

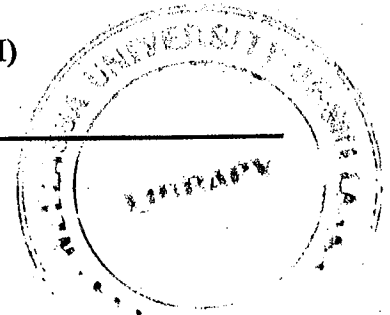
Uva Wellassa University of Sri Lanka  
Faculty of Animal Science & Export Agriculture



Uva Wellassa  
University

BASc Degree Programme  
Year II Semester I  
End Semester Examination – February / March 2011

AQT 214-2 Fish Genetics –Essay - (Section III)



**Instructions**

Answer all questions in Section III in the booklet provided

No. of questions : Four (02)

No. of pages : One (01)

Time : One hour (1hr.)

Total marks allocated : 60%

Index No:

1.

- a. In a breeding population of platy fish reduced number of rays in dorsal fin was observed. This condition is a rare defective condition caused by a recessive allele and the breeder farm needs to eliminate this character from the breeding stock.

How do you advise the breeder to eliminate this character from the breeding stock.  
(Note that the defective fishes are surviving and can perform breeding)

- b. Write a short note on one of the following,  
i. **Breeding value**  
ii. **Correlation among traits**

2.

- a. Briefly describe the importance of **heritability ( $h^2$ )** in fish breeding.
- b. Indicate **four (04) different methods of sex-determination** of fish and explain how a X-linked character will be inherited in one of those methods

[End of section III]