



MACHAKOS UNIVERSITY

University Examinations for 2016/2017 Academic Year

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

SECOND YEAR FIRST SEMESTER EXAMINATION FOR DIPLOMA IN

AGRICULTURAL EDUCATION AND EXTENSION

SPECIAL/SUPPLEMENTARY EXAMINATION

KRM 0308: ANNUAL CROPS PRODUCTION

DATE: 29/8/2017

TIME: 8:30 – 10:30 AM

Instructions:

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

SECTION A: COMPULSORY: (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)
 - i. Tobacco
 - ii. Sorghum
 - iii. Pigeon peas
 - iv. 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
- i. Weevils (4 marks)
 - ii. Antracnose (4 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

QUESTION TWO

- a) With specific crop examples, explain three roles of the following in crop production
- i. Greening
 - ii. Gapping
 - iii. Staking
 - iv. Rogueing (12 marks)
- b) Describe two methods of planting sweet potato (8 marks)

QUESTION THREE

- 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

- 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

- 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)