

UNIVERSITY OF RUHUNA
BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE
Level III Semester II – December 2016/ January 2017

AQU 3222 - Methods for Aquaculture I

Answer **any Four (04)** questions

Time: 02 hours

01. a) Using a suitable diagram, explain the effects of fertilization on pond productivity. (25 marks)
- b) Discuss the reasons for failures in pond fertilization. (25 marks)
02. a) What is meant by “neutralizing value” and “efficiency rating” of liming material? (10 marks)
- b) “Besides, solving issues in acid base relationships, liming enhance the nutrient availability in fish ponds.” Discuss this statement. (40 marks)
03. a) What is meant by polyculture? (02 marks)
- b) Explain the factors that affect species selection and stocking density of polyculture. (40 marks)
- c) Briefly describe the advantages of polyculture. (08 marks)
04. Write short notes on **any two (02)** of the following (25 marks each)
- a) Organic fertilizer vs inorganic fertilizer in aquaculture
- b) Producing “Super males” using genetic manipulation of tilapia
- c) Chinese carps as culturable finfish species

05. a) "Tilapia is an excellent candidate for aquaculture". Discuss this statement. (25 marks)
- b) Briefly describe the methods used to control tilapia production in aquaculture systems. (20 marks)
- c) What is GIFT tilapia? (05 marks)
06. a) Give the Industry definition of "ornamental fish and live rock"? (08 marks)
- b) "Ornamental fish tanks can be prepared using various types of materials." Discuss. (20 marks)
- c) Briefly describe the under gravel filters used in ornamental fish aquarium. (22 marks)

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