## M.Sc. 4th Semester Examination, 2010 AQUACULTURE MANAGEMENT & TECHNOLOGY

(Fisheries Technology & Harbour Engineering)

PAPER-AMT-2401

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. Write in brief (any four):

- $2 \times 4$
- (a) What do you mean by float? Mention its role in fishing.
- (b) Mention the difference between active and passive fishing gear.
- (c) Enlist the different gases and gas-mixture used for MAP.

- (d) What are the important steps and measures to be taken for preservation and marketing of value added products?
  - (e) Define line fishing.
  - (f) Mention the name of two plants traditionally used in the process of harvesting fish.
  - (g) Enlist the advantage of packaging.
  - (h) Define 'twine' and 'yarn'.
- 2. Write on four of the following:

 $4 \times 4$ 

- (a) Discuss the role of Turtle Exclusion Device (TED) in sea fishing.
- (b) Explain the communication technology used in mechanized boat.
- (c) Discuss about responsible fishing with special emphasis on mesh size regulation.

- (d) Write a note on the maintenance and preservation of gear.
- (e) Describe the light fishing methods.
- (f) Explain the packaging of frozen fish.
- (g) Describe the mechanism of Modified Atmospheric Packaging.
- (h) Enumerate the different fishing crafts used in freshwater fish catch in the Southern West Bengal.
- 3. Answer two of the following:

 $8 \times 2$ 

- (a) (i) State the difference between value added product and fish by-product.
  - (ii) Discuss the preparation procedure of fish liver oil (any one).
  - (iii) Add a note on preparation and utilization of Shark fin rays. 2+3+3

- (b) (i) Enlist the fishing craft design materials.
  - (ii) Define marine fouling. Enlist the fouling organism commonly observed in marine environment.

(iii) Add a note on maintenance of crafts.

$$2\frac{1}{2} + 3 + 2\frac{1}{2}$$

- (c) (i) Enlist the different plastic packaging materials commonly used for fish packaging.
  - (ii) State the important design parameters of cartoons for packaging fishery products.
  - (iii) Add a note on toxicological aspects of effect of packaging materials on fish products.3+3+2
  - (d) (i) What do you mean by Trawl net?

- (ii) Classify different types of Trawl net.
- (iii) Describe the mechanism and application of 'Sonar System'.  $1\frac{1}{2} + 2\frac{1}{2} + 4$