
CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
BIOLOGY , CHEM MATH AND BACHELOR OF SCIENCE**

BOTA 352: PRINCIPLES OF CROP PROTECTION

STREAMS:

TIME: 2 HOURS

DAY/DATE: THURSDAY 13/12/2018

8.30 A.M – 10 .30 A.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

1. (a) Define the term pest. [1 mark]
(b) Giving relevant examples describe factors affecting pest status in crop protection. [7 marks]
2. Explain the following terms:
 - (a) Economic damage [2 marks]
 - (b) Economic injury level [2 marks]
 - (c) Economic threshold [2 marks]
3. Describe the factors favoring pest populations. [6 marks]
4. Differentiate between inoculation and inundation as used in biological control. [6 marks]
5. Describe solarization as a means of pest control. [3 marks]

SECTION B

6. (a) Describe the term 1 PM [3 marks]

- (b) Discuss steps involved in designing an IMP programme. [12 marks]
- (c) Describe an IPM pyramid of tactic. [5 marks]
7. (a) Discuss the role of biotechnology in pest management. [12 marks]
- (b) Discuss effects of pesticides on the environment. [8 marks]
8. (a) Describe ways in which post harvest pests can be managed efficiently. [6 marks]
- (b) Define the term ICM. [2 marks]
- (c) Discuss the effectiveness of the following as cultural methods of pest management.
- (i) Crop rotation [3 marks]
 - (ii) Use of resistant varieties [3 marks]
 - (iii) Sanitation [3 marks]
 - (iv) Site selection [3 marks]
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