

M.Sc.

2015

2nd Semester Examination

FISHERIES SCIENCE

PAPER—FSC-201

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.

Unit—I

(Freshwater Ecology)

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

(a) Define bioindicator. Cite an example.

(b) What are the differences between Bog and Fen ?

(Turn Over)

- (c) State the significance of Mangrove ecosystem.
- (d) What is denitrification ?
2. Answer any *two* questions from the following : 2×4
- (a) Briefly explain the universally accepted model of energy flow.
- (b) Briefly describe the characteristics of freshwater environment.
- (c) What is grazing food chain ? Briefly describe this food chain with diagram.
- (d) Write a note on the importance of wetland ecosystem.
3. Answer any *one* questions of the following : 1×8
- (a) What is gross and net productivity ? Briefly discuss the conservation process of aquatic ecosystem.
Add a note on benthos. 2+4+2
- (b) Write a note on : 2×4
- (i) Aquatic food web.
- (ii) Nekton and neuston.

Unit—II**(Saline Water Ecosystem)**

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

- (a) What are differences between spring tides and neap tides ?
- (b) Differentiate between photic and aphotic zone.
- (c) Why estuarine ecosystem is more productive than other ecosystem ?
- (d) How would you justify that zooplankton is fully dependent on phytoplankton ?

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

- (a) Briefly explain the predator-prey relationship in aquatic environment.
- (b) Briefly describe the adaptive modification of marine organisms.
- (c) Enlist the name of organisms found in sandy and rocky beach.
- (d) Briefly describe the conservation of marine biodiversity.

6. Answer any *one* questions of the following : 1×8

(a) What is continental shelf? Briefly explain the structure of sea beach with diagram. Add a note on profundal zone. 2+4+2

(b) Write notes on : 2×4

- (i) Threats of coral reef ecosystem.
 - (ii) Fishery potentialities of Mahanadi estuary.
 - (iii) Chemical composition of sea water.
 - (iv) Zones of up-welling.
-