

2019

B.Sc.

1st Semester Examination

AQUACULTURE MANAGEMENT

(Honours)

Paper - C 1-T

**(Taxonomy Anatomy & Biology of
Fin Fishes and Shell Fishes)**

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.*

1. Answer any *five* questions of the following :

5×2=10

- (a) State about the taxonomic importance of meristic characteristics of fish.
- (b) What is 'Law of Priority' in taxonomy ?
- (c) Name two Bivalves and two Gastropods having *commercial importance* in West Bengal.

[Turn Over]

- (d) What is Pyloric caeca ? State its importance.
- (e) Mention the important characteristics of typical Vertebra of any osteichthyes.
- (f) What is living fossil ? Give example from fish.
- (g) Why fish heart is called venous heart ?
- (h) How would you calculate the growth of a fish ?

2. Answer any *four* questions. 4×5

- (a) Discuss about gill structure of any bony fish.
- (b) Give an idea about Dipnoan fishes.
- (c) State about the morphological characteristics of *Penaeus monodon*.
- (d) Write down the digestive structure of *Lates calcarifer*.
- (e) How to study the age and growth of fishes ?
- (f) State about different maturity stages of Indian Major carps.

3. Answer any *one* question. 1×10

- (a) (i) Mention characteristics and example of following order of fish —
Clupeiformes, Perciformes & Siluriformes

- (ii) Discuss the mechanism and function of Swimbladder in fish.
- (iii) Add a note on diagestive glands of fish. $4\frac{1}{2}+3\frac{1}{2}+2$
- (b) (i) Discuss about mouth parts modification of fishes according to their feeding habit.
- (ii) Enumerate the Osmoregulation process of any anadromous fish.
- (iii) Add a note on different larval stages of *Penaeus monodon*. $4+3\frac{1}{2}+2\frac{1}{2}$
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