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UNIVERSITY OF ESWATINI

2nd SEM. 2018/2019

FINAL EXAMINATION PAPER

**PROGRAMME: B.Sc. ANIMAL SCIENCE YEAR 2
B.Sc. ANIMAL SCIENCE (DAIRY OPTION) YEAR 2**

COURSE CODE: ASC204

TITLE OF PAPER: RANGE MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

**INSTRUCTIONS: ANSWER QUESTION ONE (1) AND ANY OTHER THREE (3)
QUESTIONS**

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

QUESTION 1

Given the following information:

Production per hectare is 3000 kg DM forage

Total area is 200 ha

100 cows each weighs 450 kg

10 bulls each weighs 550 kg

90 calves each weighing 100 kg

- (a) Calculate how many days the animals will spend in this ranch. (15 Marks)
- (b) Outline any **FIVE (5)** guidelines that must be followed by range managers to avoid livestock poisoning by plants. (10 Marks)

QUESTION 2

Give an explanation why the concept that says “rangeland is a renewable resource” is conditional.

(25 Marks)

QUESTION 3

(a) Using a diagram show that the presence of metabolic reserve has a significant influence on the survival of range grass.

(16 Marks)

(b) Give any **THREE (3)** characteristics associated with high grazing resistance in grasses.

(9 Marks)

QUESTION 4

What are the risks associated with rangeland livestock production?

(25 Marks)

QUESTION 5

(a) Give **FIVE (5)** reasons why plants must store carbohydrates.

(10 Marks)

(b) Why is it important to practise correct stocking rate?

(15 Marks)