

M.Sc.

2016

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 neuston with example.

(b) Write the functions of decomposers.

(Turn Over)

- (c) Why Wetland ecosystem is regarded as Nature's Kidney ?
- (d) What is limnetic zone ?
2. Answer any *two* questions from the following : 2×4
- (a) Briefly discuss the threats of mangrove ecosystem.
- (b) Describe Lindeman energy flow model with diagram.
- (c) Briefly discuss the detritus food chain with diagram.
- (d) Narrate the adaptive modifications of riffle animals.
3. Answer any *one* questions of the following : 1×8
- (a) What is productivity of aquatic ecosystem? How would you measure the productivity in aquaculture pond? Briefly elucidate the restoration process of aquatic ecosystem. $2+2+4$
- (b) Write short notes on : $4+4$
- (i) Wetland ecosystem and their types.
- (ii) Nekton and benthos

Or

Aquatic food web.

Unit—II**(Saline Water Ecology)**

4. Answer any *two* questions from the following : 2×2
- (a) What are the driving forces in coastal areas ?
 - (b) Define indicator species with examples.
 - (c) Write names of two algae responsible for golden brown water colour in aquaculture pond.
 - (d) What are threats of coral reef ecosystem ?
5. Answer any *two* questions from the following : 2×4
- (a) Enlist the faunal peculiarities of inter-tidel zone of the marine environment.
 - (b) Briefly explain the impact of estuaries on marine life.
 - (c) Write the names of inhabitants excluding fishes in coral reef ecosystem.
 - (d) Discuss the present scenario of Indian coastline.

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

(a) What is ICZM? Briefly narrate the space of ICZM programme. Explain the role of plankton in water colour development in respect to aquaculture.

$2+3+3$

(b) Write notes on : 2×4

(i) Geographic area of Godavari estuary.

(ii) Fishery potentialities of Godavari estuary.

(iii) Hydrobiology of Mahanadi estuary.

$3+3+2$