

UNIVERSITY OF RUHUNA
BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE
Level IV Semester I – July /August 2016

AQU 4123 – Aquaculture Management

Answer any Four (04) questions

Time: 02 hours

01. Write a brief account on the methods of controlling weed animals in fish farms. (50 marks)
02. a) Explain the importance of algal blooms in fish ponds. (20 marks)
b) Describe the problems occurring due to dense algal blooms in a fish pond and explain the control measures which can be applied for them. (30 marks)
03. a) Define “ gas transfer equation” (08 marks)
b) Name three factors which are important in deciding the rate of O₂ transfer between air and water. Briefly explain their importance. — (34 marks)
c) Describe the importance of pond aeration. (08 marks)
04. a) What is meant by a “biofilter”? (05 marks)
b) Describe the importance of autotrophs and heterotrophs in maintaining water quality in a biofilter system. (15 marks)
c) Describe the importance of “startup time” in biofilter operations. (20 marks)
d) How to seed a biofilter in an aquarium? (10 marks)

05. Write short notes on any two of the following (25 marks each)

- a) Nitrite in fish ponds
- b) Environmental concerns of using antibiotics in fish culture
- c) Methods to administer therapeutants to fish
- d) Manual and mechanical methods of controlling aquatic weeds in fish ponds

06. a) Describe the structures that are used to hold live fish at the fishing ground. (20 marks)

b) Briefly describe the biochemical changes and stress in fish during transportation. (10 marks)

c) Define the two systems of packing and transportation of live fish fry. (20 marks)

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