

2018

M.Sc.

2nd Semester Examination

FISHERIES SCIENCE

PAPER—FSC-201

Subject Code—28

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.

Illustrate the answers wherever necessary.

Unit—I

(Fresh Water Ecology)

1. Answer any *two* questions from the following : 2×2

(a) What is periphyton ? Give an example.

- (b) What are the importances of producers ?
- (c) Why wetland ecosystem is regarded as 'Nature's kidney' ?
- (d) Define neuston with example.

2. Answer any *two* questions from the following : 2×4

- (a) Briefly explain any one energy flow model with diagram.
- (b) Describe carbon cycle with flow diagram.
- (c) Narrate the grazing food chain with example.
- (d) Discuss the Fisheries potentialities of mangrove ecosystem.

3. Answer any *one* question from the following : 1×8

- (a) (i) Differentiate between gross primary productivity and net primary productivity.
- (ii) Briefly describe the abiotic factors of an aquatic ecosystem.
- (iii) Add a note on thermal stratification of freshwater bodies. 2+3+3

- (b) (i) Distinguish between natural and artificial ecosystem.
- (ii) Enlist faunal peculiarities of freshwater ecosystem.
- (iii) Briefly elucidate the restoration process of aquatic ecosystem. 2+2+4

Unit—II

(Saline Water Ecology)

4. Answer any *two* questions from the following : 2×2
- (a) What are the impact of estuary on marine life ?
- (b) Differentiate between photic and aphotic zone.
- (c) What is the boundary of coastal zone ?
- (d) Briefly explain the geographic range of Hooghly-Matlah estuary.
5. Answer any *two* questions from the following : 2×4
- (a) Briefly narrate the threats of estuarine ecosystem.
- (b) Enumerate the adaptive modification of marine organisms.

- (c) Describe the life cycle of any one rotifer.
- (d) Briefly discuss the Integrated Coastal Zone Management (ICZM).

6. Answer any *one* question from the following : 1×8

- (a) (i) What is plankton ?
- (ii) Classify plankton based on trophic level and size groups with example.
- (iii) Briefly describe relationship among different planktons in aquatic ecosystem. 2+4+2
- (b) (i) What is continental shelf ?
- (ii) State the threats of coral reef ecosystem.
- (iii) Write the importance of coastal zone. 1+3+4
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