NATIONAL UNIVERSITY OF LESOTHO

FACULTY OF AGRICULTURE

DEPARTMENT OF ANIMAL SCIENCE

ANS2501: INTRODUCTION TO AQUACULTURE

FIRST SEMESTER FINAL EXAMINATION

JANUARY 2024 MARKS: 100 TIME: 3hrs

Instructions

- Answer all questions
- Points should be bulleted
- Start every question on new page

Question 1

a) Aquaculture is a fast growing sector in the developing countries. Describe in detail aquaculture and components of biosecurity that are considered to enhance smooth production. (15 marks)
b) Based on the tank structures we have at NUL Farm, enumerate features of ideal tank materials suitable for fish production. (5 marks)

Question 2

a) 30 to 60 days are required for the fry to reach the fingerling size. Describe the life cycle in fish. (10 marks)
b) Fish disease affect fish growth and this causes a great loss to the farmer, nevertheless fish like other living organisms have defensive mechanism to protect themselves against the diseases. Describe the protective barriers the fish use against infection. (10 marks)

Question 3

Pond culture is a farming facility suitable for land based Aquaculture in the non-arable agro ecological zones of Lesotho. What are the factors to consider during the site selection for pond construction? (20 marks)

Question 4

a) Mr. Fish is interested in poultry production as well as fish production which aquaculture production system would you advise him to opt for and why? Support your answer with 5 reasons. (10 marks)

b) A farmer stocked his pond with common carp fingerlings as warm water species that are favorable in the lowlands. Discuss the post stocking management practices required to ensure successful production. (10 marks)

Question 5

Cage culture is the most successful facility used in water based aquaculture in the highlands of Lesotho where tonnes of trout fish are produced in every year.

a) Enumerate 5 factors to consider during site selection before cage placement (5 marks)
b) With an example of your choice elaborate the correlation between farming facility, fish species, and production system in aquaculture (15 marks)

##########END OF EXAM##########