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University Examinations 2015/2016

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN HORTICULTURE

AHS 2403: INTEGRATED PEST MANAGEMENT AND PESTICIDE SCIENCE

DATE: NOVEMBER 2015

TIME: 2 HOURS

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

QUESTION ONE (30 MARKS)

- a) In view of the pest concept, describe a pest (3 Marks)
- b) IPM adheres to three basic principles. Explain (3 Marks)
- c) List four characteristics of effective biocontrol agents (4 Marks)
- d) Name any five spray supplements and their functions when added to pesticides (5 Marks)
- e) What is the difference between LD₅₀ and LC₅₀ (5 Marks)
- f) As a farm manager, why would you shift to IPM when chemical pesticides so often succeed at controlling pests? (10 Marks)

QUESTION TWO (20 MARKS)

- a) Pest problems may persist even when pesticides have been applied. Discuss (10 Marks)

- b) Describe three ways in which natural enemies can be introduced or maintained in an agricultural ecosystem (10 Marks)

QUESTION THREE (20 MARKS)

- a) The technical material of a pesticide is usually processed with other substances before use by the operator. Why is it important? (5 Marks)
- b) Describe any two liquid pesticide formulations (5 Marks)
- c) In IPM strategies, the use of pesticides is as last resort. Describe the use of pesticide in IPM systems (10 Marks)

QUESTION FOUR (20 MARKS)

- a) Describe ways in which pesticides enter the insect body (10 Marks)
- b) Describe the push-pull strategy for managing stem borers and striga weeds in maize (10Marks)