



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



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

ANS 131-2 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 : 60%

Index No:

1.

- a) Write short notes on
 - i. Interphase of cell cycle (30 marks)
 - ii. Traditional Animal Breeding Scheme (30 marks)
- b) **“Deletions /deficiencies of chromosome segments will leads to Pseudodominance”**
 What is your opinion about the above statement?
 Agree/ Disagree
 Justify your answer (40 marks)

2.

- a) Why breeding is important to improve Animal productivity (50 marks)
- b) Gene ‘T’ controlling the height of the plants. Allele ‘T’ is for the tallness of plants and ‘t’ is the alternative recessive allele. In a population of 500 plants,

Phenotype	Genotype	Number
Tall	TT	232
Tall	Tt	223
Short	tt	45

Calculate the allelic frequencies $f(A)$ and $f(a)$

(50 marks)

[End of Section II]