

## RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES, MIHINTALE

## B.Sc. (General) Degree in Applied Sciences Second year – Semester I Examination – October/November 2015

## **BIO 2211 - FISH BIOLOGY**

Time: Two (02) hours

Answer four (04) questions only.

Illustrate your answers with labeled diagrams where appropriate.

- 1. a) Name the primary forces that act on the body of a fish during its locomotion and mention how they affect its locomotion.
  - b) "The efficiency of undulatory motion increases with the decreasing of body length". Critically evaluate this statement giving suitable examples.
- 2. a) "Gills of bony fish are comparatively efficient than those of cartilaginous fish". Comment on this statement.
  - b) Describe the breathing mechanism of bony fish.
- 3. a) Illustrate the structure of the fish eye.
  - b) "Many carnivorous fish have a perfect vision during both day and night periods". Appraise this statement.
- 4. With appropriate examples, discuss the different types of direct nurseries exhibited by fish during their parental care.
- 5. Write short notes on any four (04) of the following.
  - a) Carnivorous feeding behaviours in fish
  - b) Vessels in the anterior region of the fish body
  - c) Osmoregulation in freshwater fish
  - d) Fixing and preservation of fish for laboratory examination
  - e) Digestion in the stomach of fish