



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DIPLOMA IN
AGRICULTURAL EDUCATION AND EXTENSION

SPECIAL/SUPPLEMENTARY

KRM 0308: ANNUAL CROPS PRODUCTION

DATE:

TIME:

INSTRUCTION TO CANDIDATES:

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

SECTION A: COMPULSORY:

QUESTION ONE (30 MARKS)

- a)
 - i) Explain the characteristics of an annual crop (2 marks)
 - ii) Explain five reasons why annual crops are important in the country's development (5 marks)
- b) Explain two uses of the following crops (8 marks)
 - a) Tobacco
 - b) Sorghum
 - c) Pigeon peas
 - d) Yams
- 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 four reasons why a farmer should be advised to plant finger millet (4 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) With specific crop examples, explain three roles of the following in crop production (12 marks)
- i) Greening
 - ii) Gapping
 - iii) Staking
 - iv) Rogueing
- b) Describe two methods of planting sweet potato (8 marks)

QUESTION THREE (20 MARKS)

- a) Explain the production of cowpeas under the given headings (10 marks)
- i) Land preparation
 - ii) Planting
 - iii) Harvesting
- b) Explain six measures used in pulse pest control (6 marks)
- c) Explain any four reasons why a farmer should be advised to plant sunflower. (4 marks)

QUESTION FOUR (20 MARKS)

- a) Describe two methods of planting rice (12 marks)
- b) Explain the two advantages and two disadvantages of each method in (a) above (8 marks)

QUESTION FIVE (20 MARKS)

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