

2019

MAJOR

1st Semester Examination

INDUSTRIAL FISH & FISHERIES

Paper—C 1-T

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Taxonomy, Classification and Evolution of fishes

1. Answer any five questions : 5×2=10
- (a) Define binomial nomenclature.
 - (b) Define cladogram? State its importance.
 - (c) Write down the systematic position of *Scylla serrata* and *Bellamyia bengalensis*.
 - (d) What is living fossil? Give example from fish.
 - (e) State about homonymy & Synonymy with proper example from fish.

[Turn Over]

(f) Mention the order name of following fishes :
Trygon sp., *Harpodon* sp. *Tenualosa ilisha*,
Mystus gulio.

(g) Write down the steps of Linnaean hierarchy.

(h) Mention name of 4 different types of fish of freshwater fishes.

2. Answer any four questions : $4 \times 5 = 20$

(a) Discuss about the morphometry study of fishes.

(b) Give an idea about Cataloguing of fishes.

(c) Write a note on ICZN.

(d) How to prepare a fin formula of a fish?

(e) Enumerate different approaches of molecular taxonomic study.

(f) State about biological species concept.

3. Answer any one question : $1 \times 10 = 10$

(a) (i) Discuss the rules of binomial nomenclature (5 rules).

(ii) How to prepare a phylogenetic tree? 5+5

- (b) (i) Write the characteristics and example of following order of fishes :

Squaliformes, Sygnathiformes,
Cypriniformes, Beloniformes.

- (ii) Write down the Systematic position of *Litopenaeus vannamei*.

- (iii) Add a note on biological control with the help of fish. (4×1½)+2+2
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