

Roll No. : .....

Total No. of Questions : 11 ]

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# **BPF-2196**

**M.Sc. (Final) Examination, 2022**

**ZOOLOGY**

Paper - VIII (d)

**(Fish Biology)**

*Time : 3 Hours ]*

*[ Maximum Marks : 75*

**Section-A**

**(Marks : 2 × 10 = 20)**

*Note :-* Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

**Section-B**

**(Marks : 5 × 5 = 25)**

*Note :-* Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **5** marks.

**Section-C**

**(Marks : 10 × 3 = 30)**

*Note :-* Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

**Section-A**

2 each

1. Attempt all *ten* questions :

- (i) What is Living Fossil ? Give example from fish.
- (ii) What is Thermocline ?

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- (iii) What do you mean by hardness of water ?
- (iv) Define induced breeding.
- (v) What is 'Isinglass' ?
- (vi) What are 'Fish Seed' ?
- (vii) How the lime is useful in Aquaculture ?
- (viii) Write the name of two bacterial and viral diseases in fishes.
- (ix) Define Epipelagic Zone.
- (x) Define Carangiform Locomotion.

**Section-B**

5 each

**Note** :- Attempt all *five* questions :

2. What are the features of estuarine ecosystem ?

*Or*

Write a note on Plankton in related to fisheries.

3. Write a note on composite and cage culture.

*Or*

Describe chemical factors influencing in fish culture.

4. Write a note on factors influencing fish production in marine water.

*Or*

Write a note on different types of Hatcheries units used in India.

5. What types of modification present in Hill stream fishes ?

*Or*

Write a note on effect of pollutants on fishes.

6. What is Fish Migration ? Explain causes of fish migration.

*Or*

Write a note on Bioluminescence.

**Section–C**

10 each

*Note* :- Attempt any *three* questions :

7. Write an essay on biology of Indian major carps.
8. Write an account of Bi-products of fishing industry.
9. Write an essay on Exotic fishes and their role in Indian Freshwater.
10. Describe the various types of diseases present in fishes.
11. Write a note on different types of poison glands present in fishes.