



UNIVERSITY OF ESWATINI

1st SEM. 2018/2019

RE-SIT EXAMINATION PAPER

PROGRAMME: B.Sc. AGRICULTURAL EDUCATION YEAR 4
B.Sc. ANIMAL SCIENCE YEAR 4
B.Sc. AGRICULTURAL & BIOSYSTEMS ENGINEERING
YEAR 4

COURSE CODE: ASC 403

TITLE OF PAPER: FISH FARMING

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

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

QUESTION 1

- a) Draw and label the schematic diagram of the external anatomy of a catfish. **(17 Marks)**
- b) Describe the types of fish scales. **(8 Marks)**

QUESTION 2

Explain the process of pond preparation, after construction, to the stocking point. **(25 Marks)**

QUESTION 3

Fully discuss the nitrogen cycle, showing the negative effects it has on fish farming and how one can solve each of those problems. **(25 Marks)**

QUESTION 4

For proper growth/health of fish on a facility, a fish culturist must balance a number of components. Briefly discuss 4 management-associated factors that the culturist has some level of control over. **(25 Marks)**

QUESTION 5

With the aid of a diagram, discuss how you would get an all-male population using hybridization and sex reversal of the *Oreochromis niloticus* breeder. **(25 Marks)**