



Uva Wellassa University of Sri Lanka  
Faculty of Animal Science & Export Agriculture  
B.ASc. Degree Programme  
Year III Semester II  
End Semester Examination- September/October 2013



**ANS 332-3 Animal Biotechnology**  
**Essay - (Section III)**

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**Instructions**

Answer all questions in Section III in the booklet provided

No. of questions : Three (03)

No. of pages : One (01)

Time : One hour and thirty minutes (01 hr. 30 min.)

Total marks allocated : 60%

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1.

a) Propose a method to transfer **Growth Hormone (GH) gene** in to broiler chicken to **enhance their growth**. Outline the steps involved in gene transformation.

(50 marks)

b) Write a **brief critique** on 'Uses and Applications of Transgenic Animals'.

(50 marks)

2.

a) What is **DNA fingerprinting**? (10 marks)

b) Write a **brief summary** on **role of molecular markers in livestock improvement**?

(40 marks)

c) A disease appears suddenly in a flock of broiler chicken and many birds die either without premonitory signs or with minimal signs of depression, ruffled feathers and high fever. Other birds show weakness and a staggering gait. This broiler flock is suspected for **Avian Influenza** with the infection of **H7N7 virus**. Design an experiment to **diagnose Avian Influenza (H7N7) virus** with selective molecular marker.

(50 marks)

3. Write short notes on ,

- a) Somatic Cell Nuclear Transfer (SCNT)
- b) Polymerase Chain Reaction (PCR)
- c) cDNA Library

(100 marks)

**[End of Section III]**