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.

(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

(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 : 2×4=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)*

5×3=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 : 10×3=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