

**2018**

**CBCS**

**1st Semester**

**INDUSTRIAL FISH AND FISHERIES**

**PAPER—C1T**

**(Major)**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

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

*Illustrate the answers wherever necessary.*

***Taxonomy, Classification  
and Evolution of fishes***

1. Answer any *five* questions :

5×2

(a) State the important properties of scientific nomenclature.

*(Turn Over)*

- (b) Define holotype and paratype with proper examples.
- (c) What is Macro taxonomy ?
- (d) Give scientific name, one of each Gastropoda, Bivalvia, Crustacea and Cephalopoda.
- (e) Cite order name and example of Dipnoan fishes.
- (f) Give an idea about golden age of fish.
- (g) What do you mean by sibling species ? Give example from fish.
- (h) Give one example of the following fish orders Beloniformes, Rajiformes, Mastacembeliformes and Symbranchiformes.

2. Answer any *four* questions : 4×5

- (a) Enumerate the role of taxonomy in aquaculture and biological control.
- (b) Discuss about fish bar-coading technique.
- (c) Write a note on ICZN.
- (d) Briefly discuss about the evolutionary process of Bony fishes.

(e) Classify Crustacea upto subclass with suitable examples.

(f) Give an idea of phylogenetic tree.

3. Answer any one question : 1×10

(a) (i) Define synonym and homonym with examples.

(ii) Discuss Law of priority.

(iii) What do you mean by nomen hybridum ?

(iv) Write short note on living fossils of fishes.

$3+2\frac{1}{2}+2+2\frac{1}{2}$

(b) (i) Mention the order name of following fishes with characters : *Heteropneustes fossilis*, *Pampus argenteus*, *Lates calcarifer* and *Ctenopharyngodon idella*.

(ii) Define Sympatric and Allopatric speciation with proper explanation.

$1\frac{1}{2}\times 4+4$