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1st SEM 2009/2010



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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

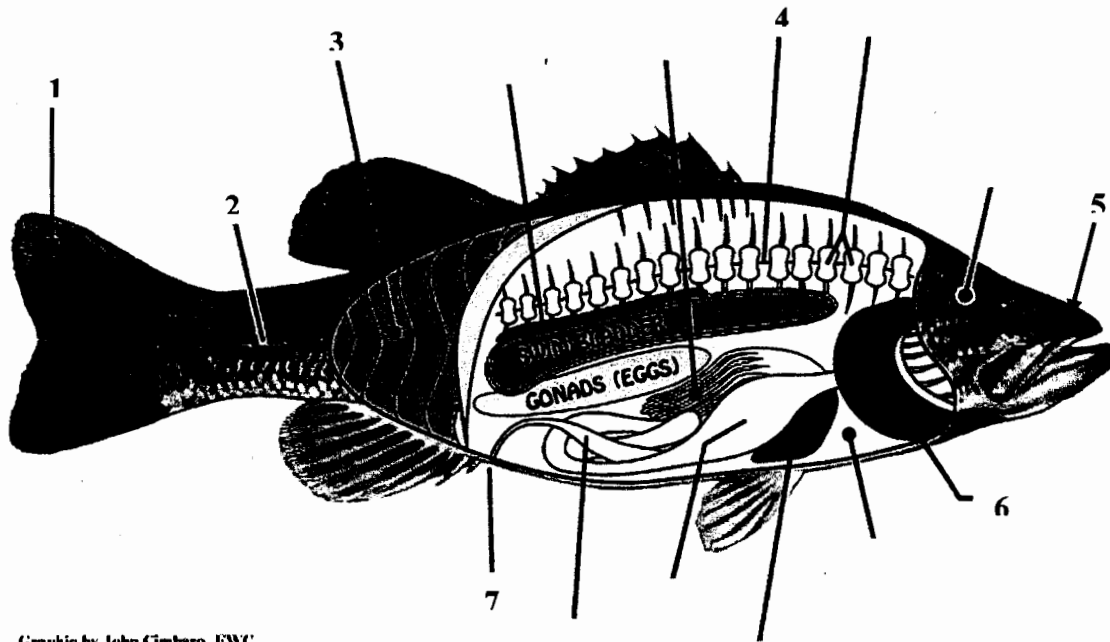
TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS

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CHIEF INVIGILATOR**

QUESTION 1

Consider the following picture.



Graphic by John Cimbaro, FWC

- A) Name the structures indicated by numbers and describe their functions on the fish.. (3X 7=21 points)
- B) Describe the oxygenated blood movement in the fish? (4 points)

QUESTION 2

Pond construction is an essential input in fish farming. Write a short note on

- A) Water sources for fish ponds. (6 points)
- B) Practical soil testing in the field for pond construction. (19 points)

QUESTION 3

Describe the following methods for controlling reproduction.

- A) The use of predator (*Clarias gariepinus*) (10.0 points)
- B) Sex-reverse of one of the breeders (*Oreochromis niloticus/O. aureus*) (15.0 points)

QUESTION 4

Ectoparasitic diseases in the Tilapia fish are mainly due to *Icthyophthirius*, *Trichodina*, *Chilodonella*, etc.

1-Write a short note on bath treatment using:

- A) Formaline 25 ppm (4 points)
- B) Malachite green (7 points)
- C) Salt (NaCl) (4 points)

2-Write a short note on fish treatment using antibiotics:

- A) Main antibiotic used. (3 points)
- B) Disadvantages. (4 points)
- C) Injection application on fish (3 points)

QUESTION 5

Fish preservation can be done by drying methods. Explain in detail the drying process of fish. (25 points)