MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

**FIRST YEAR SECOND SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE
IN AGRIBUSINESS MANAGEMENT**

AGR 100: INTRODUCTION TO AGRICULTURE

DATE: 30/5/2017   **TIME: 8:30 – 10:30 AM**

INSTRUCTIONS:

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

SECTION A: COMPULSORY

QUESTION ONE (30 MARKS)

a)   Explain four reasons why classification is important in crop production   (4 marks)

b)   With three reasons, explain why a farmer should be advised to use minimum tillage

                                                                                                                              (3 marks)

c)   Explain four reasons why farmers are advised to practice early planting in maize

         production   (4 marks)

d)   i)   Explain two methods of categorizing the country into various zones   (2 marks)

         ii)   Explain two roles played by agriculture in country's development   (2 marks)

e)   A farmer intend to plant maize in a 20 ha piece of land. If the spacing is 90cm x 25 cm

         estimate the plant population   (3 marks)

f) i) Calculate the amount of fertilizer to be applied in Kg/ha and in 50-kg bags, using the carrier as Sulphate of Ammonia (21% N), if the recommended rate is 80 kg N/ha (4 marks)

ii) With an example in each case, explain the role of the following management practices in livestock production. (6 marks)

    i) Debeaking

    ii) Dehorning

    iii) Steaming up

g) With an example in each case, explain three reasons for value addition in crop and livestock production. (3 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

QUESTION TWO (20 marks)

a) Explain any five cropping systems that can be adapted by Kenyan farmers (10 marks)

b) Discuss five causes of food insecurity in Kenya (10 marks)

QUESTION THREE (20 MARKS)

a) Explain five factors that affect livestock production in Kenya (10 marks)

b) Explain five ways Kenyan farmers use in conservation of water in their farms (10 marks)

QUESTION FOUR (20 MARKS)

Explain 10 importance of pests/parasites and diseases in crop and livestock production

(20 marks)

QUESTION FIVE (20 MARKS)

a) Explain any six methods a farmer can successfully employ to manage weeds in crops

(12 marks)

b) Explain four methods of reducing post-harvest losses in crop production (8 marks)