

The Open University of Sri Lanka
Bachelor of Science Degree Programme
Final Examination : 2010 /2011 - Level 5
Course code : ZOU 3162 / ZOE 5162
Course Title : Fish and Fisheries Biology
Duration : Two and half hours



Date - 8th July 2011

Time - 9.30 a.m - 12.00 noon

Answer **any four** questions.

Wherever necessary illustrate your answers with clearly labeled diagrams

1. Discuss structural and behavioural reproductive adaptations shown by fish to ensure maximum survival.
2. (a) What is a fish stock ?
 (b) Explain the methods that can be used to identify fish stocks ?
3. Write an account on the different types of fishing gear used in shallow lagoons and estuaries.
4. (a) What is meant by exotic fish?
 (b) Discuss the role of exotic fish in inland fisheries of Sri Lanka .
 (c) Explain how overpopulation of exotic fish could be controlled.
5. (a) Briefly explain the factors that affect the growth of fish ?
 (b) The mean lengths of six year classes of a fish population are given below.

Year class	1980	1979	1978	1977	1976	1975
Mean length (mm)	74.4	108.2	126.2	137.3	150.0	151.0

Calculate the asymptotic length (L_{∞}) and growth coefficient (k) of this fish population .

6. Write short notes on any two (02) of the following.
 - (a) Tuna fishery of Sri Lanka
 - (b) Age determination of tropical fish
 - (c) Modifications of mouth apparatus in teleostei fishes
 - (d) Management of fishery resources