



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

AUGUST – DECEMBER 2018 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF BIOLOGY

REGULAR PROGRAMME

BIO 201: INVERTEBRATE BIOLOGY

Date: DECEMBER 2018

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions

- Q1. a) i) Explain the modes of locomotion in molluscs **(3 marks)**
ii) Outline economic importance of hirudinae **(2 marks)**
iii) Explain the reproductive mechanisms of the poriferans **(5 marks)**
- b) i) Outline the role of parapodia in polychaetes **(2 marks)**
ii) Differentiate between polypoid and medusoid **(4 marks)**
iii) Describe the feeding process in sponges **(4 marks)**
- c) i) Outline the general characteristics of the phylum Ciliophora **(2 marks)**
ii) Explain the process of gas exchange in echinoderms **(2 marks)**
iii) Distinguish between the class Insect and class Myriapoda. **(3 marks)**
- d) Outline the functions of the following cells: **(3 marks)**
i) Nematocysts
ii) Colloblasts
iii) Amebocytes

- Q2. Give a detailed account of the physiology of Protozoans (20 marks)
- Q3. Discuss the reproductive mechanisms of the platyhelminthes. (20 marks)
- Q4. Discuss in details the Salient features of invertebrates (20 marks)
- Q5. Write an essay on the economic importance of nematodes (20 marks)

END