



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2015/2016

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURE

SECOND SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE
IN AGRICULTURAL & EXTENSION EDUCATION

KRM 102: FARMING SYSTEMS

Date: 18/4/2016

Time: 2 HOURS

INSTRUCTIONS

This paper consists of FIVE questions

Answer question one and other two questions in this paper

QUESTION ONE

- (a) Name six crops classified in the group of cereals (6 marks)
- (b) State the crop product used for economic importance of the following crops:
- | | |
|--------------|----------------|
| (i) Sisal | (iv) Sugarcane |
| (ii) Tea | (v) Cashew Nut |
| (iii) Coffee | (vi) Tobacco |
- (6 marks)
- (c) List the three ecological requirement for choice of a crop in different regions of Kenya (6 marks)
- (d) State six features of organic practices as applied in an ecosystem friendly farming system. (6 marks)
- (e) Describe three agronomic attributes of pruning tea plants (6 marks)

QUESTION TWO

- (a) Maize crop is an important staple in Kenya. State its agronomic requirement in terms of
- i) spacing
 - ii) fertilization
 - iii) biotic constraints
 - iv) grain postharvest treatment (12 marks)
- (b) State four biotic constraints associated with dry bean production in Kenya (8 marks)

QUESTION THREE

- (a) The following crops are produced in plantations as important contributors in the agro-industry of Kenya (i) tea, (ii) cotton, (iii) coffee, (iv) sisal, and (v) pineapple. State the rainfall requirement for each crop (10 marks)
- (b) Briefly state the economic contribution to Kenya's agro-industry of each of the five crops mentioned in part (a). (10 marks)

QUESTION FOUR

Explain five approaches to sustainable crop production in the marginal areas of Kenya (20 marks)

QUESTION FIVE

Compare four different animal enterprises which easily complement crop production. (20 marks)