



# MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

FIRST YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

AGR 100: INTRODUCTION TO AGRICULTURE

DATE: 23/9/2019

TIME: 2.00-4.00 PM

---

## **INSTRUCTIONS:**

Answer question one and two other questions

---

### **QUESTION ONE**

- a) Explain four reasons why crop classification is important to extension officers (2 marks)
- b) With three reasons, explain why secondary tillage is an important operation in crop production (3 marks)
- c) Explain four factors that determining depth of planting in crop production (5 marks)
- d) Explain fives roles played by agriculture in country's development towards meeting vision 2030 goals (5 marks)
- e) A farmer intend to plant cowpeas in a 80 ha of land. If the spacing is 40 cm x 15 cm estimate the plant population (3 marks)
- f) i Explain four reasons why controlled grazing is important in livestock farming (4 marks)
- ii With an example in each case, explain two roles of the following management practices in livestock production.
- I. Steaming up (2 marks)
- II. Docking (2 marks)

- g) With an example in each case, explain four reasons why value addition is important in crop and livestock production. (4 marks)

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

**QUESTION TWO**

- a) Explain five cropping systems that can be adapted by Kenyan farmers to increase crop production and ensuring continuous agricultural industrial growth (10 Marks)
- b) Explain five socio-economic factors that hinders food security in Kenya (10 Marks)

**QUESTION THREE**

- a) Explain five factors hindering growth and development in crop and livestock production in Kenya (10 marks)
- b) Explain five ways Kenyan farmers use in conservation of water in their farms for crop and livestock utilization (10 marks)

**QUESTION FOUR**

Explain 10 economic importance of weeds in crop and livestock production (20 marks)

**QUESTION FIVE**

- a) Explain six methods a farmer can successfully employ to manage pests/parasites and diseases in crops and livestock production (12 marks)
- b) Explain four reasons you would encourage a farmer to keep records, giving specific examples of records (8 marks)