

**2025/FYUG/ODD/SEM/
IFFDSM-101T/397**

FYUG Odd Semester Exam., 2025

INDUSTRIAL FISH AND FISHERIES

(1st Semester)

Course No. : IFFDSM-101T

(Taxonomy and Physiology)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

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

UNIT—I

I. Answer any *two* of the following questions :

2×2=4

- (a) Differentiate between taxonomy and systematics.
- (b) Write a note on sibling species.
- (c) What is the main purpose of classification?

(2)

2. Answer any one of the following questions :

(a) What is species concept? Describe biological species concept in taxonomy.

(b) Write the full form of ICZN. Enumerate the rules of nomenclature.

UNIT—II

3. Answer any two of the following questions :

(a) Why is Dipnoi called lungfish?

(b) Name three genera of lungfishes.

(c) Write the salient feature of Cypriniformes.

4. Answer any one of the following questions :

(a) Write an essay on different types of scales found in fishes with suitable diagrams.

(b) Enlist and briefly describe the important fish fauna of N-E India with special reference to Barak valley.

(3)

UNIT—III

5. Answer any two of the following questions :

2×2=4

(a) Write on the feeding habits of Indian major carps.

(b) State the role of digestive glands in the process of digestion.

(c) Write a note on gastrosomatic index.

6. Answer any one of the following questions : 10

(a) Write a detailed note on functional significance of air bladder in teleosts.

(b) Describe the structure of alimentary canal and digestive glands of *Scoliodon* with diagrams.

UNIT—IV

7. Answer any two of the following questions :

2×2=4

(a) Note down the function of rectal gland.

(b) Write a note on the types of kidneys found in fishes.

(c) What do you mean by afferent and efferent branchial arteries?

(4)

8. Answer any *one* of the following questions :
- (a) Define excretion. Discuss osmo-regulatory mechanism in freshwater fishes.
 - (b) Describe the arterial system of *Labeo rohita* with necessary diagrams.

UNIT—V

9. Answer any *two* of the following questions : 2x
- (a) Write a note on lateral line system in fishes.
 - (b) What is Ampullae of Lorenzini? Explain briefly.
 - (c) Name the endocrine glands of fishes.
10. Answer any *one* of the following questions :
- (a) Describe the structure of internal ear in fishes with suitable diagram.
 - (b) Name the hormones secreted by the anterior pituitary with their functional significance.

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