



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 0122/0220: ANNUAL CROPS

DATE: DECEMBER 2011

TIME: 1½ HOURS

INSTRUCTIONS: Answer question one and any other two questions

QUESTION ONE – (30 MARKS)

- (a) Yellow sweet potato variety is the most popular one in the country. Explain. (2 Marks)
- (b) Why are beans not easily digested by non-ruminants? (1 Mark)
- (c) Copper deficiency is a problem in some wheat growing districts in Kenya. Give any two ways farmers can employ to contain this problem. (2 Marks)
- (d) Give two symptoms of maize smut disease. (2 Marks)
- (e) What is the toxic compound found in Cassava? (2 Marks)
- (f) Why is tuber method of sweet potato propagation not recommended? (2 Marks)
- (g) (i) State any three qualities a wheat seed for planting should have. (3 Marks)
(ii) State two factors which determine the seed rate of wheat. (2 Marks)
- (h) (i) What is chitting (2 Marks)
(ii) Name any two chemicals which can be used to enhance chitting. (2 Marks)
- (i) Nchiru is maize producing one found in the lower highland zone. Give two maize varieties which you can recommend in this area to the farmers. (2 Marks)
- (j) Maize needs a weed free environment. Explain how you can control weeds in maize from by light cultivation method. (3 Marks)
- (k) Name two pests and three diseases which affect beans. (5 Marks)

QUESTION TWO – (15 MARKS)

- (a) Bacterial wilt is a problematic disease of the potatoes;
 - (i) Give three symptoms of the disease (3 Marks)
 - (ii) State any three methods of spreading this disease (3 Marks)
 - (iii) Give the four methods of controlling the disease (3 Marks)
- (b) State all the ecological requirements of wheat. (6 Marks)

QUESTION THREE – (15 MARKS)

Give a detailed account of how you can produce dry beans in your farm from land preparation up to storage. (15 Marks)

QUESTION FOUR – (15 MARKS)

- (a) (i) State any five characteristics which are used for identifying different sweet potato cultivars. (5 Marks)
- (ii) Explain how you can establish sweet potato using vines. (4 Marks)
- (b) (i) Give three symptoms of maize stalk borer (3 Marks)
- (ii) State three methods of controlling this pest. (3 Marks)

QUESTION FIVE – (15 MARKS)

- (a) (i) Give two factors which determine the spacing to use in potato production. (2 Marks)
- (ii) Explain the storage process of potatoes. (6 Marks)
- (b) Give four reasons why wheat farmers are advised to plant certified seeds. (4 Marks)
- (c) Name three pests which attack sweet potatoes. (3 Marks)