



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

THIRD YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF
AGRICULTURAL EDUCATION AND EXTENSION

KRM 308: ANNUAL CROPS PRODUCTION

DATE: 27/7/2017

TIME: 2:00 – 4:00 PM

INSTRUCTION TO CANDIDATES:

Answer *ALL* questions from Section A and any other *TWO* from Section B:

SECTION A: COMPULSORY)

QUESTION ONE (30 MARKS)

- a) Explain four reasons why classification of annuals is important to both scientists and farmers (2 marks)
- b) Explain four uses of the following annual crops (10 marks)
 - i) Tobacco
 - ii) Sorghum
 - iii) Sunflower
 - iv) Yams
 - v) Wheat
- c)
 - i) Explain four reasons why cassava does well in lowland parts of Kenya compared to Irish potatoes (4 marks)
 - ii) Giving specific crop examples, explain four ways how temperature influence annual production (4 marks)
- d) Explain two roles of the following practices in annual crops, giving specific example
 - i. Staking
 - ii. Roguing (2 marks)

- e) Giving an example of crop infected, describe one symptom and two management of the following infestations in annual crops
- a) Weevils (4 marks)
 - b) Anthracnose (4 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

QUESTION TWO (20 marks)

- a) Discuss the role of annual crop production in Kenya towards achieving Vision 2030 (14 marks)
- b) Describe the planting of Irish potatoes (6 marks)

QUESTION THREE (20 MARKS)

- a) Explain the production of cowpeas under the given headings (8 marks)
- i) Ecological
 - ii) Land preparation
 - iii) Planting
 - iv) Harvesting
- b) Explain six measures used in management of pests in pulses giving specific example of pests (12 marks)
- c) Explain any four reasons why a farmer should be advised to plant finger millet (4 marks)

QUESTION FOUR (20 MARKS)

Describe planting of rice under the following headings (20 marks)

- a) Land preparation
- b) Planting
- c) Water Management
- d) Fertilization
- e) Harvesting and post harvesting practices

QUESTION FIVE (20 MARKS)

- a) Explain the production of maize under the following headings (10 marks)
- i) Ecological conditions
 - ii) Planting
 - iii) Weeding
 - iv) Fertilization
 - v) Harvesting
- b) Explain five reasons a farmer must considered when selecting maize variety for planting (10 marks)