



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF EDUCATION (SCIENCE)

SZL 201: INVERTEBRATE ZOOLOGY

DATE: Tuesday, 3rd April, 2012

TIME: 8.00 a.m. – 10.00 a.m.

INSTRUCTIONS:

Answer **ALL** questions in Section A and any **TWO** in Section B. Within each Section, **ALL** questions carry equal marks.

SECTION A (40 MARKS)

1. Distinguish between determinate and indeterminate development.
2. Explain cephalization as an evolution trend in invertebrates.
3. Outline excretion and osmoregulation in protozoans.
4. Describe briefly the structure of an apical complex.
5. Describe the arthropod features present in Phylum Onychophora.
6. Discuss briefly mechanisms of feeding in Class Bivalvia.
7. State five characteristics of Class Asteroidea.

8. Explain the functions of the following structures:

- a) Choanocytes
- b) Cnidocil
- c) Ctenidia
- d) Archaeocytes
- e) Aristotle's lantern

SECTION B (60 MARKS)

9. Give a detailed comparative account of the morphological and anatomical features of the classes in the Phylum Annelida.

10. Discuss in detail the salient features of invertebrates.

11. a) Discuss the major characteristics of Phylum Arthropoda.
- b) Discuss the adaptations of Class Insecta that enabled its members to conquer the terrestrial ecosystem.