



1st SEM.2007/2008

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**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

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

COURSE CODE: APH 405

TITLE OF PAPER: FISH FARMING

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS

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THE CHIEF INVIGILATOR**

QUESTION 1

Discussion of costs and benefits of fish farming provides insight as to why and how government of Swaziland might recommend policies for the promotion of fish farming in the country. Experiences in some African countries have demonstrated the benefits of fish farming but also the pitfalls. Discuss at least four benefits that could be gained from fish farming. (25 points)

QUESTION 2

There are few creatures on earth that have developed such an interesting and unique set of physical characteristics as fish. Their spatial adaptations have allowed them to survive in an environment completely different from terrestrial vertebrates. Despite the difficult obstacles in life, fish have some unique anatomical and physiological adaptations that allow them to flourish. Therefore, understanding of these basic adaptations helps better care of fishes. Discuss the external aspects of fish anatomy. (25 points)

QUESTION 3

Write short notes on

- a) Diadromous fish (3 points)
- b) Swim bladder (3 points)
- c) Gills in fish (3 points)
- d) Three mode of reproduction in fish (9 points)
- e) Functions of fins in fish (7 points)

QUESTION 4

Mr Magagula is interested to start fish farming at small scale level in one of the villages located at the suburb of Mbabane. He then approaches you as a fishery expert working in the Ministry of Agriculture. Initially, his plan is to develop a pond of 20m x 20m. Discuss how you would consult him to locate his fish pond. (25 points)

QUESTION 5

In fish culture fish have many enemies. They are found among insects, fish, amphibians, reptiles, birds and mammals. They can be divided between permanent enemies (of eggs, fry and adult), occasional enemies and those competing for food. Discuss the principal harmful aquatic insects, and amphibians which would receive due attention in fish farming. (25 points)