



Uva Wellassa University of Sri Lanka  
End Semester Examination- September/October 2012  
Faculty of Animal Science & Export Agriculture  
Aquatic Resources and Technology Degree Programme  
Year III Semester II



AQT 351-2 Applied Aquatic Biotechnology –Essay - (Section III)

**Instructions**

Answer all questions in Section III in the booklet provided

No. of questions : Three (03)

No. of pages : One (01)

Time : One hour (01 hr)

Total marks allocated : 60%

Index No:

1.
  - a) Define the term **Transgenic fish** (20 marks)
  - b) Propose a method to transfer **Growth Hormone gene (GH) gene** in to Atlantic salmon (*Salmo salar*) to **enhance growth** for human consumption .Outline the steps involved in gene transformation. (40 marks)
  - c) Briefly explain **Possible risks of transgenic fish** in aquaculture (40 marks)
  
2. Mycobacteriosis is one of the serious diseases that affect a wide range of cultured fish. Few tilapia fishes of a farm are showing clinical signs (skin discolouration, abnormal swimming behavior) which are similar to mycobacteriosis. Design an experiment to diagnose mycobacteriosis of this farm using a PCR based technique. (100 marks)

[End of Section III]