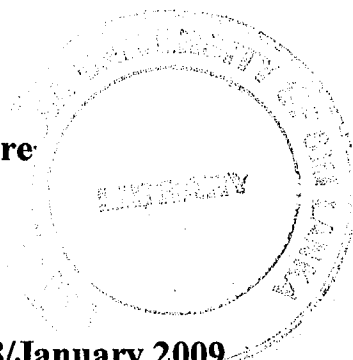




Faculty of Animal Science & Export Agriculture  
Uva Wellassa University of Sri Lanka

B.ASc. Degree Programme  
Year II Semester I

End Semester Examination – December 2008/January 2009



**ANS 231-2 Principles of Genetics and Breeding - Essay (Section II)**

**Instructions**

Answer all questions in Section II

No. of questions : Two (02)

No. of pages : One (01)

Time : One hour (01 hr)

Total marks allocated : 40%

Index No:

1.
  - a) **“Deletions /deficiencies of chromosome segments will leads to Pseudo-dominance”**  
What is your opinion about this statement?  
Agree/ Disagree?  
Justify your answer
  - b) **“Sometimes duplications of chromosome segments is useful”**  
What is your opinion about this statement?  
Agree/ Disagree  
Justify your answer
  - c) Giving examples explain how the **genetic drift** change the gene frequencies in a population ( based on Bottle neck effect)
2.
  - a) In a population of 500 plants having three genotypes **TT- 232, Tt – 223 and tt - 45** respectively.  
**Calculate the allelic frequencies  $f(A)$  and  $f(a)$**
  - b) Why breeding is important to improve Animal productivity
  - c) Write a short note on **“Traditional Animal Breeding Scheme”**

[End of Section II]