

[4]

**SECTION 'C'**

4 × 10 = 40

Long Answer questions (Word limit 400-450 words.)

**UNIT-I**

- Q. 1.** Give detail account of Elasmobranchii, their origin, evolution and phylogeny.

**OR**

Describe the general character, origin and phylogeny of Teleostomi.

**UNIT-II**

- Q. 2.** Write an essay on stocking and transport of fish seed and brood fish.

**OR**

Describe the physic chemical condition of water and its effect on fishes.

**UNIT-III**

- Q. 3.** Write an essay on prawn fishery.

**OR**

Give detail accounts on marine fisheries of India.

**UNIT-IV**

- Q. 4.** What are the main helminth parasites of fishes? Describe the diseases caused by them.

**OR**

Write an essay on viral diseases of fishes.

-----XXX-----

[1]

ROLL NO.....

**ZOO. 404/21**

**IV SEMESTER EXAMINATION, 2021**

**M.Sc. (ZOOLOGY)**

**PAPER-IV**

**AQUACULTURE & FISHERIES**

**TIME: 3 HOURS**

**MAX.- 80**

**MIN.- 16**

**Note:** The question paper consists of three sections A, B & C. All questions are compulsory.

**Section A- Attempt all MCQ questions**

**Section B- Attempt one question from each unit.**

**Section C- Attempt one question from each unit.**

**SECTION 'A'**

2 × 8 = 16

**Multiple Choice Questions**

1. Rat fishes are -  
(a) Salmons  
(b) Lamprey  
(c) Sharks  
(d) Chimeras
2. The armored fishes are -  
(a) Chondrichthyes  
(b) Osteichthyes  
(c) Placoderms  
(d) Acanthodians
3. Fish production is practiced with -  
(a) Maize crop  
(b) Paddy  
(c) Wheat  
(d) Pulse

[2]

4. Scientific name of Mangur is -
- (a) Trichogaster Ficciatus
  - (b) Clarias batrachus
  - (c) Xentodon cancila
  - (d) Tanchysurus Sona
5. Fish are called fry, when -
- (a) They hatch from eggs
  - (b) While they are larvae
  - (c) When they are capable of feeding themselves
  - (d) None of the above
6. Crustacean fishery is connected with exploitation of -
- (a) Oysters and crabs
  - (b) Mussels and squids
  - (c) Shells and cuttle fish
  - (d) Lobsters and prawns
7. Black-Spot disease of marine fishes is caused by -
- (a) Retrovirus
  - (b) Dinoflagellates
  - (c) Ichthyophthirius multifillis
  - (d) Flat Worm
8. Which of the following is a 'Bacterial Disease'.
- (a) Velvet disease
  - (b) Costiasis
  - (c) Fin-rot
  - (d) Cilodon-disease

[3]

**SECTION 'B'**  
**Short Answer Type Questions**

4 × 6 = 24

**UNIT-I**

- Q.1.** Give the evolution, phylogeny and general characteristics of Holocephali.

**OR**

Describe the distribution and characteristics of Diphoi Fishes.

**UNIT-II**

- Q.2.** Write a note on pond management for fish culture.

**OR**

What is dry and wet bundh breeding? Explain with suitable diagram.

**UNIT-III**

- Q.3.** Write the importance of Sewage fisheries.

**OR**

Write about the composition of fishes in composite fish culture.

**UNIT-IV**

- Q.4.** Write about the main protozoan diseases of fish.

**OR**

Write a note on prophylaxis and treatment of fish disease.