



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 1st Semester Examination, 2021-22

IFFACOR01T-INDUSTRIAL FISH AND FISHERIES (CC1)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

1. Answer any **seven** questions from the following: 2×7 = 14
 - (a) Distinguish between the mouth structure of *Petromyzon* and *Myxine*.
 - (b) What is natural classification?
 - (c) Write the scientific names of two scaleless fish.
 - (d) What is lobefin fish?
 - (e) How lateral line scales differs from other scales of a fish body?
 - (f) What is spiracle in fish? Give example.
 - (g) What is the peculiarity of pectoral fin in sting ray?
 - (h) Mention the names and numbers of barbels of *Mystus* sp.
 - (i) What is pleopod? Mention its function.

2. Write short notes on any **two** of the following: 3×2 = 6
 - (a) Jawless fish
 - (b) Binomial nomenclature
 - (c) Decapoda
 - (d) Taxonomic importance of gill raker.

3. Answer any **four** questions from the following: 5×4 = 20
 - (a) What do you mean by morphometric study of a fish? Define with labelled diagram the following measurements of a carp: 1+4
 - (i) Standard length, (ii) Predorsal length, (iii) Length of the snout, (iv) Body depth.
 - (b) Write an account of different types of fin rays in fish. Discuss their importance in meristic study of fish with example. 2+3
 - (c) Describe with labelled diagram the external morphology of *Macrobrachium rosenbergii* with reference to taxonomic features. 5

- (d) Mention at least four distinctive characters of Crustacea. Name the order with one order character of the following Crustaceans. 2+3
(i) Daphnia, (ii) Cyclops, (iii) Krill
- (e) Mention four general characteristics of the order Clupeiformes. Name the order with one order character of the following fishes : 2+3
i) *Cirrhinus*, ii) *Notopterus*, iii) *Sphyrna*
- (f) Give a comparative account of elasmobranch and teleostean fish. What is subspecies? Give example from fish. 3+2

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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