BONDO UNIVERSITY COLLEGE

UNIVERSITY EXAMINATION 2012/2013

1ST YEAR 2ND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE WITH IT (REGULAR)

COURSE CODE: SZL 104

TITLE: HIGHER INERTEBRATES

DATE: 27/11/2012 **TIME: 12.00-14.00PM**

DURATION: 2HOURS

INSTRUCTIONS:

1. **Answer ALL questions in section A**
2. **Answer any TWO questions in section B**
3. **Use illustrations where appropriate**

SECTION A (30 MARKS)

1. List **three** main features of the phylum mollusks. (3 marks)
2. Briefly explain the functions of nephridium, ctenidia and circular muscle stating the phylum where they are found. (3 marks)
3. Define the following terms:
    a. Prostomium
    b. Pygidium
    c. Epitoky (3 marks)
4. Describe briefly the adaptive radiation in polychaetes. (3 marks)
5. List the classes of annelids and mollusks (3 marks)
6. State the phylum in which each of the following belong?
    a. Sea cucumbers
    b. *Nereis*
    c. *Lobsters* (3 marks)
7. Explain the economic importance of the class insect. (3 marks)
8. Give EXAMPLES of the class bivalvia. (3 marks)
9. Explain the functions of statocytes in higher vertebrates. (3 marks)
10. Explain the distinguishing features of the class gastropoda. (3 marks)

SECTION B (40MARKS)

11. Compare and contrast the reproductive systems of annelids, mollusks and arthropods. (20 marks)
12. Describe the feeding process in mollusks. (20 marks)
13. Discuss the
    a. Ecological success of arthropods.
    b. Metameric segmentation in annelids. (20 marks)
14. Give an account of
    a. Excretion and Osmoregulation in the subphylum crustacean.
    b. Feeding in the phylum brachiopoda. (20 marks)