



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



**Aquatic Resources Technology Degree Programme**  
**Year II Semester I**  
**End Semester Examination – August / September 2014**

**AQT 214-2 Fish and Shellfish Nutrition**  
**Essay (Section II)**

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**Instructions**

Answer **all** questions in Section II in a given Booklet.

No. of questions : Two (02)  
No. of pages : Two (02)  
Time : One hour (1hr)  
Total marks allocated : 60%

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01) Assume that you are an aquaculturist need to develop low cost feed using locally available ingredients for small scale **grow-out pond** system rearing **Tilapia fingerlings**. If the farm is located close to **Dambulla area**,

(a) List down ingredient selection criteria.

(15 marks)

(b) List the ingredients which are locally available (Dabmulla area) and categorize them into energy sources and protein sources.

(10 marks)

(c) Suggest suitable small scale feed preparation procedure including the selected ingredients with other necessary additives.

(25 marks)

**Note:** Explain the significance of each step that you are adopting for the above feed preparation method (Question (c)).

(02) An ornamental fish farmer brought 1000 ornamental koi carps, each weighing around 2.0 g. He was grown them up to their average weight of 7.0 g. During the growing period farmer had fed 9.6 kg of feeds. A koi carp of 2.0 g requires a ration of 8% of its body weight. Farmer had given feed twice a day.

Note: Question (a) and (b) need to include the calculation steps.

(a) How much feed farmer had given per Ration? (10 marks)

(b) Calculate the expected feed conversion ratio (FCR) of the fish? (15 marks)

(c) Is this result (Results got for Question (b)) typical of aquatic animals? Comment on the result explaining the factors that affect on FCR of the aquatic organisms.

(25 marks)

[End of section II]