



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

P.O. Box 62157

00200 Nairobi - KENYA

Telephone: 891601-6

Ext 1022/23/25

MAIN EXAMINATION

SEPTEMBER –DECEMBER 2021

FACULTY OF SCIENCE

DEPARTMENT OF BIOLOGY

REGULAR PROGRAMME

BIO 100: GENERAL BIOLOGY

Date: DECEMBER 2021

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any TWO Questions

- Q1. a) Outline five characteristics of Phylum in which locusts belong (5 marks)
- b) Distinguish between each of the following terms:
- i) Cell theory and gene theories (2 marks)
 - ii) First and 2nd laws of thermodynamics (2 marks)
 - iii) Condensation and hydrolysis (2 marks)
- c) Differentiate between primary and secondary cell walls (5 marks)
- d) Briefly describe the interconversion of carbohydrates (4 marks)
- e) Describe the properties of enzymes (5 marks)
- f) Contrast onion cell and bacterial cell (5 marks)
- Q2. Discuss the functions of polypeptides (20 marks)

Q3. Discuss the properties of water in relation to organism's functioning **(20 marks)**

Q4. Citing examples, discuss functions of mineral elements **(20 marks)**

Q5. Discuss digestion of cassava, and functions of its by-products **(20 marks)**

END