(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.
(iii) Briefly describe three distinctive features of collembolans.
(iv) Explain four functions of allelochemicals.
(v) Briefly describe the circulatory system of insects
(vi) How does metamorphosis enhance abundance in insects? [3mks] [6mks] [6mks] [4mks] [6mks] [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 polymorphism in insects. [20mks]

5. Describe the functionality of the alimentary canal of diptera. [20mks]