

2008

AQUACULTURE MGT. & TECH.

PAPER—AMT-2001

Full Marks : 40

Time : 2 hours

Answer Q. No. 1 and any three from the rest

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. Write short answer on any five of the following: 2 × 5**
- (a) What is the water spread area under inland aquaculture in India ?**
 - (b) Water holding capacity of soil.**
 - (c) How many types of aerators are being used for aquaculture ?**

(Turn Over)

- (d) What is the species ratio to be considered under integrated fish culture system ?
- (e) Mention the merits of modified extensive culture of prawn.
- (f) State the ideal criteria of brackish water under aquaculture system.
- (g) What are the commercial importance of sea-weeds ?
- (h) What are the export potentialities of tiger prawn in West Bengal ?
- (i) Name the state that produces maximum freshwater fish in our country.
- (j) Name the types of pearl , that are being cultured in our country. Also , state the leading States for pearl production.
- (k) Compare between the foulers and predator organisms.
- (l) Write about the variation in pH values in a productive fish-pond giving reasons.

2. (a) What do you mean by aquaculture ?
- (b) Give an account on the biological characteristics of aquaculture species.
- (c) Write the short-term and long-term objectives of National Policy for development of aquaculture in India. 2 + 4 + 4
3. (a) Write the scientific name of silver-lip pearl oyster with a note on their distribution.
- (b) Enumerate the embryonic development of pearl oyster.
- (c) What are the major constrains of pearl oyster farming in India ? 2 + 5 + 3
4. (a) What are the differences between freshwater and marine prawns ?
- (b) Elucidate the production of shrimps in Asia through aquaculture practice.
- (c) State the problems of shrimp farming in West Bengal. 3 + 4 + 3
5. (a) Write the two scientific names of culturable cold water fishes.

(b) Discuss the developmental process of cold water fish species.

(c) What are the reasons for cage culture practice of cold water fish? 2 + 5 + 3

6. Write short notes (any *two*): 5 × 2

(i) Give an account of the mathematical modelling of designing a sluiceway for tide-fed fish-farm.

(ii) Techniques of sea-weed culture on commercial basis

(iii) Prospects of mariculture in India

(iv) Computerised design of automatic feeder and its application.
