

UNIVERSITY OF FORT HARE

AGP 222

Degree Examinations

November 2018

Time : 3 Hours

Subject : Veld and Cultivated Pasture Management

Marks : 100

This paper consists of 3 printed pages including the cover page

Internal Examiners

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Moderator

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Instructions

1. ANSWER ALL QUESTIONS
2. It is in your best interest to write clearly and legibly.

SECTION A: VELD MANAGEMENT

Question 1 (20 marks)

Define the following terms and concepts (2 marks each):

- a) Carrying capacity
- b) High production grazing
- c) Continuous grazing
- d) Grazing/browsing capacity
- e) Period of absence
- f) Animal Unit
- g) Benchmark site
- h) Forage Factor
- i) Canopy cover
- j) Period of absence

Question 2 (20 marks)

1. Fill in the missing words on the following descriptions. Just write the required word or words only: (10 marks)
 - 1.1. is a small stomached grazer that takes high nutritious feed.
 - 1.2. Is an index of veld productivity and correlates to grazing capacity of the veld.
 - 1.3. Is generally termed 'the tragedy of the commons' since no farmer has power to control the number of animals grazing the area.
 - 1.4. site is the most productive and ecologically stable veld.
 - 1.5. For grasslands to be highly productive, must be catered for, through rest periods & management driven by objectives.

2. Write short notes on the following grazing systems:

2.1 Seasonal rotational resting grazing system (5 marks)

2.2 A year-long rotational resting grazing system. (5 marks).

Question 3 (20 marks)

- a) i. Define veld management and state its two main objectives (5).
- ii. The ontogeny of the grass plant reveals some critical growth periods at which the plants are most susceptible to grazing. Name them. (10).
- iii. Describe the **ecological** approach used in the utilization of grazing material to achieve the objectives of veld management. (5).

SECTION B: CULTIVATED PASTURES

Question 4 (20 marks)

- i. Briefly describe the two variables that are modified in order to achieve the objectives of fodder flow planning (10 marks)
- ii. Explain the mechanical and heat scarification methods. (10 marks)

Question 5 (20 marks)

- i. Differentiate between ley pastures and cultivated pastures. [4 marks]
- ii. Describe four desirable characteristics of pasture plants to be used for hay making. [4 marks]
- iii. Outline the steps followed during hay making. [12 marks]