



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
BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION
BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT
SPECIAL EXAMINATION

KCU 201: PRINCIPLES OF CROP PRODUCTION

DATE:

TIME: 2 HOURS

Instructions:

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

SECTION A: COMPULSORY: (30 MARKS)

1.
 - a) Explain six reasons why farmers carry out seed bed preparation (6 marks)
 - b) Explain two method of zoning (4 marks)
 - c) Explain four economic importances of weeds in crop production (4 marks)
 - d) Explain four reasons why you would advice a farmer to use compound fertilizers compared to straight fertilizers (4 marks)
 - e) A farmer intend to top dress his fruits and the only fertilizers available are in a 25kg bags. Calculate the amount of fertilizer to be applied in Kg/ha using the carrier as Sulphate of Ammonia (21% N), if the recommended rate is 40 kg N/ha (4 marks)

Explain four reasons why you would advice a farmer to use grafted mangoes for planting instead of seed (4 marks)

- f) Explain any four factors that affect plating density in crop production (4 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

QUESTION TWO

- a) In an effort to encourage farmers to adopt organic farming, describe three organic fertilizers you can advice farmers to use (12 marks)
- b) Explain any two methods farmers can adopt in planting of crops (8 marks)

QUESTION THREE

- a) Explain five factors that affect crop production in Kenya (10 marks)
- b) Discuss five ways in which Kenyan farmers can adapt in order to conserve water in their farms (10 marks)

QUESTION FOUR

- a) Explain five methods a farmer can adopt in fertilizing his/her crops (10 marks)
- b) Explain five methods farmers can apply in an effort to control soil erosion in their farms (10 marks)

QUESTION FIVE

- a) Describe six methods a farmer can successfully employ to manage pests and diseases in crops (12 marks)
- b) Explain four ways farmers can utilize in managing post-harvest losses during crop production (8 marks)