

UNIVERSITY OF RUHUNA  
BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE  
Level I Semester I Examination (Repeat) - August/September 2018  
FAQ1112 – Evolution and Basic Biology of Fin-fish

Time – 1½ hours

Answer any three (03) questions

---

01. (a) Describe how the jaws evolved in fish. (30 marks)  
(b) What are the types of different jaw suspensions found in fish? (20 marks).
02. Briefly describe the following. (12.5 marks for each)
- (i) Adaptations of eye of Sharks for hunting and finding their prey at low light intensities.
  - (ii) Adaptations of mouth of lampreys for feeding.
  - (iii) Modifications of the swim bladder of Scienidae for sound production.
  - (iv) Adaptations of teeth in sharks for different feeding habits.
03. Either
- (I) Write an account on Chondrostei and explain why they are considered as a paraphyletic group of fish. (50 marks)
- Or
- (II) Write short notes on **any three** of the following. (50/3 marks for each)
    - (a) Scale modification in fish
    - (b) Types of caudal fins in fish
    - (c) Ampullae of lorenzini
    - (d) Adaptations for aerial respiration in fish
    - (e) Gills of bony fish

04. (I) List out the different body shapes found in fish. Give at least one example for each category. (16 marks)

(II) Write an account on the importance of having diversified body shapes in fish in order to facilitate living in different habitats. (34 marks)

05. "Fish display an enormous diversity in their head region to ensure different feeding styles". Justify this statement giving suitable examples. (50 marks)