

**2022**

**M.Sc.**

**2nd Semester Examination**

**FISHERIES SCIENCE**

**PAPER—FSC-201**

*Full Marks : 50*

*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.*

*Answer all questions.*

**UNIT-201.1**

**FRESHWATER ECOLOGY**

1. Answer any two questions.

2×2

(a) What is Potamon zone ?

(Turn Over)

- (b) Define neuston with examples.
- (c) Compare a lotic and lentic ecosystem.
- (d) Why wetland ecosystem is regarded as 'Biological Supermarkets/Earth's filter'?

2. Answer any *two* questions.

2×4

- (a) Briefly narrate the threats of Mangrove ecosystem.
- (b) Briefly describe the Nitrogen cycle with flow diagram.
- (c) Briefly narrate the restoration of aquatic ecosystem.
- (d) Discuss the grazing food chain with diagram.

3. Answer any *one* question.

1×8

(a) Write notes on:

(i) Thermal stratification of freshwater environment.

(ii) Adaptive modifications of Rhithron communities.

4+4

- (b) Define wetland ecosystem. Enlist the faunal peculiarities of any wetland ecosystem. Briefly narrate the management process of wetland ecosystem. 2+3+3

### UNIT-201.2

### SALINE WATER ECOLOGY

1. Answer any *two* questions. 2×2
- (a) What is photic zone ? State its significance.
- (b) Write name of two plankton responsible for light or bright green water colour.
- (c) Define holoplankton and meroplankton with examples.
- (d) Why estuarine ecosystem is more productive than other aquatic ecosystems?
2. Answer any *two* questions. 2×4
- (a) Describe the strategies of marine communities conservation.

- (b) Briefly explain the life cycle of any zooplankton with diagram.
- (c) Briefly narrate the need and scope of Integrated Coastal Zone Management (ICZM) program.
- (d) Enlist the biotic communities of pelagic zones.

3. Answer any one question.

1×8

- (a) What is coral reef ecosystem? Enlist major inhabitant in this ecosystem. Mention the threats of coral reef ecosystem. 2+3+3
- (b) What is neap tide and spring tide? Briefly describe the physico-chemical characteristics of marine environment. Add a note on adaptive modifications of coastal inhabitants. 2+4+2

[ Internal Assessment – 10 Marks ]

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