



UNIVERSITY OF EMBU

2016/2017 ACADEMIC YEAR

FIRST SEMESTER EXAMINATION

FOURTH YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

IN AGRICULTURE(CROP PROTECTION OPTION)

ACP 406: WEED MANAGEMENT PRACTICES

DATE: NOVEMBER 30, 2016

TIME: 8:30-10:30AM

INSTRUCTIONS:

Answer Question ONE and ANY other TWO Questions

QUESTION ONE (30 MARKS)

- a) Define the term 'weed' as used in crop production (3 marks)
- b) Briefly describe the classification of weeds (5 marks)
- c) State the principles applied in weed management practices (4 marks)
- d) Outline information that needs to be included on any label when marketing chemicals for weed control (5 marks).
- e) Outline the benefits of weeds giving appropriate examples in each case (5 marks).
- f) Weeds are successful group of plants in an agro ecosystem. Explain this statement. (5 marks)
- g) State ways of preventing weeds from multiplying in a crop field. (3 marks)

QUESTION TWO (20 MARKS)

- a) Describe the cultural methods of weed control (10 marks)
- b) Discuss the pros and cons of biological weed control in a maize field (10 marks)

QUESTION THREE (20 MARKS)

- a) The use of organic and inorganic compounds to disrupt plant growth has been increasing over the years in the developing Countries. If 1kg of a herbicide is used in 1000litres of water per hectare,
- i) How much chemical will be required in an eighth of an acre? (3 marks)
 - ii) If the farmer is using a 20 litres knapsack sprayer pump, advise him on the quantity of chemical he will need for the sprayer pump (2 marks)
 - iii) Citing examples, discuss ways in which herbicide resistance in weed species can be prevented (15 marks)

QUESTION FOUR (20 MARKS)

Herbicides can either be soil or foliar based. Contrast the reasons for applying herbicides to the foliage versus into the soil.

QUESTION FIVE (20 MARKS)

- a) The negative impact on crop performance by weeds is mainly due to competition and allelopathy. Discuss this statement (6 marks)
- b) Discuss how continuous and frequent use of herbicides can result in pollution of the environment. (14 marks)

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