

RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

Bachelor of Science in Applied Sciences Third year – Semester I Examination – July/August 2023

FAM 3201 - FISHERIES AND AQUACULTURE

Time: Two (02) hours

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Answer **QUESTION NO. 01** and any **THREE** (03) other questions.

- 1. Aluthdivul wewa, located in the village of Divulwewa within the Galenbindunuwewa divisional secretariat, Anuradhapura district, has been visited recently by the students following the course in Fisheries and Aquaculture.
 - a) Explain the approaches employed by the fishermen of Aluthdivul wewa in establishing a well organized fisheries society.
 (40 marks)
- b) Analyze the approaches implemented by the fisheries society at Aluthdivul wewa for effective management of their fisheries resources. (50 marks)
- c) Enumerate the marketing strategies employed by those fishermen. (10 marks)
- 2. If a person living close to the Mannar lagoon intends to engage in Sea bass culture but lacks personal land ownership, the only viable option available to him is to utilize the lagoon without disrupting the existing lagoon fisheries.
 - a) What is the culture system that could be employed for Sea bass culture? Justify your answer.

(10 marks)

- b) As an aquaculturist, explain how the farmer would be guided to set up the aforementioned culture system. (60 marks)
- c) Illustrate the limitations of the proposed culture system.

(30 marks)

- 3. a) Discuss the process of fertilization of fishponds, with a specific focus on the factors that should be considered to determine the appropriate quantity of fertilizers. (30 marks)
 - b) Elaborate on <u>two (02)</u> methods that could be used by a fish farmer, lacking any equipment, to assess the plankton concentration in fishponds. (40 marks)
 - c) Outline the strategies that should be adopted during harvesting of fish from a pond. (30 marks)
- 4. a) Discuss why aquaculture is important for a developing country. (70 marks)
 - b) Describe in brief the criteria used in the selection of appropriate fish species for aquaculture.

 (30 marks)
- 5. Write short notes on the following.
 - a) Major factors to be considered when selecting suitable fishing gear.
 - b) Artemia as live feed for fish larvae
 - c) Economic importance of fish
 - d) The maritime zones of Sri Lanka

 $(25 \text{ marks } x \ 4 = 100 \text{ marks})$

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