2011

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 *four* of the following : 2×4

(a) What is neuston ?

(b) State the functions of decoumposer.

(c) What do you mean by ecological energetics ?

(d) Define wetland.

(e) What is the significance of estuarine ecosystem?

(f) State the differences between entrophic and oligotrophic lake.

(g) Define biomass.

(h) Distinguish between photic and aphotic zone.

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

(a) Enlist nutrient components of marine environment.

(b) Briefly describe the thermal stratification of a lake.

(c) State the physical and chemical properties of freshwater.

(d) State the adaptive modification of rhithron community.

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

(f) Briefly discuss the zonation of Ocean.

(g) Distinguish between positive and negative estuary.

(h) State the role of plankton in an aquatic ecosystem.

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

(a) What is energy flow ? Discuss the Lindeman's energy flow model. Add a note on net productivity. 2+4+2

(b) Compare among plankton and nekton. Give an account on the restoration process of aquatic ecosystem. 3+5

(c) What are the biotic communities of continental shelf ? State the fishery potentialities of Mahanadi estuary. Add a note on potamon zone. 3+3+2

(d) Differentiate food-web from food chain. Discuss the application of Remote sensing & GIS on coastal resource management. 3+5