+2

(P.T.O)

**ZOO 403A.2**  
**INLAND AND MARINE FISHERIES**  
**F.M. - 20**



**GROUP-A**

4. Answer any **TWO** from the following questions: 2×2=4
- a) What is SIFS?
  - b) Classify Inland Fisheries of India.
  - c) Why is fish referred to as “Rich Food for Poor People”?
  - d) Enlist the marine products exported from India.

**GROUP-B**

5. Answer any **TWO** from the following questions: 2×4=8
- a) Classify lakes on the basis of circulation. What is Oxbow lake? 3+1
  - b) What is River Ranching Programme? Mention the importance of estuary as an ecosystem. 2+2
  - c) Distinguish between industrial and municipal waste water. Mention two secondary treatment measures for waste water management. 2+2
  - d) What is GIS system? What are the applications of Remote Sensing in fisheries. 1+3

**GROUP-C**

6. Answer any **ONE** from the following questions: 1×8=8
- a) What is Public Health Fishery? Give an elaborate account of Waste Stabilization Pond. 2+6
  - b) Comment on: 4+4
    - i) Shellfish Fishery.
    - ii) Lakes formed by volcanic activity.

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