

Total Pages—7

UG/II/AQM/H/IV/18 (New)

2018

**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*

[ NEW SYLLABUS ]

1. Answer any *ten* from the following : 2 × 10
  - (a) Point out the characteristic of spoiled fish.
  - (b) State the principle of fish drying.

( Turn Over )

- (c) What are the role of estuary on marine biodiversity ?
- (d) State the functions of phytoplankton in aquaculture pond.
- (e) Define reservoir with example.
- (f) What is the impact of oil pollution on marine life ?
- (g) Distinguish between fibres and ropes.
- (h) State the function of sinkers.
- (i) What is ghost fishing ?
- (j) Point out importance of tunnel dryer.
- (k) What is carrying capacity of pond ?
- (l) What are the criteria for selection of an ideal fishing gears ?
- (m) Define nekton with example.

( 3 )

- (n) What is organoleptic test ?
- (o) State the advantages of short-term fish preservation.

GROUP – A

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

(a) (i) What is fertilizer ?

(ii) Classify fertilizer with example.

(iii) Distinguish between fertilizer and manure. 2 + 4 + 4

(b) (i) What is acid sulphate soil ?

(ii) Give a brief account of soil management in fish culture pond.

(iii) Add a note on soil texture. 2 + 5 + 3

(c) (i) What is the differences between micro and macro vegetation ?

(ii) Give an idea about the role of macro-vegetation in fish-pond. 3 + 7

(d) (i) What is sewage ?

(ii) Distinguish between industrial sewage and domestic sewage.

(iii) Discuss the primary and secondary treatment of sewage water.  $2 + 3 + 5$

3. Answer any *one* from the following :  $15 \times 1$

(a) (i) What are degradable and non-degradable pollutants ?

(ii) Briefly discuss the biological assessment of pollution.

(iii) Enlist industrial effluents of Indian water body.

(iv) Add a note on long-term effect of pesticides in aquatic ecosystem.

$3 + 6 + 3 + 3$

(b) Write a brief note on :  $5 \times 3$

(i) Surface film of water

(ii) Lake management

- (iii) Soil structure
- (iv) Biological indices
- (v) Physical properties of inland water.

GROUP – B

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

- (a) (i) What is synthetic fibres ?
- (ii) State the merit and demerit of synthetic fibres.
- (iii) Add a note on types of fibres and their uses. 2 + 4 + 4
- (b) (i) What is float ?
- (ii) Give a brief account on different types of float used in fishing gears with diagram.
- (iii) Add a note on floated ropes. 2 + 6 + 2
- (c) (i) Distinguish between mechanized and non-mechanised fishing craft.

(ii) Describe the traditional fishing method in West Bengal.  $3 + 7$

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

(i) Bull trawling

(ii) Line fishing

(iii) Thimbles and shackles

(iv) Power blocks.

5. Answer any *one* from the following :  $15 \times 1$

(a) (i) What are the causes of fish spoilage ?

(ii) What are the post-mortem biochemical changes in fish tissues ?

(iii) Briefly narrate the different types of ice used in fish preservation.

(iv) Describe the packaging requirements of frozen fish.  $3 + 5 + 4 + 3$

(b) Write short notes on :  $5 \times 3$

(i) Sanitation in processing plant

( 7 )

**(ii) Wet curing**

**(iii) Fish byproducts**

**(iv) Value-added products of fish**

**(v) Fishing gear preservation.**

---