

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 0122: ANNUAL CROPS

DATE: APRIL 2014 TIME: 1 ½ HOURS

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

QUESTION ONE – (30 MARKS)

- (a) Explain the advantages of planting Hybrid seeds over the local seeds. (4 Marks)
- (b) Explain five factors that make maize an important crop in Kenya. (5 Marks)
- (c) Describe how you would control witch weed (striga hermonthica) in cereal production.
 - (5 Marks)
- (d) Why is millet and sorghum considered as orphan crops? (5 Marks)
- (e) Explain the symptoms and control of the following:
 - (i) Blast (*Piricularia oryzea*) in Rice
 - (ii) Stem rust (*Puccinia graminis*) in wheat. (6 Marks)
- (f) Explain why sorghum is a good rationing crop. (5 Marks)

QUESTION TWO – (15 MARKS)

(a) Explain the significance of early seed bed preparation in relation to weed control.

(7 Marks)

- (b) Explain how you would correct copper deficient soil for wheat production. (6 Marks)
- (c) Give two varieties of wheat that are drought tolerant, resistant to lodging and high yielding. (2 Marks)

QUESTION THREE – (15 MARKS)

(a) Highlight the differences between the finger millet, pearl millet and proso millet.

(6 Marks)

(b) Explain how you would use a natural pest enermies in controlling a given pest insect.

(4 Marks)

(c) Explain the significance of early planting in rainfall marginal areas.

(5 Marks)

QUESTION FOUR – (15 MARKS)

(a) Explain the advantages of ridging in potato production.

(5 Marks)

- (b) Why are the vines cutting in sweet potatoes preferred to roots propagation as a planting materials. (5 Marks)
- (c) Explain the horticultural maturity in beans.

(5 Marks)

QUESTION FIVE – (15 MARKS)

- (a) Describe two diseases and two pest commonly associated with beans (*Phaseolus Vulgaris*) and show their symptoms and control. (12 Marks)
- (b) Explain why Nitrogen fertilizers are not a requirement in root crops. (3 Marks)