

**M.Sc. 4th Semester Examination, 2011**

**AQUACULTURE MANAGEMENT  
AND TECHNOLOGY**

*(Fisheries Technology & Harbour Engineering)*

**PAPER—AMT-4001**

*Full Marks : 40*

*Time : 2 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 any *four* of the following : 2 × 4

(a) State the difference between value added product and fish by - product.

(b) What do you mean by 'twine' and 'yarn' ?

*( Turn Over )*

- (c) Enlist the different plastic packaging materials used for fish and fishery product packaging.
- (d) What do you mean by FPC ? Mention its uses.
- (e) Write the advantage of using F.R.P as boat building materials.
- (f) What is Sinker ? Mention its role in fishing.
- (g) Classify purse seines on the basis of target species.
- (h) Define light fishing.

2. Answer any *four* of the following : 4 × 4

- (a) Write notes on gear preservation.
- (b) Write down the principle and application of TED.
- (c) Discuss in brief the packaging of dried fish.
- (d) Role of 'Echo-sounder' in fishing.

- (e) Enlist the name of plants commonly used for craft design. Add a note on wood preservation.
- (f) Discuss about mesh size regulation and responsible fishing.
- (g) How would you prepare Isinglass in the laboratory ? Mention its uses ?
- (h) Enumerate the traditional fishing methods used in West Bengal.

3. Answer any *two* of the following : 8 × 2

- (a) (i) Enlist the different traditional and mechanical fishing crafts used in India.
  - (ii) Mention the different craft design materials commonly used in India.
  - (iii) Add a note on marine fouling and control measures.  $2\frac{1}{2} + 2\frac{1}{2} + 3$
- (b) (i) Enlist the different by-products prepared from fish.

- (ii) Discuss in details the fish liver oil extraction procedure.
- (iii) Add a note on chitin and chitosan. 2 + 3 + 3
- (c) (i) Define modified atmospheric packaging.
- (ii) Enlist the gases and gas mixtures used for MAP.
- (iii) Write a note on toxicological aspects of packaging materials.
- (iv) Add a note on prospects of fish and fishery products packaging in India.  $1\frac{1}{2} + 1\frac{1}{2} + 3 + 2$
- (d) (i) What do you mean by Trawl net ?
- (ii) Classify different types of Trawl nets.
- (iii) Add a note on Gill net design and its application in fishing. 2 + 3 + 3
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