
CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS.

**EXAMINATION FOR THE AWARD OF BACHELOR OF SCIENCE IN
HORTICULTURE AND AGRICULTURE**

AGRI 233: CROP ENTOMOLOGY

STREAMS:

TIME: 2 HOURS

DAY/DATE: THURSDAY 6/12/2019

11.30 A.M. – 1.30 P.M

INSTRUCTIONS

- **This paper has two sections A and B**
- **Section A accounts for 30 marks while section B accounts for 40 marks**
- **Section A is compulsory**
- **Answer any two questions in section B**

SECTION A : 30 MARKS : ANSWER ALL QUESTIONS

1. (a) Define the term pest. [2 marks]
(b) Explain the following terms:
 - (i) Economic damage [2 marks]
 - (ii) Economic injury level [2 marks]
 - (iii) Economic threshold [3 marks]
2. Differentiate between inundation and inoculation as used in biological control. [8 marks]
3. Describe the push and pull technology in the control of the maize stem borer. [6 marks]
4. Explain the following terms as used in host plant resistance of insect pests:
 - (i) Tolerance [2 marks]
 - (ii) Antibiosis [3 marks]

(iii) Antixenosis [2 marks]

SECTION B 40 MARKS : ANSWER TWO QUESTIONS

5. (a) Discuss the potato tuber moth under the following subheadings:
- (i) Host range [2 marks]
 - (ii) Damage [4 marks]
 - (iii) Control [6 marks]
- (b) Discuss the impact of agro chemicals to the environment. [8 marks]
6. (a) Define the term IPM. [3 marks]
- (b) Describe steps involved in the implementation of an IPM programme. [12 marks]
- (c) Describe the limitations associated with use of botanical pesticides. [5 marks]
7. (a) Discuss pyrethroids under the following subheadings:
- (i) Advantages of synthetic pyrethroids over natural pyrethrins. [5 marks]
 - (ii) Mode of action [5 marks]
 - (iii) Examples [2 marks]
- (b) Describe pesticides formulations used in application of pesticides. [8 marks]
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