

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
HORTICULTURE**

HORT 313: HORTICULTURAL CROP PROTECTION

STREAMS:

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 11/12/2019

2.30 P.M – 4.30 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. Briefly explain the following terms in relation to pest damage.
 - (a) Economic damage [2 marks]
 - (b) Economic injury level [2 marks]
 - (c) Economic threshold [3 marks]
2. (a) Define the term pest. [2 marks]
(b) Giving relevant examples, describe the factors affecting pest status. [8 marks]
3. Describe the terms (i) severity and (ii) incidence and their utilization in crop loss assessment. [6 marks]
4. (a) Define the term weed. [2 marks]
(b) Giving relevant examples, describe general symptoms of weed invasion.[5 marks]

SECTION B

5. (a) Discuss the tomato leaf miner under the following sub-headings;
 - (i) Host range [2 marks]

- (ii) Damage [6 marks]
- (iii) Control [6 marks]
- (b) Describe common pesticide formulations used in crop protection. [6 marks]
6. (a) Under the following subheadings discuss witch weed.
- (i) Why it is a successful weed. [4 marks]
- (ii) Mode of attack [4 marks]
- (iii) Mechanism of push and pull technology in the control of witch weed and stem borer. [6 marks]
- marks]
- (b) Describe the effects of pesticides on the environment. [8 marks]
7. (a) Describe the effect of pesticides on the environment. [8 marks]
- (b) Discuss utilization of biotechnology in crop protection. [12 marks]
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