2013

M.Sc.

3rd Semester Examination

AQUACULTURE MANAGEMENT & TECHNOLOGY

PAPER-AMT-301

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.

(Aquatic Biology)

1. Answer any four of the following:

 2×4

- (a) What is continental shelf?
- (b) Differentiate between spring and neap tides.
- (c) State the functions of decomposers in an aquatic ecosystem.

- (d) Distinguish between artificial and natural ecosystem.
- (e) What is neuston? Cite examples.
- (f) Define Mero-Plankton. Cite an example.
- (g) Differentiate between epilimnion and hypolimnion.
- (h) What is biomass?
- 2. Answer any four of the following:

 4×4

- (a) Explain the significance of wetland ecosystem.
- (b) Briefly describe the food-web of marine ecosystem.
- (c) Narrate the community composition of coral-reef ecosystem.
- (d) Enlist the biotic communities of sea-beach.
- (e) What are the geographical area of Godavari-estuary? Add a note on the fishery potentialities of this estuary.
- (f) State the chemical properties of marine environment.
- (g) Briefly explain the process of nitrogen cycle.
- (h) Describe the community adaptation in lotic environment.

3. Answer any two of the following:

8×2

(a) Compare entrophic and aligotrophic lake. Briefly explain the Management tools of Indian estuary.

3+5

(b) What is renewable coast? Give an account on the application of remote sensing in coastal resource management. Add a note on littoral benthic fauna.

2+4+2

(c) What are primary and secondary productivity? Give an account on the restoration of aquatic ecosystem.

3+5

(d) Short notes (any two):

 4×2

- (i) Classification of lake.
- (ii) Grazing food chain.
- (iii) Characteristics of wetland ecosystem.
- (iv) Lindeman energy flow model.