

## MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 - Meru-Kenya.

Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293,

+254 789151411 Fax: 064-30321

Website: www.must.ac.ke Email: info@must.ac.ke

### **University Examinations 2013/2014**

## FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR DIPLOMA IN AGRICULTURE AND

# FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR CERTIFICATE IN AGRICULTURE

#### AGR 0123: PASTURES AND FODDER MANAGEMENT

DATE: APRIL 2014 TIME: 1 ½ HOURS

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

## **QUESTION ONE – (30 MARKS)**

(a) Define the term pasture.

(2 Marks)

- (b) Give three reasons why we should study pasture production.
- (3 Marks)
- (c) In your own view enumerate any four problems that have hindered pasture management in Kenya. (4 Marks)
- (d) You are an extension officer in charge of pasture and fodder conservation section in Meru County Agricultural show, can you enumerate five qualities of a good pasture plants or legume to young farmers club of local secondary should who have visited your stand.

(5 Marks)

- (e) What do you understand by the following terminologies as used in pasture and fodder management. (5 Marks)
  - (i) Direct sowing
  - (ii) Under sowing
  - (iii) Over sowing
  - (iv) Fodder
  - (v) Silage
- (f) Differentiate between the following
  - (i) Carrying capacity and grazing pressure

- (ii) Lay pasture and permanent pasture
- (iii) Grassland and savannah
- (iv) Node and internode
- (v) Grasses and legumes (5 Marks)
- (g) Give four reasons why farmers need to conserve pasture. (5 Marks)
- (h) List two methods that a farmer can use to conserve pastures and fodders. (2 Marks)

### **QUESTION TWO – (15 MARKS)**

- (a) Fodder conservation is appreciated as one way of effective and efficient way of utilizing fodder materials in view of this give a detailed account on the procedure of making tube silage for a small scale farmer. (8 Marks)
- (b) List four types of silo that you know. (4 Marks)
- (c) Discuss any three factors that affect the quality of silage. (3 Marks)

#### **QUESTION THREE – (15 MARKS)**

- (a) During hay making some, losses are found to occur. Discuss any five ways which brings losses in the process of making hay and conserved hay. (5 Marks)
- (b) Fodder crop have been identified as the most important feed on small holder farms in Kenya. Discuss any one of the method of nappier grass establishment (conventional or Tumbukiza method). (8 Marks)
- (c) Name two varieties of nappier grass you have learnt. (2 Marks)

#### **QUESITON FOUR – (15 MARKS)**

- (a) Name three varieties of legumes. (3 Marks)
- (b) Give two reasons why legumes are important in the small holder farming system in Kenya. (2 Marks)
- (c) In the ecology of the natural grasslands, climate is one of the factors that determines the distribution of pastures. Discuss five climatic conditions which have a direct bearing on distribution of pastures. (10 Marks)

#### **QUESTION FIVE – (15 MARKS)**

Describe the following terms as used in grazing management:

(a) Continuous grazing.	(5 Marks)
(b) Rotational grazing	(5 Marks)
(c) Deferred grazing	(5 Marks)