

UNIVERSITY OF RUHUNA

BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE

Level III, Semester I Examination

July/August 2017

AQU 3112 – Aquaculture I - Introduction

Time: 02 hours

Answer any four (04) questions

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1.

- a) What is meant by Aquaculture? (05 marks)
- b) Briefly discuss the reasons behind the increasing trends in the global aquaculture industry. (20 marks)
- c) Write a short account on biological principles involved in aquaculture. (25 marks)

2.

- a) State a list of factors that are considered in species selection for aquaculture (05 marks)
- b) “A water supply with sufficient quantity and adequate quality is the most important factor when selecting sites for land-based aquaculture” Discuss this statement (45 marks)

3. Write short notes on **any two (02)** of the following (50 marks)

- a) Raceway aquaculture system
- b) Open water aquaculture
- c) Pen culture

4. Write answers for all parts

a) Define the following terminologies with respect to the dyke of a pond with embankments

i. Construction height

ii. Side slope

iii. Free board

iv. Base width

(10 marks)

b) Briefly explain the physical characteristics of a fish pond (30 marks)

c) Write a short account on "Feeder canals" (10 marks)

5. Either

A.

i. What is meant by acid sulfate soil? (05 marks)

ii. Briefly explain the formation of acid sulfate soils (30 marks)

iii. What are the effects of acid sulfate soil on aquaculture? (15 marks)

Or

B. Write an essay on "The importance of soil properties in site selection for aquaculture"

(50 marks)

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