UG/II/AQM/H/IV/17 (Old)

2017

AQUACULTURE MANAGEMENT

[Honours]

PAPER – IV

Full Marks : 90

Time : 4 hours

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

[OLD SYLLABUS]

1. Answer any *ten* from the following : 2 × 10

(*a*) Write the Microbial causes of fish spoilage.

(*b*) What are point and non-point sources of water pollution ?

(*c*) Mention four names of traditional fishing gear.

(*d*) Define decomposers with example.

(*e*) Define fjord estuary.

(*f*) What is inorganic manure ?

(*g*) What is Rampani boat ?

(*h*) Write the characters of raw sewage.

(*i*) Write the scientific name of two sea-weeds.

(*j*) What is fishing harbour ?

(*k*) What is fish shoal ?

(*l*) Define botulism and point out causes of botulism.

(*m*) What do you mean by fish curing ?

(*n*) Briefly explain eutrophic lake with example.

(*o*) What do you mean by recycling of waste materials ?

GROUP – A

2. Answer any *two* from the following : 10 × 2

(*a*) (*i*) What is acidic soil and sodic alkaline soil ? How these soil can make ideal for freshwater farming ?

(*ii*) Briefly narrate physico-chemical characteristics of freshwater. (3 + 3) + 4

(*b*) (*i*) Write the differences between manure and chemical fertilizer.

(*ii*) Briefly describe about soil structure.

(*iii*) Add a note on soil colloids. 4 + 4 + 2

(*c*) (*i*) What is fish ladder ?

(*ii*) What is the significance of providing fish ladder in reservoir fishery ?

(*iii*) Add a note on reservoir ecology. 2 + 4 + 4

(*d*) (*i*) Write the causes of water pollution.

(*ii*) Briefly described about conservation and management of a reverine fishes.

(*iii*) Add a note on primary and secondary productivity. 3 + 4 + 3

3. Answer any *one* from the following : 15 × 1

(*a*) (*i*) Define bio-magnification.

(*ii*) Write the difference between lake and lagoon.

(*iii*) Briefly narrate the characteristics of industrial effluents.

(*iv*) Discuss about role of plankton in water colour development. 2 + 4 + 4 + 5

(*b*) Write notes on following : 3 × 5

(*i*) Upwelling

(*ii*) Chemical properties of sewage

(*iii*) Management of Indian estuary

(*iv*) Oceanic waves

(*v*) Spring tide and neap tide.

GROUP – B

4. Answer any *two* from the following : 10 × 2

(*a*) (*i*) What is positive buoyancy ?

(*ii*) Describe the kinds of gear materials.

(*iii*) Write the merit and demerit of synthetic fibres. 2 + 3 + 5

(*b*) (*i*) Why visual test is most important for gear fabrication ?

(*ii*) What are the differences between active and passive gear ?

(*iii*) State the process of fishing gear preservation. 2 + 4 + 4

(*c*) (*i*) Define fish preservation.

(*ii*) What are the short and long term fish preservation ?

(*iii*) Add a note on chemicals used in fish preservation. 2 + 4 + 4

(*d*) (*i*) State the principle of fish freezing.

(*ii*) Briefly explain the canning process of any one fishes.

(*iii*) Add a note on smoking. 2 + 5 + 3

5. Answer any *one* from the following : 15 × 1

(*a*) (*i*) Write the characteristics of packaging materials.

(*ii*) What is scientifically sound fish preservation process ?

(*iii*) Write the wet-reduction method of fish meal preparation.

(*iv*) Briefly explain the need of hygienic fish handling. 4 + 2 + 5 + 4

(*b*) (*i*) What is line haulers ?

(*ii*) Write the demerits of FRP.

(*iii*) Explain the method of wooden boat construction.

(*iv*) What are the different types of gears operated in inland fishing ? 2 + 3 + 5 + 5
