



(Knowledge for Development)

KIBABII UNIVERSITY UNIVERSITY EXAMINATIONS **2017/2018 ACADEMIC YEAR**

FOURTH YEAR FIRST SEMESTER SUPPLEMENTARY/SPECIAL EXAMINATIONS

FOR THE DEGREE OF BACHELOR SCIENCE & BACHELOR OF SCIENCE (BIOLOGY) AND (BIO-RESOURCE MANAGEMENT)

COURSE CODE: SZL 411

COURSE TITLE: GENERAL ENTOMOLOGY

DATE:

2nd October, 2018

TIME: 11:30 -1:30 p.m.

INSTRUCTIONS TO CANDIDATES

Answer question ONE [1] and ANY other TWO [2] questions

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

1. (i) List three types of antennae

(ii) Explain the types of larvae found in insects.

[3mks]. [(6mks].

(iii) Briefly describe three distinctive features of collembolans.

[6mks].

- (iv) Explain four functions of allelochemicals. [4mks].
 - (v) Briefly describe the circulatory system of insects

[6mks]

- (vi) How does metamorphosis enhance abundance in insects? (5mks)
- 2 a. Define the term territoriality with regards to insects. [2mks]
- b. Describe the gaseous exchange process in insects. [8mks]
- c. Write brief notes on the body structures of the insects; namely: **head, thorax** and the **abdomen**. [10mks]
- 3. (a). List three **migration cues** of locusts. [3mks]
 - (b) Trace the origin of tagmatization in insects. (4mks]
 - (c) How do social insects differ from social vertebrates? [5mks]
 - (d) Explain the role of thorax as ambulatory structures in orthopterans. [8mks]
- 4. Discuss **polymorphosis** in insects. [20mks]
- 5. Describe the **functionality** of the alimentary canal of **dipterans**. [20mks]