



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND TRADE

THIRD YEAR FIRST EXAMINATION FOR BACHELOR OF EDUCATION SCIENCE

KRM 102: FARMING SYSTEMS

Date: 28/11/2016

Time: 2:00 – 4:00 PM

INSTRUCTIONS:

Answer Question ONE and Any Other TWO Questions

1. a) i) Define the term 'Farming System' (2 marks)
ii) Describe any 3 goals of a farmer that influence the choice of farming system. (3 marks)
- b) In 2008, the Government of Kenya launched Kenya Vision 2030 as the new long-term development blueprint for the country. Explain five reasons why you think agriculture was included as a key pillar of this vision. (5 marks)
- c) Describe any five classes of crops based on agronomic classification giving a relevant example in each case. (10 marks)
- d) i) Intensive farming systems are preferred in high potential agricultural areas characterized by small parcels of land. Highlight any five reasons why such farming systems are preferred. (5 marks)
ii) Discuss any five shortcomings of the farming system in d (i) above (5 marks)
2. a) The Government of Kenya has taken key policy measures to reduce the effects of declining agricultural productivity. Briefly discuss any three PRICE related and two INCOME related policies. (10 marks)

- b) Briefly explain how the following agronomic factors influence crop selection;
- i) Temperature (5 marks)
 - ii) Soil aeration (5 marks)
- 3 a) Organic products are rapidly gaining popularity among Kenyan consumers. More farmers are now carrying out production of organic crops and livestock products. Describe any five benefits of organic production. (5 marks)
- b) Describe the problems associated with modern intensive cultivation of crops and livestock rearing. (15 marks)
4. a) i) Define integrated farming systems (2 marks)
- ii) Describe the two important goals of integrated farming systems (4 marks)
- b) Describe each of the following farming systems giving relevant examples in each case;
- i) Extensive farming system (3 marks)
 - ii) Intensive farming system (3 marks)
- c) State the advantages and disadvantages of large scale farming. (8 marks)
5. a) Assume you have been appointed the new Farm Manager of a mixed farm. How will the following agronomic factors influence your choice of crops to grow on the land to maximize productivity?
- i) Growing cycle (3 marks)
 - ii) Solar radiation (3 marks)
 - iii) Soil pH (3 marks)
- b) Explain any three socio-economic attributes of farmers that may influence the choice of a particular farming method. (6 marks)
- c) List any five products that may be obtained from aromatic plants. (5 marks)