The Open University of Sri Lanka
Bachelor of Science degree Programme
Final Examination : 2009/ 2010 – Level 5
Course Code : ZOU 3162 / ZOE 5162/ZOI 5162
Course Title : Fish and Fisheries Biology
Duration : Two and half hours

Date - 30 th June 2010 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