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UNIVERSITY OF SWAZILAND

2<sup>nd</sup> SEM 2013/2014

FINAL EXAMINATION PAPER

PROGRAMME: B.Sc. AN.SCI YEAR IV, B.Sc. A.E.E. YEAR IV, B.Sc. AG.ED YEAR IV, B.Sc. ABE YEAR IV

COURSE CODE: AS 404

TITLE OF PAPER: FISH FARMING

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

**QUESTION 1**

- a) Describe Swaziland's subsistence fish farming. (5 Marks)
- b) Explain the function of **mucus** in the fish. (10 Marks)
- c) Briefly discuss **polygyny** and **polyandry** behaviour of *Oreochromis* species. (10 Marks)

**QUESTION 2**

- a) Explain how to obtain a supermale in *Oreochromis niloticus*? (15 Marks)
- b) Briefly discuss pond liming. (4 Marks)
- c) List 3 main source of proteins in fish feed. (6 Marks)

**QUESTION 3**

- a) Describe mechanical and physical control of emergent plants in the pond. (12.5 Marks)
- b) Explain the influence of temperature for culture of tilapia species. (12.5 Marks)

**QUESTION 4**

- a) Describe **water quality related disease** common in fish. (10 Marks)
- b) Explain the procedure for fish treatment using injection. (10 Marks)
- c) Explain how to treat viral disease on tilapias. (5 Marks)

**QUESTION 5**

Explain in detail the harvesting procedure of fish in ponds. (25 Marks)