

UNIVERSITY OF SWAZILAND 2ND SEM. 2014/2015 SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME:

B.Sc. AGRICULTURAL EDUCATION YEAR 4

B.Sc. ANIMAL SCIENCE YEAR 4

B.Sc. AGRICULTURAL & BIOSYSTEMS ENGINEERING

YEAR 4

COURSE CODE: AS 404

TITLE OF PAPER: FISH FARMING

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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QUESTION 1

- (a) Give a detailed account of how you can make a transgenic fish using the two processes given below:
- i) Androgenesis
- ii) Gynogenesis

(25 marks)

QUESTION 2

Sketch an intensive tilapia pond that shows the two main sources of nitrogen and its fate through the two main pathways. Include all the components involved and explain how they are interconnected.

(25 Marks)

QUESTION 3

Discuss protein sources in fish diets and in each case mention their contribution in the diet.

(25 Marks)

QUESTION 4

Discuss the harvesting procedure of fish in ponds.

(25 marks)

QUESTION 5

(a) Outline the importance of pond liming and fertilization.

(15 marks)

(b) Give the disadvantages of organic fertilizer use in a pond.

(10 marks)