



## MERU UNIVERSITY COLLEGE OF SCIENCE & TECHNOLOGY

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### University Examinations 2010/2011

FIRST/SECOND YEAR, FIRST SEMESTER EXAMINATIONS FOR DIPLOMA IN AGRICULTURAL  
EDUCATION AND EXTENSION/DIPLOMA IN AGRICULTURE/CERTIFICATE IN AGRICULTURE

**AGR 121/123: PASTURE AND FODDER CROP MANAGEMENT**

**DATE: DECEMBER 2010**

**TIME: 1½ HOURS**

**INSTRUCTIONS:** Answer *Question one* which is *Compulsory* and any other *two* questions

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#### QUESTION ONE – (30 MARKS)

- (a) Define the following terms as used in pasture and fodder crops management:
- (i) Forage. (2 Marks)
  - (ii) Ranch (2 Marks)
  - (iii) Ley (2 Marks)
  - (iv) Herb (2 Marks)
  - (v) Grazing (2 Marks)
- (b) Discuss Chloris Gayana (Rhode grass) under the following sub-headings:
- (i) Natural habitat (2 Marks)
  - (ii) Palatability (2 Marks)
  - (iii) Persistence (2 Marks)
- (c) (i) Name two aims of rotational grazing. (2 Marks)  
(ii) Name two advantages of continuous grazing. (2 Marks)
- (d) (i) State two reasons for conserving forage. (2 Marks)  
(ii) What is your understanding of the term stocking rate? (2 Marks)  
(iii) Describe the process of hay making as a method of conserving forage. (6 Marks)

#### QUESTION TWO – (15 MARKS)

- (a) What is dry-matter digestibility? (2 Marks)
- (b) A grazing management system to be recommended must achieve three aspects, name them. (3 Marks)
- (c) Name the two main grazing systems. (2 Marks)

(d) Discuss the steps followed in making silage. (8 Marks)

**QUESTION THREE – (15 MARKS)**

(a) Define the term carrying capacity. (2 Marks)

(b) What is a paddock? (2 Marks)

(c) Name the two grass species common in high altitude areas in Kenya. (2 Marks)

(d) Explain what is “set-stocked” as used in pasture and fodder crop management. (2 Marks)

(e) (i) What is zero-grazing (stall-feeding) (1 Mark)

(ii) Discuss three (3) advantages of zero-grazing (stall-feeding) (6 Marks)

**QUESTION FOUR – (15 MARKS)**

(a) Discuss three ways of planting nappier grass (*Pennisetum Purpureum*) (6 Marks)

(b) Name three effects of weeds on pastures. (3 Marks)

(c) Give three reasons for top-dressing pastures. (3 Marks)

(d) State three importance of paddocking in grazing management. (3 Marks)

**QUESTION FIVE – (15 MARKS)**

(a) Briefly describe the three parts of grass as discussed in botany of grass. (3 Marks)

(b) What is the name given to the fruit of most grasses? (2 Marks)

(c) Describe five desirable attributes of cultivated fodder crops. (10 Marks)