



**RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES**

**B.Sc. (General) Degree in Applied Sciences
Second Year - Semester I Examination – June/July 2018**

ZOO 2204 - FISH BIOLOGY

Time: Two (02) hours

Answer any four (04) questions.

1. Discuss the structural and behavioural adaptations of macrophagous and benthophagous fishes. **(100 marks)**
2. a) Describe the structure of the heart of a typical bony fish and explain how it differs from that of a typical cartilaginous fish. **(40 marks)**
b) Briefly explain how the haemal arch and caudal pumps ensure the blood returns from the caudal region to anterior region of the fish. **(60 marks)**
3. a) Discuss the osmoregulatory process in freshwater and marine bony fish. **(60 marks)**
b) Explain how osmoregulation in marine cartilaginous fishes differs from that of marine bony fishes. **(40 marks)**
4. a) Describe the life history of salmon with special emphasis on its breeding behavior. **(80 marks)**
b) Write a concise account on "Adaptive significance of fish migration". **(20 marks)**
5. Write short notes on the following.
 - a) lateral line organs
 - b) preservation of fish for taxonomical studies
 - c) physostomous and physoclistous fish
 - d) modes of reproduction in fish**(25 x 04 marks)**

-----END -----