The Open University of Sri Lanka

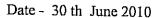
Bachelor of Science degree Programme

Final Examination: 2009/2010 - Level 5

Course Code Course Title : ZOU 3162 / ZOE 5162/ZOI 5162 : Fish and Fisheries Biology

Duration

: Two and half hours



Time: 9.30am - 12.00 noon

Answer any four (04) questions

Wherever necessary illustrate your answers with clearly labeled diagram

- 1. "Modern teleostei is a highly diverse animal group in the living world". Explain this statement giving suitable examples.
- 2. Under the postwar rapid development initiative suppose a medium scale reservoir in the Wanni region has been selected to develop inland fisheries. Describe how habitat conditions for fish in this reservoir could be increased to enhance fishery production.
- 3. (a) Describe the marine fishery resources in Sri Lanka.
  - (b) Discuss the strategies that could be used to control over exploitation of marine fisheries in Sri Lanka
- 4. Explain how fish maintain their Osmotic balance.
- 5. (a) Briefly describe the methods that could be used to estimate fish population size.
  - (b) The catch and effort data for *Eutroplus suratensis* population in a freshwater reservoir in a survey carried out over 5 days are given below.

Sample	Catch in No's	Effort in man hours
1.	300	5
2.	350	7
3.	100	4
4	40	2
5.	10	1

If the catch per unit effort is propotional to population size, calculate the initial population size.

- 6. Write short notes on any two (02) of the following
  - (i) Air bladder of fish
  - (ii) Beach seine fishery of Sri Lanka
  - (iii) Type of scales of fish
  - (iv) Jawless fishes

