



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

P.O. Box 62157
00200 Nairobi - KENYA
Telephone: 891601-6
Fax: 254-20-891084
E-mail: academics@cuea.edu

MAIN EXAMINATION

AUGUST – DECEMBER 2017 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF BIOLOGY

REGULAR PROGRAMME

BIO 100: GENERAL BIOLOGY

Date: DECEMBER 2017

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions

- Q1. a) State two processes that occur in all ecosystems **(2 marks)**
- b) Differentiate between **(4 marks)**
1. Prokaryotes and eukaryotes
2. Catabolism and anabolism
- c) List and explain characteristics of living things **(4 marks)**
- d) Explain the structure of an atom **(3 marks)**
- e) Briefly discuss the following polysaccharides **(5 marks)**
1. starch
2. glycogen
3. cellulose
4. lignin
- f) Explain the major theories contributing to modern biology **(4 marks)**
- g) List the most common elements in organisms **(2 marks)**
- h) Briefly discuss the six unifying themes in biology **(6 marks)**
- Q2. Discuss the kingdom fungi **(20 marks)**
- Q3. Outline the properties of water and explain their importance in life **(20 marks)**

- Q4. With the aid of a well labeled diagram of a chloroplast discuss photosynthesis **(20 marks)**
- Q5. Discuss the factors that influence enzyme activity **(20 marks)**

END