

2015

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

1. Answer *ten* questions from the following : 2×10
 - (a) Write down the constituents of soil.
 - (b) What is the difference between bioaccumulation and biomagnification ?
 - (c) What is fishing harbour ?

(Turn Over)

- (d) Define fish Maws and mention its importance.
- (e) Write the types of fibres used in gear technology.
- (f) Define upwelling. Mention its importance.
- (g) Give some names of boat building material.
- (h) What do you mean by line fishing ?
- (i) Enlist different salts present in marine water.
- (j) Write short note on periphyton.
- (k) What are the advantages of sundrying ?
- (l) Define biological indices.
- (m) Enlist the name of four sea-weeds.
- (n) What is Colombo curing ?
- (o) What do you mean by spoilage ?

GROUP – A

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

(a) (i) Estuaries are productive ecosystem –
Justify with reasons.

(ii) What is radioactive pollution ? State its
impact on aquatic biota. 5 + (2 + 3)

(b) (i) What are the physical properties of sea
water ?

(ii) What do you mean by seasonal
thermo-cline ?

(iii) What is micro-vegetation ? State its
importance. $5 + 2\frac{1}{2} + 2\frac{1}{2}$

(c) (i) State the modern classification of lakes.

(ii) What are the effects of Pesticides on
aquatic biota ? 6 + 4

(d) Write short note on : $2\frac{1}{2} \times 4$

(i) Bundh breeding

(ii) Eutrophication

(iii) Shadow zone

(iv) HACCP.

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

(a) Give a brief description of sewage treatment and its reuse. What is sludge ? State the composition of urban sewage. 8 + 3 + 4

(b) Write short notes on : 3 × 5

(i) Organic Pollution

(ii) Marine food-web

(iii) Trickling filter

(iv) Primitive Ocean.

(v) Point and non-point source of Pollution.

GROUP – B

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

(a) Explain different criteria to be considered for construction of an aquaculture farm. Discuss different types of hatchery for IMC seed. 6 + 4

(b) Differentiate between trawlnet and gillnet.
What is chitin and chitosan ? Add a note on
tickler chain ? 5 + 3 + 2

(c) Write a short notes on : $2\frac{1}{2} \times 4$

(i) Floats and sinkers

(ii) Turtle Excluder Device

(iii) Surimi

(iv) Suitable site for eco-hatchery.

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

(a) Write short notes on any *three* : 5 × 3

(i) FPC

(ii) Fish glue

(iii) Isinglass

(iv) Gear Preservation

(v) Light fishing methods.

- (b) Write about the characteristics of various packaging material. Briefly state the needs of hygienic handling in the fish processing industry. What are the principles of low temperature preservation ? Add a note on antibiotic.

4 + 5 + 3 + 3
