

M.Sc. ZOOLOGY  
THIRD SEMESTER  
FISH AND FISHERY BIOLOGY-II  
MSZ-304 C

**SET  
A**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 1hr. 30 mins.

Full Marks: 35

**(Objective)**

Time: 15 mins.

Marks: 10

Choose the correct answer from the following:

1×10=10

- In hill stream fishes the air-bladder is considerably:
  - Reduced or degenerate
  - Expanded vertically
  - Contracted
  - Expanded and contracted
- The hill stream fishes generally possess:
  - Long narrow, band shaped caudal peduncle
  - Arrow shaped caudal peduncle
  - Bow shaped peduncle
  - All of the above
- It is generally believed that vacuum produced by ridges and grooves of the adhesive disc in Hill stream Fishes:
  - Brings about attachment with rocks
  - Brings about detachment with rocks
  - Attachment as well as detachment to rocks
  - None of the above
- Fish provides vitamin/vitamins:
  - A, B and D
  - Vitamin A<sub>1</sub>
  - B only
  - None of the above
- When a dam is constructed:
  - It helps in the movement of fish
  - It acts as a barrier in the movement of fish
  - None of the above
  - Both a & b
- Vitamins of B group in fishes are:
  - Water soluble
  - Fat soluble
  - Both a and b
  - None
- Crab meat lacks.....
  - Lipids
  - Minerals
  - Proteins
  - Carbohydrates
- Chlorine known for its medicinal value and found in large quantities in fishes of Bengal is used for:
  - In treating anemic patients
  - In treating hunger edema in Full fed patients
  - In treating hunger edema in underfed patients
  - None of the above

9. The mighty river Brahmaputra with tributaries has a combined length of:
- a. 4000 Km
  - b. 11 Km
  - c. 99 Km
  - d. All of the above
10. The Indian Shad Hilsa Ilisha is a .....migratory fish.
- a. Catadromous
  - b. Anadromous
  - c. Diagonal
  - d. Rhombic

**(Descriptive)**

Time : 1 hr. 15 mins.

Marks : 25

[ Answer question no.1 & any two (2) from the rest ]

- |   |    |
|---|----|
| 1. Discuss briefly what you know about plankton and its role in fisheries.  | 5  |
| 2. What are hill stream fishes? Describe the pristine conditions prevailing in the hill streams. Explain briefly about the modifications and adaptations of hill stream fishes. | 10 |
| 3. Highlight some salient aspects on the biochemical composition of fish.   | 10 |
| 4. Discuss the effects of dams on fish migration suggesting suitable remedies and add a note on the effect of dams on Hilsa migration.  | 10 |
| 5. Discuss briefly what you know about the freshwater Inland Capture Fishery Resources of India.  | 10 |

= = \*\*\* = =