UNIVERSITY OF FORT HARE

AGP 321

Degree Examinations

November 2018

Time : 3 Hours

Subject: Fodder Production and Conservation

Marks: 100

This paper consists of 3 printed pages including the cover page

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INSTRUCTIONS

1. Answer any five questions
2. It is in your best interest to write clearly and legibly
QUESTION 1 (20 marks)

1. Discuss the importance of fodder species in a livestock production (10 marks)

2. Describe the characteristics of common tropical ley legume pastures and give examples (5 marks)

3. Describe the climatic and edaphic requirements of the species listed above (5 marks)

QUESTION 2 (20 marks)

Write brief notes on the following:

(a) Foggage utilization (10 marks)

(b) Urea treatment of cereal stovers (10 marks)

QUESTION 3 (20 marks)

1. Elaborate on the factors that are considered in selecting pastures species to grow. (10 marks)

2. Fodder species are classified according to four categories, briefly categorise the following species and explain the climatic and environmental condition of each species;

   a) *Gliricidia sepium* (3 marks)

   b) *Pennisetum glaucum* (2 marks)

   c) *Macroptilium atropurpureum* (3 marks)

   d) *Pennisetum clandestinum* (2 marks)

QUESTION 4 (20 marks)

1. Describe the establishment of a *Sorghum bicolor-Vigna unguiculata* mixed fodder crop (20 marks)
QUESTION 5 (20 MARKS)

Give an account of the microbial fermentation processes that occur in conserved silage.

QUESTION 6 (20 MARKS)

(a) Discuss the integrated weed management methods used in fodder production [10 marks]

(b) Discuss the factors that affect the quality of hay [10 marks]

QUESTION 7 [20 MARKS]

Briefly describe the two variables that are modified in order to achieve the objectives of fodder flow planning.