



(Knowledge for Development)

**KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

**FOURTH YEAR SECOND SEMESTER
MAIN EXAMINATIONS**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY AND
BACHELOR OF EDUCATION SCIENCE**

COURSE CODE: SZL 424

COURSE TITLE: APPLIED ENTOMOLOGY

DATE: MONDAY 4TH OCTOBER, 2021

TIME: 2:00 – 4:00 p.m.

INSTRUCTIONS TO CANDIDATES

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 3 printed pages. Please Turn Over 

KIBU observes ZERO tolerance to examination cheating

QUESTION 1

- a) State the role of applied entomology to agricultural sector (2 Marks)
- b) Define psyllid yellows and its causes (2 Marks)
- c) State the excretory organs of insects (2 Marks)
- d) Explain the causes of insect pest outbreaks in a farm (2 Marks)
- e) i) Name the major pests of small grains and the injury they cause (2 Marks)
- ii) Aphids and Chinch bugs impoverish plants by sucking nutrients, what other destructive role do they play? (1 Mark)
- iii) Fruit drop of peaches is caused by feeding of which pest? (1 Mark)
- f) i) What are the symptoms of feeding of pear midge larvae within developing fruit (2 Marks)
- ii) Tunneling near the skin by the apple maggot causes? (1 Mark)
- g) Briefly describe the epidemiology and management of: (2 Marks)
- i) Maize Stem borer
- ii) Fall armyworm
- h) What is the difference between a contact and systemic insecticide? (2 Marks)
- i) State major advantages of systemic pesticides. (2 Marks)
- j) Differentiate between: (2 Marks)
- i. insecticidal aerosols and fumigants
- ii. narrow spectrum pesticide and a broad spectrum pesticide (2 Marks)
- k) Describe main methods of pest control (2 Marks)
- k) Describe Three classes of insecticides (3 Marks)

QUESTION 2

Explain classification of insects giving salient features in each group (20 Marks)

QUESTION 3

- a) What are some of the important things to keep in mind and do when transporting a pesticide? Why should you practice these techniques?
(12 Marks)
- b) Distinguish the difference between defoliators, borers, leaf minors and root feeders.
(8 Marks)

QUESTION 4

Explain the reasons for biological success of insects (20 marks)

QUESTION 5

Using example give the economic and ecological importance of insects
(20 Marks)