

Total number of printed pages-4

3 (Sem-6/CBCS) ZOO HE 2

2025

**ZOOLOGY**

(Honours Elective)

Paper : ZOO-HE-6026

**(Fish and Fisheries)**

Full Marks : 60

Time : Three hours

**The figures in the margin indicate full marks for the questions.**

1. Fill in the blanks : **(all seven)** 1×7=7
- (a) Osmoregulation is \_\_\_\_\_.
- (b) \_\_\_\_\_ is the first transgenic fish that was used as food.
- (c) Epizootic ulcerative syndrome (EUS) in fish is primarily a \_\_\_\_\_ disease.
- (d) Scales in fish can be used in determining the \_\_\_\_\_ of fish.

Contd.

- (e) Argulosis is a disease in fish caused by the infestation of \_\_\_\_\_.
- (f) The collection of reproductively mature adult fish within a population that breed is referred to as \_\_\_\_\_.
- (g) Inland fisheries involve cultivating and catching fish in \_\_\_\_\_ environments.

2. Answer **all four** questions :  $2 \times 4 = 8$

- (a) Write *two* characters of *Chondichthyes* fishes.
- (b) What are the different types of fins in a fish ?
- (c) Write the basic principle of Composite fish culture.
- (d) Write the functions of Swim Bladder in fish.

3. Write short notes on : (**any three**)  $5 \times 3 = 15$

- (a) Types of scales in fish
- (b) Electric organs in fish

(c) Pen culture

(d) Zebra fish as a model organism in research

(e) Parental care in fish

4. Answer the following questions :  $10 \times 3 = 30$

(a) What is Migration? Describe the different types of migration in fish with examples. Write the factors influencing in fish migration.  $2+6+2=10$

**OR**

Describe various Fishery byproducts with their methods of preparation and uses. 10

(b) What is remote sensing? Write the application of remote sensing and GIS in fisheries.  $2+8=10$

**OR**

Describe the bacterial and fungal diseases of fish with their symptoms and prophylaxis. 10

(c) What is Sustainable Aquaculture? Describe extensive, semi-intensive and intensive culture of fish with their stocking density and production.

2+8=10

**OR**

What is Induced breeding? Describe the hypophysation technique of induced breeding of fish.

2+8=10