

**UNIVERSITY OF RUHUNA**  
**BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE**  
**Level III Semester I Examination**  
**July/August 2016**  
**AQU 3122 - Aquaculture II - Feeds & Nutrition**

**Time: 1 ½ hours**

Answer **any Three (03)** questions

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01. a) Define the terms “feed formulation” and “feed additives”. (10 marks)  
b) Discuss the importance of using various feed additives in fish feed preparation. (40 marks)
02. a) Compare and contrast the use of dry and wet feeds in fish farming industry. (30 marks)  
b) Briefly explain Extrusion process used in fish feed preparation. (20 marks)
03. Define the following terminologies and explain the importance of each of them in evaluating the performance of feeds in aquaculture operations. (50 marks)
- i. FCR (Food Conversion Ratio)
  - ii. PER (Protein Efficiency Ratio)
  - iii. %SGR (% Specific Growth Rate)
04. a) Brine shrimps are ideal as a live feed in aquaculture operations. Discuss. (25 marks)  
b) Describe the importance of decapsulating artemia cysts. (25 marks)
05. Write short notes on **any two (02)** of the following. (50 marks)
- a) Use of plant proteins in fish feed preparation
  - b) Feeding methods used in aquaculture farms
  - c) Disorders in protein nutrition
  - d) Microbial damage of fish feed during feed storage

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