H-4/3	35(A	.)/22
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Roll No. ....

# IV Semester Examination, 2022

# M.Sc.

### **ZOOLOGY**

Paper IV (Ichthyology)

Time: 3 Hours ]

Max. Marks: 80

**Note**: All questions are compulsory. Question Paper comprises of 3 sections. Section **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**

 $1\times8=8$ 

P.T.O.

## (Objective Type/Multiple Choice Questions)

Choose the correct answer:

- **1.** This is living fossil:
  - (a) Lapidosiren
- (b) Latetimeria
- (c) Lepiosteus
- (d) None of these
- **2.** This is migratory fish:
  - (a) Ribbon fish
- (b) Carp
- (c) Salmon
- (d) Shark

**3.** Placoid scales are found in :

- (a) Palentological fishes
- (b) Leing fishes
- (c) Bony fishes
- (d) Cartilagenous fish
- **4.** Parental care by males is found in :
  - (a) Hippocampus
- (b) Labeo
- (c) Anabes
- (d) Whales
- **5.** Most venomous fish is:
  - (a) Electric ray
- (b) Saw fish
- (c) Stone fish
- (d) Dog fish
- **6.** Maltase cross is found in :
  - (a) Brain of shark
- (b) Intestine of shark
- (c) Verlebra of shark (d) Teeth of shark
- **7.** Sucking mouth is present in :
  - (a) Ostracoderms
- (b) Lampreys
- (c) Hag fishes
- (d) Sharks
- **8.** Which of the following fishes is viviperous?
  - (a) Salmons
- (b) Lamprey

(c) Shark

(d) Chimeras

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**SECTION B** 

 $6 \times 4 = 24$ 

# (Short Answer Type Questions)

**Note**: Attempt *one* question from each unit. Answer not more than 400-450 words.

#### Unit-I

**1.** Write the significance of colouration.

Or

Write the types of locomotion in fishes.

#### **Unit-II**

**2.** What is the function of electric organ?

**O**r

What is the condition of deep sea?

### **Unit-III**

**3.** What specific adaptation found in Buccopharynx of Teleosts fishes?

Or

Write digestion of food in fishes.

#### **Unit-IV**

**4.** Write the osmoregulation in fresh water fishes.

**O**r

Draw the labelled diagram of membranous labyrinth of teleosts.

**SECTION C** 

 $12 \times 4 = 48$ 

### (Long Answer Type Questions)

**Note**: Attempt *one* question from each unit. Answer not more than 400-450 words.

#### Unit-I

**1.** Describe the types of fins in fishes.

Or

Describe the skin of fish.

### **Unit-II**

**2.** Explain the adaptation in the Hill stream fishes.

Or

Explain the adaptation in deep sea fishes.

### **Unit-III**

**3.** Explain the structure of weberion ossicles found in fishes.

Or

Explain the swim bladder found in fishes.

## **Unit-IV**

**4.** Draw the labelled diagram of Brain.

Or

Draw the labelled diagram of excretory system.

\* \* \* \* \* \* C \* \* \* \* \*