2010

M.Sc.

3rd Semester Examination

AQUACULTURE MANAGEMENT & TECHNOLOGY

PAPER—AMT-3001

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 *four* of the following : 2×4

a) What is Thermocline ?

b) Differentiate estuary from lake.

c) What are the functions of aquatic ecosystem ?

d) Define zone of up-welling.

e) State the significance of wetland.

f) Differentiate between spring and neaptide.

g) Mention the role of benthic fauna in aquatic ecosystem.

h) What are supra and infra neuston ?

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

a) What are the agencies involved in conservation of aquatic ecosystem?

b) State the adaptive strategies of rhithron community.

c) Enlist the faunal communities of potamon zone.

d) Briefly describe the structure of sea beach.

e) What do you mean by primary productivity of an natural ecosystem?

f) Differentiate grazing food chain from detritus food chain.

g) Is there any loss of energy from one trophic level to the next one? Explain with reasons.

h) State the functions of abiotic factors in aquatic ecosystem.

3. Answer *two* of the following: 8×2

a) Give an account of the management tools of marine ecosystem. 8

b) State the fishery potentialities of Godavari and Cauvery estuary or Mahanadi estuary. Add a note on the management strategies of Indian estuary. 5+3

c) Explain the restoration principles of aquatic ecosystem. Mention the name of biotic community of Continental-shelf. 5+3

d) Discuss the application of Remote Sensing and GIS on Coastal Resource management. Explain aquatic food-web with diagram. 4+4