



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

KRM 308: ANNUAL CROPS PRODUCTION

DATE: 24/7/2019

TIME: 2.00-4.00 PM

INSTRUCTIONS:

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)