



**MERU UNIVERSITY COLLEGE  
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**University Examinations 2011/2012**

FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR CERTIFICATE IN AGRICULTURE

**AGRI 0123: PASTURE AND FODDER CROP MANAGEMENT**

**DATE: AUGUST 2011**

**TIME: 1½ HOURS**

**INSTRUCTIONS:** Answer question *one* and any other *two* questions

**QUESTION ONE – (30 MARKS)**

- (a) Define the following terms as used in pasture and fodder crop management.
- (i) Pasture crop (2 Marks)
  - (ii) Fodder crop (2 Marks)
  - (iii) Palatability (2 Marks)
  - (iv) Ley (2 Marks)
  - (v) Range (2 Marks)
- (b) Discuss three main classifications of pastures based on ecological zones. (9 Marks)
- (c) Discuss Chloris Gayana (Rhode grass) under the following sub headings
- (i) Nutritive value (3 Marks)
  - (ii) Palatability (3 Marks)
  - (iii) Persistence to grazing (3 Marks)
- (d) What is culm as used in grass botany? (2 Marks)

**QUESTION TWO – (15 MARKS)**

- (a) Discuss the following important attributes of cultivated fodder crops under the following sub-headings:
- (i) Growth vigour (2 Marks)
  - (ii) Quality of forage (2 Marks)
  - (iii) Persistence to grazing (2 Marks)
  - (iv) Acceptability/palatability (2 Marks)
  - (v) Drought resistance (2 Marks)
- (b) Name three types of silos used in fodder and forage conservation. (3 Marks)

(c) Explain the term “set-stocking” as used in grazing management. (2 Marks)

**QUESTION THREE – (15 MARKS)**

(a) Discuss three main advantages of rotational grazing system. (6 Marks)

(b) Mention three main advantages of paddocking pastures. (6 Marks)

(c) Explain the difference between carrying capacity and stocking rate. (3 Marks)

**QUESTION FOUR – (15 MARKS)**

(a) Discuss the best way to utilize nappier grass. (6 Marks)

(b) Name three qualities of good hay (3 Marks)

(c) Explain three reasons for conserving forage. (6 Marks)

**QUESTION FIVE – (15 MARKS)**

(a) Explain why Lucern (*Medicago Sativa*) should be fed to livestock only when dry and in small amounts. (3 Marks)

(b) Discuss tethering as a method of grazing management. (3 Marks)

(c) Explain why goats can do better than sheep and cattle in case of a prolonged drought. (3 Marks)

(d) State and briefly explain three importance of grassland agriculture in Kenya. (6 Marks)