



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

**SUPPLEMENTARY SEMESTER EXAMINATION FOR THE DEGREE IN AGRICULTURAL
EDUCATION AND EXTENSION**

KRM 308: ANNUAL CROPS PRODUCTION

Date:

Time:

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

SECTION A: COMPULSORY: (30 MARKS)

- a) i) Explain four reasons why classification of annuals is important to both scientists and farmers **(4 marks)**
- ii) Explain any two ways of classifying annuals, giving specific example **(2 marks)**
- b) Explain four uses of the following annual crops **(10 marks)**
- a) Tobacco
 - b) Sorghum
 - c) Sunflower
 - d) Yams
 - e) 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

(4marks)

- i. Staking
- ii. Rogueing

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) Antracnose (4 marks)

SECTION B: Answer any TWO questions (40 Marks)

QUESTION TWO

i) Discuss the role of annual crop production in Kenya towards achieving Vision 2030

(14 marks)

ii) Describe the planting of irish potatoes

(6 marks)

QUESTION THREE

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

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

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 reasons a farmer must considered when selecting maize variety for planting
(10 marks)