



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

AUGUST – DECEMBER 2018 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF BIOLOGY

PART TIME PROGRAMME

BIO 203: PRINCIPLES OF ECOLOGY

Date: DECEMBER 2018

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions

- Q1. a) Differentiate the following terms as used in ecology **(2 marks)**
- i) Population
 - ii) Communities
 - iii) Organisms
 - iv) Ecosystem
- b) List 2 major subdivisions of ecology **(1 mark)**
- c) Briefly describe Quadrat method of sampling **(4 marks)**
- d) List and explain the 4 structural components of an ecosystem **(4 marks)**
- e) Describe 2 types of biological control **(4 marks)**
- f) List and explain any characteristic of a community **(2 marks)**
- g) Differentiate between primary succession and secondary succession **(6 marks)**
- h) Define the term biome as used in ecology and briefly describe any major biome **(4marks)**
- i) List the major measures of species diversity **(3 marks)**
- Q2. Using relevant examples explain the trends in food chains **(20 marks)**

- Q3. Discuss the impact of global warming (20 marks)
- Q4. Discuss the factors responsible for the losses of bio-diversity (20 marks)
- Q5. Justify the statement that in a balanced condition ecosystem functioning is self-regulating and self-sustaining (20 marks)

END