



MACHAKOS UNIVERSITY

University Examinations for 2017/2018 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

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

AGR 100: INTRODUCTION TO AGRICULTURE AND FOOD INDUSTRY

DATE: 5/12/2017

TIME: 11.00-1.00 PM

Instructions:

Answer ALL questions in section A and ANY TWO questions in section B

SECTION A: COMPULSORY: (30 MARKS)

QUESTION ONE

- a) i. Agriculture is defined as an art, science and business of producing crops and livestock. Discuss (3 marks)
- ii. Explain five historical steps in development of agriculture (5 marks)
- b) As an extension officer in Agriculture section, Machakos Country, explain **six** reasons why you would advice farmers to carry out land preparation (3 marks)
- c) A farmer aims at minimizing water and erosion losses in his farm and comes to you for advice. Explain two options a farmer can use for effective and efficient water use (2 marks)
- d) i. Explain four reasons why farmers are recommended to critically consideration spacing during maize planting (2 marks)
- ii. Explain three roles played by agriculture and food industry in country's development (3 marks)
- e) A farmer intend to plant green grams in a 1 ha of land. If the spacing is 40 cm x 15 cm estimate the plant population (3 marks)
- f) Explain four reasons why controlled grazing is important in livestock farming (2 marks)

- g) With an example in each case, explain two roles for carrying out the following management practices in livestock production (4 marks)
- i. Docking
 - ii. Steaming up
- h) 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) Describe five cropping systems that can be adapted by Kenyan farmers in order to increase food supply and hence encourage growth and development of food processing and exportation (15 marks)
- b) Discuss five ways of managing food security issues in an effort to enhance growth of food industries in Kenya (5 marks)

QUESTION THREE (20 MARKS)

- a) Explain any five factors that affect livestock production and Kenya Meat Commission (10 marks)
- b) Agro-ecological classification enhances food production and food industry distribution in the county. With specific examples explain the methods used in zoning the country (10 marks)

QUESTION FOUR (20 MARKS)

Explain 10 reasons why farmers are advised to manage pests and parasites in crop and livestock production respectively (20 marks)

QUESTION FIVE (20 MARKS)

- a) Explain six methods a farmer can successfully employ to manage weeds in crops (12 marks)
- b) In an effort by the national and county governments to curb agricultural food production losses, several measures have been put in place. Explain eight of these measures. (8 marks)