

**2010**

**M.Sc.**

**1st Semester Examination**

**AQUACULTURE MANAGEMENT & TECHNOLOGY**

**PAPER—AMT-103**

*Full Marks : 40*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**(Taxonomy & Biology of fin fish & shell fish)**

1. Answer any four of the following questions : 4×2
- a) Define digestive co-efficient.
  - b) State the significance of plankton culture.
  - c) What is motivational stimulus ?
  - d) Differentiate specific natality from crude natality.
  - e) Write the importance of astemia cyst.
  - f) Differences between up-stream and down-stream migration.
  - g) Write the scientific names of two freshwater gastropods.
  - h) State the ecological significance of circadian rhythms.

*(Turn Over)*

2. Answer any *four* of the following : 4×4
- a) Write a note on hierarchy on drive in fish.
  - b) Give an account on the reproductive behaviour of three spine stickle back.
  - c) Write brief on social learning in fish.
  - d) State the factors responsible for fish growth.
  - e) Explain the types of population growth.
  - f) What are the different larval stages of culturable shrimps?
  - g) How would you determine the age of fishes?
  - h) Narrate the different taxonomic characters used in classification.
3. Answer any *two* of the following : 2×8
- a) Give a detail account on anthropological activities affecting the fish migration. Add a note on its suggestive measures. 6+2
  - b) Write the distinctive features of following orders :
 

(i) Squaliformes;	(ii) Dipnoi;	
(iii) Clupeiforms;	(iv) Lamniformes.	4×2
  - c) Give a brief account of male-male competition in different male morphs in blue gill sun fish via cuckoldry. 8
  - d) Write notes on (any *two*) : 2×4
    - i) Life table ;
    - ii) Carrying capacity ;
    - (iii) Lunar and Tidal rhythms ;
    - (iv) Commercial importance of bivalves and cephalopods.