



Page 1 of 3

UNIVERSITY OF SWAZILAND

2<sup>nd</sup> SEM. 2013/2014

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: B.Sc. ANIMAL SCIENCE YEAR 3, B.Sc. ANIMAL SCIENCE (DAIRY  
OPTION) YEAR 3, B.Sc. AGRONOMY YEAR 3

COURSE CODE: AS 305

TITLE OF PAPER: PASTURE AND FODDER MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS

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**QUESTION 1**

For larger areas, pasture establishment is faster with the broadcasting method. Beginning with initial ploughing until seedling emergence, describe fully the steps involved in pasture establishment.

(25 Marks)

**QUESTION 2**

(a) Briefly discuss any five guidelines to be followed for successful pasture establishment.

(10 marks)

(b) Below is information on two seedlots of Rhodes grass (A&B).

Based on pure germinating seed (PGS),

(i) which seedlot is of better quality?

(5 marks)

(ii) which seedlot would require a higher seed rate than recommended, and why?

(5 marks)

(iii) Based on pure live seed (PLS) content of a seedlot, determine which seedlot is expensive. (SHOW ALL YOUR WORK).

(5 marks)

A: 65% Germination

B: 80% Germination

75% Purity

90% Purity

E210.00 /kg,

E245.50 /kg.

**QUESTION 3**

(a) Discuss five factors that influence optimum stocking rate.

(25 Marks)

**QUESTION 4**

(a) This semester we planted and maintained several pasture/fodder species that a dairy farmer can plant. Name three grasses and two forage legumes that we used.

For each species give both common and scientific names.

(15 Marks)

(b) Differentiate between Kikuyu grass and Lucerne.

(10 Marks)

**QUESTION 5**

- (a) (i) Describe five benefits farmers are likely to get from pasture mixtures as opposed to pure pasture stands. (10 marks)
- (ii) Give limitations of pasture mixtures and possible solutions. (10 marks)
- (b) Why is plant material cut into smaller pieces during silage making? (5 marks)