

UNIVERSITY OF EMBU

2016/2017 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN MANAGEMENT OF AGROECOSYSTEMS AND ENVIRONMENT

AEM 204: ORGANIC FARMING

DATE: APRIL 11, 2017 TIME: 8:30-10:30AM

INSTRUCTIONS:

Answer Question ONE and ANY other TWO Questions

QUESTION ONE

a) Explain the term permaculture as used in organic farming (6 ½ marks):

b) Explain THREE challenges associated with excessive irrigation (5 marks)

c) An organic farmer in Embu town practices cover cropping in his maize farm. Discuss the effect of this practice on soil fertility (5 marks).

d) Describe the procedure for preparing soap spray for use as an insecticide in organic farming

 $(4 \frac{1}{2} \text{ marks})$

e) Outline SIX techniques used in rodent control in organic farms (5 marks)

f) Outline four food security benefits of organic farming (4 marks)

QUESTION TWO

a) Explain the principles of health and ecology in organic farming (14 marks)

b) Describe organic substances that should not be composted (6 marks)

QUESTION THREE

a) Describe the IFOAM standard for inappropriate technologies (12 marks).

b) A farmer in Mbeere Embu County has requested advice on how to collect wild fruits for sale in the market as organic produce. Using IFOAM guidelines, explain to her what she needs to do to ensure that she meets the recommended standards (8 marks).

QUESTION FOUR

a) Explain the challenges facing the promotion of urban organic agriculture (8 marks).

b) Critique the 1990's Kenyan urban policy in comparison with the Tanzanian urban policy, highlighting how the two have contributed to growth of urban farming in Nairobi and Dar-es-Salaam (12 marks).

QUESTION FIVE

a) Describe the techniques of organic pest management (13 marks).

b) Discuss the characteristics of natural enemies used in organic pest control (7 marks).

END

