2019

Part – II

AQUACULTURE MANAGEMENT

(Honours)

Paper – IV

Full Marks – 90

Time : 4 Hours

The Questions are of equal value for any group / half.

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.

GROUP – A

1. Answer any **ten** questions from the following : 2×10=20

a) What is neuston? Cite an example.

b) State the significance of phytoplankton in aquaculture pond.

c) What are the importance of sinkers?

d) Mention uses of float in fishing gears.

e) State the disadvantages of short-term fish preservation.

f) What do you mean by benthos? Give example.

g) Define effluents with example.

h) Distinguish between sewage and sludge.

i) What is bioaccumulation?

j) Define biodegradable pollutants with example.

k) Write the name of sources of natural fibres.

l) State the disadvantages of synthetic fibre.

m) How would you maintain the fishing craft?

n) What are the advantages and disadvantages of gill net.

o) Define edaphic fauna with example.

Group–A

2. Answer any **two** from the following : 2×10 =20

a) i) What is soil?

ii) Classify soil with examples.

iii) Write in brief on the distribution of different types of soil in India. 2+5+3

b) i) Define manure.

ii) Compare among fertilizers and manures.

iii) Give an account on the interaction of manures with soil and water in aquaculture perspective. 2+3+5

c) i) Briefly discuss the physical and chemical nature of inland water body.

ii) Write a note on the biological community of inland water. 5+5

d) Short Note :
   i) Soil organic matter
   ii) Soil pH
   iii) Physical properties of soil
   iv) Domestic waste

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

a) i) Define lake.
   ii) Classify lake with proper example.
   iii) Give an account on the ecology of estuarine ecosystem
   iv) Write a brief note on eutrophication. 2+4+5+4

b) Short Note : 5×3=15
   i) Pesticides.
   ii) Biological assessment of pollution.
   iii) Chemical treatment of sewage.
   iv) Macrovegetation.
   v) Role of soil in pond productivity.

Group – B

4. Answer any **two** from the following : 2×10=20

a) i) Define fishing gear.
   ii) Distinguish between active and passive fishing gears.
   iii) Give an account on different gears operated in South Bengal coast. 2+3+5

b) i) Compare among conventional and modern fishing techniques.
   ii) State the uses of net haulers, otter boards and thimbles. 4+(2×3)

c) i) Differentiate mechanised fishing vessel from non-mechanised.
ii) Classify fishing vessels with example.
iii) Write a note on design of fishing craft. 3+4+3

d) Short Note : 4×2½
i) Purse Seine
ii) Negatie buoyancy
iii) Safety measures in fishing vessels.
iv) Bull trawling.

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

a) i) State the principle of fish freezing.
ii) Compare among fresh rish and spoiled fish.
iii) Give a brief account on the freezing process of any one shell fishes.
iv) Add a note on the chemicals and drugs used in fish freezing. 2+4+6+3

b) Short Note :
i) Colombo curing.
ii) Tunnel dryer.
iii) Smoking.
iv) Fish packaging.
v) Sanitation in processing plants.
