



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

MAIN EXAMINATION

JANUARY – APRIL 2015 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF NATURAL SCIENCES (BIOLOGY)

SCHOOL FOCUSED PROGRAMME

BIO 201: INVERTEBRATE BIOLOGY

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Date: April 2015	Duration: 2 Hours
Instructions: Answer Question ONE and any other TWO Questions.	

- Q1. a) i) Explain the importance of invertebrates in agriculture. (2 marks)
- ii) Briefly describe the ecological aspects used to classify invertebrates. (3 marks)
- iii) Differentiate between Parazoa and Eumetazoa. (2 marks)
- iv) State the economic importance of molluscs. (2 marks)
- v) Explain two morphological types of sponges. (2 marks)
- b) State one major difference between the following: - (4 marks)
- i) Coelomate and Pseudocoelomate
- ii) Protostome and Deuterostome
- iii) Diploblastic and Tribloblastic
- iv) Determinate and indeterminate cell state. (4 marks)
- c) Outline the major similarities between cnidarians and ctenophores. (4 marks)
- d) i) Differentiate between hydrozoans and syphozoans. (2 marks)
- ii) Explain the derived characteristics of cnidarians. (4 marks)
- iii) Describe the characteristics of a named class of annelids. (5 marks)
- Q2. Using relevant examples illustrate the phylogeny of invertebrates. (20 marks)

- Q3. Explain the features that allow arthropods colonize terrestrial environments.
(20 marks)
- Q4. Describe the derived characteristics exhibited by echinoderms.
(20 marks)
- Q5. Compare and contrast nematodes and annelids.
(20 marks)

END