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### UNIVERSITY OF SWAZILAND

2<sup>nd</sup> SEM. 2015/2016

# SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME:

BSc. ANIMAL SCIENCE YEAR 3, BSc. ANIMAL SCIENCE

(DAIRY OPTION) YEAR 3, BSc. AGRONOMY YEAR 3

COURSE CODE: AS 305

TITLE OF PAPER: PASTURE AND FODDER MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE **CHIEF INVIGILATOR** 

#### **QUESTION 1**

One of the most serious constraints to livestock production in Swaziland is inadequate and low quality of forage in winter. Briefly explain how this problem can be addressed through the use of crop residues and agroindustrial by-products.

(25 Marks)

#### **QUESTION 2**

(a) What are the objectives of pasture management?

(5 Marks)

- (b) For successful pasture establishment it is very important to start with good quality seed. Given below is information on two seedlots of Rhodes grass. Based on pure germinating seed (PGS),
- (i) which seedlot is of better quality? Show all your work.

(7 Marks)

(ii) which seedlot would require a higher seed rate than recommended, and why? (6 Marks)

(c) Based on pure live seed (PLS) content of a seedlot, determine which seedlot is expensive. Show all your work.

(7 Marks)

60% Germination A:

70% Purity

E105.00 /kg,

B: 85% Germination

95% Purity

E135.50/kg.

#### **QUESTION 3**

(a) Comment on losses in silage making under the following headlines:

(i) Field losses

(13 Marks)

(ii) Wastage

(12 Marks)

# **QUESTION 4**

Fully discuss **FIVE** of the benefits farmers are likely to get from pasture mixtures as opposed to pure pasture stands.

(25 Marks)

### **QUESTION 5**

Based on grazing of Italian rye grass at the UNISWA Farm, fully discuss and illustrate the concept of strip rotational grazing. (25 Marks)