

2010

M.Sc.

1st Semester Examination

AQUACULTURE MANAGEMENT & TECHNOLOGY

PAPER—AMT-104

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.

(Physiology of fin fish & shell fish)

1. Answer any four of the following questions : 4×2
- a) What are live food of fishes?
 - b) Define gastric and agastric fishes.
 - c) State the functions of spiral valve.
 - d) Define Parthenogenesis. Does it happen in fish?
 - e) State the functions of chloride cells.
 - f) Write on the significance of blastopores.
 - g) What you know about 'Mariner gene' in development?
 - h) Differentiate sucker fish from Parasitic fishes.

- 2. Answer any four of the following questions : 4×4**
- Briefly discuss the respiratory mechanism of fresh-water prawn.
 - State the structure and functions of hepatopancreas.
 - How epiblast and hypoblast are formed during gastrulation in Zebra fish ?
 - Define rate limiting enzyme. Write the name of rate limiting enzyme involved in glycolysis pathway.
 - What is Ketogenesis ? Briefly describe the pathway of Ketogenesis.
 - Discuss the female reproductive system of prawn with diagram.
 - What do you mean by reducing and non-reducing sugar ? Give an example of each.
 - Briefly describe the digestion process of protein through GI tract of fishes.
- 3. Answer any two of the following questions : 2×8**
- Give an account on the various modifications of mouth in different groups of fish with diagram. 8
 - What are the composition of fish blood ? Briefly discuss the venous system of any one bony fish. 3+5
 - Define osmoregulation. State the functions of different osmoregulatory organs. 2+6
 - Write notes on : (any two) 2×4
 - Entaneous senses of fishes ;
 - Sound producing organ of fish ;
 - Foot gills and side gills ;
 - Associate digestive gland of fishes.
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