



# THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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**MAIN EXAMINATION**

**JANUARY – APRIL 2018 TRIMESTER**

**FACULTY OF SCIENCE**

**DEPARTMENT OF COMPUTER AND LIBRARY SCIENCE**

**REGULAR PROGRAMME**

**DIT 010: INTRODUCTION TO COMPUTER HARDWARE AND SOFTWARE**

**Date: APRIL 2018**

**Duration: 2 Hours**

**INSTRUCTIONS: Answer Question ONE and any other TWO Questions**

- Q1. a) Explain what a computer is, and give the two major categories of a computer **(4 marks)**
- b) List and explain the characteristics of computers that has made them powerful and Universally useful **(10 marks)**
- c) Outline the FIVE major operations that a computer carries our **(5 marks)**
- d) With the aid of a diagram explain the Basic computer organization **(10 marks)**
- e) Name the two classifications of memory **(1 mark)**
- Q2. a) Differentiate between RAM and ROM **(6 marks)**
- b) Explain what input and output devices are and give TWO examples of each **(8 marks)**
- c) Differentiate between a printer and a Plotter **(6 marks)**
- Q3. a) Explain what computer software is **(5 marks)**
- b) List and explain the TWO major categories of software and give two examples of each **(10 marks)**

- c) Differentiate between a Compiler and an Interpreter **(5 marks)**
- Q4. a) Explain what is a Virus and the THREE main types of viruses **(8 marks)**
- b) Outline and explain how the following groupings of viruses infect the computer **(6 marks)**
- i) Time Bomb
  - ii) Trojan Horse
  - iii) Worm
- c) List and explain the two categories of antivirus and how they function **(6 marks)**
- Q5. a) Explain what is a MODEM? **(4 marks)**
- b) List and Explain the TWO major types of Monitors that are used with microcomputers **(6 marks)**
- c) List and explain the FOUR main types of operating systems and how they function **(10 marks)**

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