

2009

**AQUACULTURE MANAGEMENT AND  
TECHNOLOGY**

*(Aquatic Biology)*

PAPER—AMT - 3001

*Full Marks : 40*

*Time : 2 hours*

Answer **all** questions

*The figures in the right-hand margin indicate marks*

*Candidates are required to give their answers in their  
own words as far as practicable*

*Illustrate the answers wherever necessary*

1. Answer any *four* of the following : 2 × 4

(a) Differentiate natural ecosystem from artificial one.

(Turn Over)

- (b) Define Rhithron community.
- (c) What is Mesoplankton ? Cite example.
- (d) State the functions of benthic fauna in freshwater ecosystem.
- (e) Compare estuary and reservoir.
- (f) How many types of International agencies are involved in Coastal Resource Management.
- (g) What do you mean by freshwater wetland ?
- (h) Define trophic level and NPP (Net Primary Productivity).

2. Answer any *four* of the following : 4 × 4

- (a) Write in brief on Integrated Coastal Management in South-East Asia.
- (b) Discuss the cause of deterioration of Indian Coastal Resources.
- (c) Energy flow is unidirectional. Explain with suitable diagram.

- (d) Explain the restoration process of an aquatic ecosystem.
- (e) State the management strategies of Indian estuaries.
- (f) Describe the role of plankton to enhance the productivity of an aquatic ecosystem.
- (g) What is grazing food chain? Explain with diagram.
- (h) Write in brief on different types of estuary. Add a note on profundal zone.

3. Answer any *two* of the following : 8 × 2

- (a) Illustrate the application of GIS and Remote sensing in Coastal Resource Management of India. Add a note on structural configuration of a ocean floor. 5 + 3
- (b) Discuss the fishery potential and hydrobiology of Godavari estuary. Enlist the biotic communities of pelagic zone and abyssal benthic zone of a marine ecosystem. 4 + 4

- (c) What are the differences between Lotic and Lentic ecosystem? Enlist the aquatic biota of freshwater littoral zone. 3 + 5
- (d) Compare Oligotrophic and Entrophic lake. Give an account on effect of entrophication on aquatic biota. Enlist the biotic community of continental shelf. 2 + 3 + 3
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