## 2021

## **ZOOLOGY — HONOURS**

Paper: DSE-B(2)-2 (Fish and Fishery) Full Marks: 50

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

## Answer any ten questions.

1.	Classify class Osteichthyes (upto subclass) mentioning two characteristics and one example of each taxon.
2.	State modifications of mouth structure of fishes depending on their feeding habitat at different water levels. How does relative length of gut (RLG) value indicate feeding habit of fishes?  3+2
3.	Name the types of median fins found in fishes with their location on the body. What do you mean by homocercal and heterocercal caudal fin?  3+2
4.	Differentiate between cycloid and ctenoid scales. How scales are used to determine the age of a fish? 3+2
5.	Distinguish between physostomous and physoclistous types of swim-bladder. Write the role of swim-bladder as a hydrostatic organ.  3+2
6.	What is the function of electric organ in fishes? Write a short note on bioluminescence in fishes. 2+3
7.	Distinguish between gill net and drag net. Name any two types of fishing craft used inWest Bengal. 3+2
8.	State any three differences between inland and marine fisheries. How GIS technology has improved fishing yield?
9.	Briefly discuss the reasons behind depletion of fisheries resources in India.
10.	Differentiate between intensive and semi-intensive system of fish culture. What are pen culture and cage culture?
11.	Write the method for selection and segregation of brood stock in an aquaculture farm.

12. Elaborate the steps of hypophysation during induced breeding of carps.

Please Turn Over

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T(6th Sm.)-Zoology-H/[DSE-B(2)-2]/CBCS (2)

- 13. How water quality is important for preparation of aquarium? Name two fish preservation techniques. 3+2
- 14. Write the name of causal organism, two symptoms and preventive measure of one bacterial and one viral disease of fish.  $2\frac{1}{2}+2\frac{1}{2}$
- **15.** What are the advantages of composite fish culture? State the importance of isinglass as fishery by-product. What is transgenic fish? 2+2+1