



# UNIVERSITY OF EMBU

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2016/2017 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN  
AGRICULTURE AND BACHELOR OF SCIENCE IN HORTICULTURE

ACP 305: CROP PESTS AND THEIR MANAGEMENT

DATE: APRIL 5, 2017

TIME: 8:30-10:30AM

INSTRUCTIONS:

Answer Question ONE and ANY other TWO Questions

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## QUESTION ONE

- a) Define the following terms as applied in pest management
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|--------------------------------|-----------|
| i. Pest                        | (2 Marks) |
| ii. Insect population dynamics | (1 Mark)  |
| iii. Economic damage           | (1 Mark)  |
| iv. Economic injury level      | (1 Mark)  |
| v. Economic threshold          | (1 Mark)  |
- b) Assume that you have been hired by a research organization as an insect monitoring specialist to help in implementation of an integrated pest management project. You are to brief the director of the institute on the factors that contribute to quality monitoring. Briefly discuss your points (5 Marks)
- c) Assume that you are employed by Ministry of Agriculture and you are to brief farmers on the objectives of pest surveillance. Briefly discuss your notes (5 Marks)
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- d) Outline any four methods of sampling commonly used in pest management (4 Marks)
- e) Outline the major characteristics of arthropod predators (5 Marks)
- f) Write short notes on injurious insects (5 Marks)

### **QUESTION TWO**

- a) Discuss the common trapping devices used in collection of insect pests (10 Marks)
- b) Briefly discuss the indirect effects of insect infestation on agricultural crops and products (10 Marks)

### **QUESTION THREE**

- a) Discuss factors that influence the populations of insect pests in an ecosystem (11 Marks)
- b) Assume that you are employed as a crop's specialist by the Ministry of Agriculture and you are to give a presentation to farmers on the damage inflicted to crops by insects with biting and chewing mouth parts. Outline your points (9 Marks)

### **QUESTION FOUR**

Choose a field insect pest of economic importance in Kenya and write about its distribution, biology, symptoms inflicted on the crop, host range and control measures (20 Marks)

### **QUESTION FIVE**

- a) Discuss the classification of pests as applied in pest management (10 Marks)
- b) Discuss how sanitation and good housekeeping can be used to manage vertebrate pests (10 Marks)

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