



UNIVERSITY OF SWAZILAND

2nd SEM. 2016/2017

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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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 agro-industrial 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), determine the following:

(i) Seedlot of better quality? **Show all your working.**

(7 Marks)

(ii) Seedlot that 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 working.**

(7 Marks)

A: 60% Germination
70% Purity
E105.00 /kg,

B: 85% Germination
95% Purity
E135.50 /kg.

QUESTION 3

Explain the significance of good seed quality in terms of the following:

(i) Seed longevity and

(18 Marks)

(ii) Seed vigour.

(7 Marks)

QUESTION 4

(a) Hay making is an easier method of fodder conservation. However, there are losses associated with hay production. Give an outline of the losses due to

(i) Mechanical, (ii) Rain, and (c) Storage.

(20 Marks)

(b) Suggest practical ways to reduce losses in hay making.

(5 Marks)

QUESTION 5

(a) What time of the year is Rhodes grass usually planted and why?

(10 Marks)

(b) In a table form, show the differences between Rhodes grass and Ryegrass.

(15 Marks)