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University Examinations 2012/2013

YEAR ONE, SEMESTER ONE EXAMINATIONS FOR CERTIFICATE/DIPLOMA IN
AGRICULTURE

AGR 0123: FODDER AND PASTURE MANAGEMENT

DATE: APRIL 2013

TIME: 1½HOURS

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

QUESTION ONE – (30 MARKS)

- a. In the tropical it has been argued that the biggest challenged in livestock keeping is the effect of seasonal rainfall. Discuss (4 Marks)
- b. Experts in agrotology have firmly claimed that rhodes grass globally is the most important cultivated tropical grass presently, discuss. (4 Marks)
- c. Explain what you understand by the following terminologies in pasture and fodder management. (3 Marks)
 - i. Xerophytes
 - ii. Under sowing
 - iii. Hygrophytes
- d.
 - i. What do you understand by the term forage ecology? (1 Mark)
 - ii. Climate is an important factor to consider when establishing a pasture; radiation regime is one of the climatic factors. Explain its importance. (2 Marks)
- e. As the district livestock production officer in charge of one of the district in Meru County what would you give the district stakeholders forum as factors restricting the success of pasture establishment. (6 Marks)
- f. Give any three qualities for selection of good pasture grass or legume. (3 Marks)
- g. What do you understand by the following terminologies? (4 Marks)
 - i. Pasture
 - ii. Fodder
 - iii. Seed viability
 - iv. Long day plants
- h. What is the importance of forages? (3 Marks)

QUESTION TWO – 15 MARKS

Professionals in livestock production have come to appreciate that seasonality in the tropics is a reality and the way forward is to intensively campaign for fodder conservation. Hay making is one of the ways to do fodder conservation. Give a detailed account on hay making. (15 Marks)

QUESTION THREE – 15 MARKS

- a. Give three demerits of direct method of pasture establishment. (3 Marks)
- b. Give any three factors influencing vegetation distribution in Kenya. (3 Marks)
- c. In fodder establishment, direct method is commonly used. Explain any three points to consider while undertaking direct establishment. (6 Marks)
- d. Give three reasons why grass is suitable garbage plants. (3 Marks)

QUESTION FOUR – 15 MARKS

Nappier grass is a very important forage crop in dairy production industry. Prepare teaching notes to dairy farmers attending a field day at Mr Silas Mungathia's farm on TUMBUKIZA METHOD OF NAPPIER GRASS ESTABLISHMENT (15 Marks)

QUESTION FIVE – 15 MARKS

- a. Forage crops can be classified according to type of plant they are and the way in which they are used to feed livestock. Give five types of classes and examples of plant/crop in each of them. (5 Marks)
- b. In the tropics livestock keeping is done for a number of reasons. Give four reasons. (4 Marks)
- c. Both macro and micro elements are very important for pasture establishment and performance explain why? (2 Marks)
- d. What do you understand by the following terms: (4 Marks)
 - i. Nurse crop
 - ii. Seed longevity
 - iii. Seed dormancy
 - iv. Re-seeding