

2022

ZOOLOGY

[P.G.]

(M.Sc. Fourth Semester End Examination-2022)

PAPER-403 (Fishery Special)

*Full Marks: 40*

*Time: 02 Hrs*

*The figures in the right hand margin indicate marks*

*Candidates are required to give their answers in their own words as far as practicable*

*Illustrate the answers wherever necessary*

**USE SEPARATE ANSWER SCRIPT FOR EACH GROUP**

**Group-A**

**[Aquaculture and Fish Technology]**

**[F.M. – 20]**

1. Answer any two questions from the following: 2x2= 4
- a) Write about the optimum water and soil condition for fish culture.
  - b) Distinguish between fishery and aquaculture
  - c) Write a note on history of aquaculture.
  - d) Name four fish by products that are economically important.

(2)

2. Answer any two questions from the following:  $2 \times 4 = 8$
- Write a note on fishery extension with example.
  - Write about the guideline of organic aquaculture. Mention its importance.
  - Write briefly the fishing harvesting and processing techniques of fine fish.
  - Discuss the ecological impact of coastal shrimp farming.

3. Answer any one questions of the following:  $1 \times 8 = 8$
- Write briefly the relation between feeding and growth of fin fishes.
  - Write the causative agent, symptom and preventive measure of bacterial disease (any one) and fungal disease (any one) of carp.

**Group-B**

**[Inland and Marine fishery]**

**[F.M. – 20]**

4. Answer any two questions from the following:  $2 \times 2 = 4$
- Name two marine and two estuarine fishes.
  - Write down the salinity range of both estuarine and marine zone of ocean.
  - What do you mean by reservoir? Give an example from West Bengal.

(3)

- d) Define waste water. Name two waste water fishes.
5. Answer any two questions from the following:  $2 \times 4 = 8$
- Give a quantitative measurement of fresh water distribution in India.
  - Write the prospects of reservoir fishery in India.
  - Write the criteria for selection of fishes in aquaculture system.
  - Write about secondary treatment of waste water.
6. Answer any one question of the following:  $1 \times 8 = 8$
- Define estuary. Why estuary is so important in fishery? Write a note on estuarine fishery in West Bengal.  
 $2+2+4$
  - What is the full form of GIS? Write down the working Principle of RS-GIS and its application in marine fisheries.  
 $2+4+2$