

2ND SEMESTER 2004/2005

PAGE 1 OF 2

UNIVERSITY OF SWAZILAND **FACULTY OF AGRICULTURE SUPPLEMENTARY EXAMINATIONS: 2005**

PROGRAMME:

DIPLOMA IN AGRICULTURE II

DIPLOMA IN AGRICULTURAL EDUCATION II.

COURSE CODE: APH 203

TATLE OF PAPER: RANGE AND RANCH MANAGEMNT

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.

OUESTION 1

Using the soil, vegetation and the grazing animal, show the interaction of the various components in a range ecosystem. (25 Marks)

QUESTION 2

Fencing is an essential input in a ranching operation. Mention the characteristics, merits and limitations of

a) Suspension fences (9 Marks)

b. Fabricated fences (8 Marks)

c) Electric fences (8 Marks)

QUESTION 3

Discuss the role of fire in range management and mention the period and frequency of burning.

(25 Marks)

QUESTION 4

- a. Define the terms decreasers, increasers and invaders in relation to range condition. (12.5 Marks)
- b. Explain why highly palatable species decrease whilst the unpalatable species increase under sustained heavy grazing/under grazing. (12.5 Marks)

QUESTION 5

Describe the following vegetation variables as a measure of rangeland condition

a) Cover (9 Marks)

b) Botanical composition (8 Marks)

c) Dry matter production (8 Marks)