Roll No.

IV Semester Examination, 2022

M.Sc.

ZOOLOGY

Paper III

(Aquaculture and Fisheries)

Time: 3 Hours]

Max. Marks: 80

Note: All questions are compulsory. Question Paper comprises of 3 sections. Section $\bf A$ is objective type/multiple choice questions with no internal choice. Section **B** is short answer type with internal choice. Section **C** is long answer type with internal choice.

SECTIONA

 $1 \times 8 = 8$

(Objective Type/Multiple Choice Questions)

Choose the correct answer:

- **1.** Which of the suitable for fish forming?
 - (a) Eel

- (b) Tuna
- (c) Tilapia
- (d) Sardine
- **2.** Spinal deformities in formed fish occure due to the difficiency of:
 - (a) Vitamin A
- (b) Vitamin C
- (c) Vitamin B
- (d) Vitamin D

P.T.O.

- **3.** What is the optimum salinity requirement for breeding of macrobrachium malcolmsonii?
 - (a) 10-15 ppt
- (b) 18-20 ppt
- (c) 12-14 ppt
- (d) None of these
- **4.** 'Blue revolution' is related with the following:
 - (a) Milk production (b) Food grain production
 - (c) Fish production (d) Oil seed production
- **5.** Which is cat fish?
 - (a) Clarias botracus (b) Bagarius
 - (c) Tanchysurus
- (d) Mystus seenghala
- **6.** Catla is a:
 - (a) Mid water feeder (b) Surface feeder
 - (c) Both (a) and (b) (d) Column feeder
- 7. Ideal rice species for paddy cum fish farming which has strong root system.
 - (a) Tulsi

- (b) Panidhan
- (c) Rajarajan
- (d) All of these
- **8.** Pearl oyster belongs to class:
 - (a) Cephalopoda
- (b) Palecypoda
- (c) Gastropoda
- (d) Scaphapoda

H-4/34(A)/22

SECTION B

 $6 \times 4 = 24$

(Short Answer Type Questions)

Note: Attempt *one* question from each unit.

Unit-I

1. Write the general characters of Actinopterygii.

Or

Write general characters of Elasmobranch.

Unit-II

- **2.** Write short notes on any one :
 - (a) Hatching Happa
 - (b) Dry Bundh Breeding

Unit-III

3. Write notes of composite fish culture.

Or

Preparation of fish aquarium.

Unit-IV

4. Write difference between capture fisheries and culture fishereis.

Or

Write notes any two fish pathogen protozoan.

SECTION C

 $12 \times 4 = 48$

(Long Answer Type Questions)

Note: Attempt *one* question from each unit.

Unit-I

1. Describe the evolution and phylogeny of crossopterygii.

Or

Write notes on evolution and phylogeny of elasmobranchi.

Unit-II

2. Write an essay on different types of fishing methon by different net.

Or

Describe construction and maintenence of fresh water fish farm.

Unit-III

3. Describe Integrated fish farming.

Or

Describe sewage fisheries.

Unit-IV

4. Write notes on fish by product.

Or

Describe pearl fishery.

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