



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

DIPLOMA IN AGRICULTURAL EDUCATION AND EXTENSION

AGR 0308: ANNUAL CROPS PRODUCTION

DATE: 10/8/2021

TIME: 2.00-4.00 PM

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## INSTRUCTIONS:

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

### SECTION A: COMPULSORY: (30 MARKS)

#### QUESTION ONE (30 MARKS)

- a) i Explain four reasons why classification of annual crops is important to farmers (4 marks)
- ii Explain two reasons that qualify sweet potato as an annual crop (2 marks)
- b) Explain four uses of each of the following annual crops (6 marks)
- i. Sorghum
- ii. Yams
- iii. Wheat
- c) i) Explain four reasons why cassava does well in lowland parts of Kenya compared to maize (4 marks)
- ii) Giving one specific crop example, explain four ways in which temperature influence annual production (4 marks)
- d) Explain two roles of the following practices in annual crops, giving specific example
- i. Staking
- ii. Hilling (4 marks)
- e) Explain four uses of cotton (2 marks)
- f) Explain four methods of achieving uniformly dried tobacco (4 marks)

**SECTION B: Answer any TWO questions (40 Marks)**

**QUESTION TWO (20 MARKS)**

- a) Discuss seven roles 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 methods used in management of pests in green grams (12 marks)
- c) Explain four uses of finger millet (4 marks)

**QUESTION FOUR (20 MARKS)**

- a) Explain the production of maize production under the following headings (10 marks)
- i. Ecological conditions
  - ii. Planting
  - iii. Weeding
  - iv. Fertilization
  - v. Harvesting
- b) Explain five factors that a farmer considers in selecting maize variety for planting (10 marks)

**QUESTION FIVE (20 MARKS)**

- a) Describe four measures taken in water management in rice production (8 marks)
- b) i Describe two method of planting rice (4 marks)
- ii Explain two advantages of each method in (b) above (4 marks)
- c) Explain four uses of sunflower (4 marks)