CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCE IN BIOLOGY & BACHELOR OF MATHEMATICS/CHEMISTRY

BOTA 352: PRINCIPLES OF CROP PROTECTION

STREAMS: BSC, BIO, BED (SCI)   **TIME: 2 HOURS**

DAY/DATE: MONDAY 09/12/2019   **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.   Define the following terms

    (a)   Economic damage   [2 marks]

    (b)   Economic threshold   [3 marks]

    (c)   Economic injury level   [3 marks]

    (d)   ICM   [2 marks]

2.   Explain pest status and factors that affect it   [5 marks]

3.   Discuss the impact of pesticides to the environment   [5 marks]

4.   Discuss crop protection measures to manage crop damage by wildlife   [5 marks]

5.   Describe essential monitoring tools used in pest management   [5 marks]

SECTION B

6.   Giving relevant examples, discuss pest management strategies under the following sub-headings

(a)   Biological control approaches   [12 marks]

(b)   Trap crops   [8 marks]

7.   Discuss farm waste management under the following subheadings

(a)   Crop residue waste management   [6 marks]

(b)   Farm plastics and pesticide container   [8 marks]

(c)   Excess pesticides   [6 marks]

8.   Define the term IPM; using a named example of a crop and pest, describe how you would develop an integrated pest management programme. Give reasons for selecting the strategies named   [20 marks]