



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

MAIN EXAMINATION

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AUGUST - DECEMBER 2015 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF BIOLOGY

REGULAR PROGRAMME

BIO 201: INVERTEBRATE BIOLOGY

Date: DECEMBER 2015

Duration: 3 Hours

INSTRUCTIONS: Answer Question ONE and ANY other THREE Questions

- Q1. a) Briefly explain the ecological importance of invertebrates. **(4 marks)**
- b) Differentiate between the following
- i Pleisomorphic traits and apomorphic traits.
 - ii Paraphyletic groups and polyphyletic groups. **(4 marks)**
- c) i Outline TWO advantages of coelom in invertebrates. **(2 marks)**
- ii List TWO theories that explain the origin of a coelom. **(2 marks)**
- iii Briefly describe the sequence of events that take place during fertilization, to embryo formation. **(6 marks)**
- d) Outline the disadvantages of land as a habitat for invertebrates. **(4 marks)**
- e) Briefly describe the endosymbiotic theory. **(4 marks)**
- f) Distinguish the medusa and polyp body forms in cnidarians. **(4 marks)**
- Q2. Compare and contrast TWO phyla of pseudocoelomates. **(20 marks)**

- Q3. Discuss the traits that enable insects colonize terrestrial environments. **(20 marks)**
- Q4. Describe the evolutionary history of parazoa and eumetazoa. **(20 marks)**
- Q5. Describe the classification at echinoderms. **(20 marks)**

END