

1st SEM 2010/2011

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# UNIVERSITY OF SWAZILAND FINAL EXAMINATION PAPER

PROGRAMME:

YEAR IV

B.SC AG.ED YEAR IV, B.SC LWM YEAR IV & B.SC AN.SCI

COURSE CODE: APH 405

TITLE OF PAPER: FISH FARMING

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS

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#### **OUESTION 1**

#### Pond construction.

A) Explain in detail how to construct a 200m<sup>2</sup> pond. (15.0 points)

B) Without using sophisticated equipment describe the soil tests that are performed before pond construction. (10.0 points)

#### **QUESTION 2**

## Farming of monosex fish.

A) Explain the preparation of sex-reversed food. (10.0 points)

B) Explain in detail the sex-reverse of one of the breeders in tilapia species (production of supermale) (15.0 points)

## **QUESTION 3**

## Fish nutrition. Write short notes on:

A) Advantages of organic fertilizers (5 X2.0 points)

B) Plant protein sources for fish feed (10.0 points)

C) Vitamin requirements for fish (5.0 points)

## **QUESTION 4**

#### Pond management

A) Describe the common aquatic plants that can be found in the fish pond.

(3X 5.0 points)

B) Describe the methods to minimize the leakage of water in the fish pond.

(3.0 points)

C) The maximum dissolved oxygen at 25°C at sea level is 8.3 ppm. Explain why researchers never get that amount in the fish ponds? (7.0 points)

## **QUESTION 5**

#### Fish harvesting and processing

A) Describe the harvesting procedure of fish in the fish pond. (4X 4.0 points)

B) Explain why global trade of tilapia is increasing in non-traditional and non-producing countries? (9.0 points)