



# MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)  
University Examinations for 2015/2016 Academic Year

SCHOOL OF AGRICULTURE & NATURAL RESOURCES

DEPARTMENT OF AGRICULTURE

FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE IN  
AGRICULTURAL EDUCATION AND EXTENSION

KCU 201: PRINCIPLES OF CROP PRODUCTION

**Date: WEEKEND**

**Time: 2 HOURS**

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**INSTRUCTIONS:**

**Answer Three (3) Questions. Question One Is Compulsory.**

1.
  - a) Outline the three principles of crop production. (6 marks)
  - b) Explain low altitude influence to rainfall amount of land masses in Kenya (6 marks)
  - c) Explain effects of mixed cropping systems to final yield. (6 marks)
  - d) Describe different propagation methods of coffee and maize (6 marks)
  - e) With two examples, explain advantages plantation crop production systems in terms of yield returns (6 marks)
2. Explain any four ways of improving crops production in the semi-arid lands of Kenya (20 marks)
3. Explain five forms of fertilizers manufactured for crop production (20 Marks)
4.
  - a) Explain four water- soil conservation techniques (8 marks)
  - b) Explain three ways in which cassava root can be preserved to prevent spoilage. (6 marks)
  - c) State six crop protection strategies used by framers on food crops at field levels

(4 marks)

5. a) Explains any five non-chemical methods for post-harvest crop protection techniques (10 marks)
- b) Tea is a foreign earner in Kenya. Explain five comparative advantages Kenya has over other countries in East Africa in terms of ecological resources (10 marks)