



MACHAKOS UNIVERSITY

University Examinations for 2017/2018 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

**FOURTH YEAR, SECOND SEMESTER EXAMINATION FOR BACHELOR OF
AGRICULTURAL EDUCATION & EXTENSION**

**KRM 402: PRINCIPLES OF ORGANIC FARMING AND CONSERVATION
AGRICULTURE**

DATE: 6/12/2017

TIME: 2.00-4.00 PM

Instructions: Answer question one and two other questions

SECTION A: 30 MARKS (COMPULSORY)

QUESTION ONE: (30 MARKS)

- (a) Describe the four ethical principles of organic farming (8 marks)
- (b) Explain the following organic farming techniques
 - i. Vermicomposting (2 marks)
 - ii. Fallowing (2 marks)
 - iii. Under-sowing (2 marks)
- (c) Explain the characteristics of organic fertilizers (6 marks)
- (d) Describe the five (5) pillars of organic animal husbandry that promote good health in livestock (10 marks)

SECTION B: 40 MARKS (ANSWER ANY TWO QUESTIONS)

QUESTION TWO: (20 MARKS)

- (a) Describe the FOUR (4) advantages of organic fertilizers (8 marks)
- (b) Explain the processes of organic farming certification (12 marks)

QUESTION THREE (20 MARKS)

Discuss the TEN (10) key characteristics of an organic farming system (20 marks)

QUESTION FOUR: (20 MARKS)

- (a) Explain the FIVE (5) limitations of urban agriculture (10 marks)
- (b) Describe the FIVE (5) advantages of mixed cropping (10 marks)

QUESTION FIVE (20 MARKS)

- (a) Explain the natural sources of organic fertilizers (10 marks)
- (b) Describe the FIVE (5) advantages of cover crops (10 marks)