



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 1st Semester Examination, 2020, held in 2021

IFFACOR01T-INDUSTRIAL FISH AND FISHERIES (CC1)

TAXONOMY OF AQUATIC ORGANISMS

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) Mention the location and function of uropod.
 - (b) What is scroll valve? Mention its function.
 - (c) Give the scientific name along with distribution of two lung fish.
 - (d) What is rostrum? Mention its taxonomic significance.
 - (e) Mention the occurrence and function of chelate appendages.
 - (f) Distinguish between pereopod and pleopod.
 - (g) What is the difference between Total length and Standard length of fish?
 - (h) What is the peculiarity of Lateral line in tilapia?
 - (i) Mention the Structural and Taxonomic significance of Fin rays in fish.

2. Write short notes on any **two** of the following: 3×2 = 6
 - (i) ICZN; (ii) Cladistic classification; (iii) Placoderm; (iv) Genitalia of prawn.

3. Answer any **four** questions from the following: 5×4 = 20
 - (a) Describe with labelled diagram the external morphology of Lobster with reference to taxonomic features. 5
 - (b) Define type. Write an account of different kinds of type in Taxonomy. 1+4
 - (c) Make a distinctive account of Actinopterygian and Sarcopterygian fishes. Comment on coelacanth. 3+2

- (d) Mention the general characters of class Crustacea. Make a comparative account of *Macrobrachium rosenbergii* and *Penaeus monodon* with respect to cephalothoracic parts adding necessary diagram. 2+3
- (e) Discuss the importance of Biochemical and Karyotypic characteristics in the taxonomic study of fish. 5
- (f) Name the Order with one Order character of the following fishes: 5
- (i) *Setipinna*; (ii) *Pristis*; (iii) *Mystus*; (iv) *Rastrelliger*; (v) *Cynoglossus*.

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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