



**MERU UNIVERSITY COLLEGE
OF SCIENCE & TECHNOLOGY**

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University Examinations 2011/2012

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

AGR 0123/0221: PASTURES AND FORAGE MANAGEMENT

DATE: DECEMBER 2011

TIME: 1½ HOURS

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

QUESTION ONE – (30 MARKS)

- (a) As an agricultural extension officer what would you give as the objectives of pasture management to your livestock farmers? (2 Marks)
- (b) “One of the biggest problems faced by livestock farmers in the tropics is the effect of seasonal rainfall” Discuss (4 Marks)
- (c) Forage crops can be classified according to the type of plant they are and the way in which they are used to feed livestock. Give five types of classes and example of plant in each of them. (5 Marks)
- (d) As an agricultural extension officer, a livestock farmer comes to your office for intervention on pasture establishment. Give and explain any three factors restricting the success of pasture establishment. (6 Marks)
- (e) What do you understand by the following terms? (5 Marks)
 - (i) Pasture
 - (ii) Browse
 - (iii) Ley
 - (iv) Greenland
 - (v) Roughage
- (f) Both macro and micro elements are very important in pasture performance; explain the difference between the two types of elements. (2 Marks)
- (g) Give three qualities for selection of a good pasture grass or legume (3 Marks)

- (h) In pasture and fodder production management weed has been identified as an important factor. Explain three weed control methods. (3 Marks)

QUESTION TWO – (15 MARKS)

In fodder production “*Tumbukiza Method Of Nappier Grass Establishment*” has been found to be very effective technology. As an agricultural extension officer prepare teaching notes for farmers attending a field day at Mr. Mungawa’s farm. (15 Marks)

QUESTION THREE – (15 MARKS)

- (a) Give three reasons why granes are suitable herbage plants. (3 Marks)
- (b) What do you understand by the following terms in pasture and fodder management:
- (i) Seed treatment (2 Marks)
 - (ii) Silage (2 Marks)
 - (iii) Hay (2 Marks)
 - (iv) Seed inoculation (2 Marks)
- (c) Outline four constrains regarding forage production. (4 Marks)

QUESTION FOUR – (15 MARKS)

Explain how you would make a small scale silage. (5 Marks)

QUESTION FIVE – (15 MARKS)

- (a) What do you understand by the following terms:
- (i) Seed longevity (2 Marks)
 - (ii) Re-seeding (2 Marks)
 - (iii) Nurse crop (2 Marks)
 - (iv) Seed dormancy (2 Marks)
- (b) “In the tropics livestock is kept for various reasons” Give four reasons. (4 Marks)
- (c) Explain what you understand by the following terms
- (i) Forage conservation (1 Mark)
 - (ii) Hydorphytes (1 Mark)
 - (iii) Mesophyte (1 Marks)

