



MERU UNIVERSITY COLLEGE OF SCIENCE & TECHNOLOGY

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University Examinations 2012/2013

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

AGR 0122/0220: ANNUAL CROPS

DATE: DECEMBER 2012

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question **ONE** and any other **TWO** questions

QUESTION ONE – 30 MARKS

- (a) Potato tuber cuttings are recommended as potato planting materials. Give two reasons why most farmers do not use this method. (2Marks)
- (b) (i) What is chitting as used in Potato production? (2Marks)
(ii) Give two reasons why a farmer should ensure that the site to plant potatoes should not have been under solanaceae family plants for the last five years. (2Marks)
- (c) (i) Explain any two methods of controlling copper deficiency in wheat farms. (2Marks)
(ii) State any four preventive methods of controlling weeds in wheat farm (2Marks)
- (d) (i) State any three factors which determine the amount of fertilizer applied in a maize farm. (3Marks)
(ii) Striga weed is a major weed in maize farmers in the Lake Victoria region. Give any four ways of controlling this weed. (4Marks)
- (e) (i) Give the names of two bean varieties recommended in semi-arid areas. (2Marks)
(ii) Why are beans supposed to be cooked in hot water for a long time before eating? (2Marks)
- (f) (i) Give the scientific names of the two types of cassava produced by farmers. (4Marks)
(ii) Why are cassava roots and leaves not supposed to be consumed before cooking properly? (2Marks)
- (g) What is the optimum temperature needed by sweet potatoes. (1Mark)

QUESTION TWO - 15 MARKS

- (a) Late blight is a serious Irish Potato disease. (2Marks)
- (i) State any two symptoms of this disease (2Marks)
 - (ii) Give any two methods of controlling the disease (2Marks)
- (b) Potatoes are supposed to be planted on ridges. State any three advantages of ridge planting method. (3Marks)
- (c) (i) Give the scientific name of sweet potatoes (2Marks)
- (ii) Explain the procedure of establishing sweet potatoes using the stem cuttings. (6Marks)

QUESTION THREE – 15 MARKS

- (a) (i) Explain the procedure used by cassava farmers to store them for a long period of time. (4Marks)
- (ii) Post harvest physiological deterioration (PPD) is a problematic disease in cassava roots. Explain how it occurs and the methods of controlling this disease. (5Marks)
- (b) (i) Give any four reasons why wheat farmers are supposed to plant certified seeds from registered seed companies. (4Marks)
- (ii) State any two symptoms of stem rust in wheat. (2Marks)

QUESTION FOUR – 15 MARKS

- (a) Potato spacing is determined by the intended use of the tubers. Explain. (4Marks)
- (b) Give two potato varieties recommended in low potential areas. (2Marks)
- (c) State any three methods of controlling potato tuber moth. (3Marks)
- (d) State any three methods of suppressing sprouting in potato tubers that farmers can employ. (3Marks)
- (e) Water stress at maize flowering stage affects maize production severely. State any five ways by which water stress affect the crop at this stage. (3Marks)

QUESTION FIVE – 15 MARKS

- (a) Explain the procedure of controlling weeds in bean farm. (4Marks)
- (b) Explain the procedure of storing cassava roots after harvesting in order to prolong the storage life. (3Marks)
- (c) Explain the procedure of preparing cassava for planting materials. (4Marks)
- (d) (i) Name any two common bird pests of wheat. (2Marks)
- (ii) State two methods of controlling bird pests. (2Marks)