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University Examinations 2022/2023

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR DEGREE BACHELOR OF
SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

AAA 3402: CROP PROTECTION

DATE: APRIL 2023

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Explain the concept of pest (4 marks)
- b) Explain the harmful effects of pests in crop production (8 marks)
- c) Discuss the pathogenic organisms that cause plant diseases citing relevant examples (12 marks)
- d) Describe factors contributing to successful dissemination and survival of weeds (6 marks)

QUESTION TWO (20 MARKS)

- a) Explain ways in which pesticides gain entry into the insect body (6 marks)
- b) Explain the meaning of LD₅₀, LC₅₀ and LT₅₀ in the context of pesticide activity (6 marks)
- c) Describe four cultural methods in crop protection (8 marks)

QUESTION THREE (20 MARKS)

- a) Describe two major viral diseases infesting maize crop (6 marks)
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- b) Describe classification of pests based on the host range (6 marks)
- c) Describe two types of weed-crop interactions (8 marks)

QUESTION FOUR (20 MARKS)

- a) Explain the role of biotechnology techniques in insect pest management (6 marks)
- b) Describe the major components of integrated pest management (5 marks)
- c) Give three ways in which insect pest resist the effect of pesticides (3 marks)
- d) Explain three insecticide formulations (6 marks)