



# THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

**A. M. E. C. E. A**

**MAIN EXAMINATION**

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**JANUARY – APRIL 2018 TRIMESTER**

**FACULTY OF SCIENCE**

**DEPARTMENT OF COMPUTER AND LIBRARY SCIENCE**

**REGULAR PROGRAMME**

**CMT 101: COMPUTER HARDWARE AND SOFTWARE**

**Date: APRIL 2018**

**Duration: 2 Hours**

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

- Q1. a) Differentiate between CPU and Chipset and clearly give their functions. **(2 marks)**
- b) Explain what the following Acronyms are in computing **(6 marks)**
- |           |           |
|-----------|-----------|
| i) SIMM   | v) PCI    |
| ii) SATA  | vi) IDE   |
| iii) DIMM | vii) CMOS |
- c) Outline the TWO major classifications of storage and give an example of each **(4 marks)**
- d) List and explain THREE methods of improving performance in a Processor **(6 marks)**
- e) Outline and explain the THREE major components of a processor **(6 marks)**
- f) Outline the various Simple things that are done to solve overheating problems in a computer **(6 marks)**
- Q2. a) What are the FIVE questions to ask when upgrading the memory of a computer **(10 marks)**

- b) Outline the FIVE major precautions to take when installing new memory modules **(5 marks)**
- c) List and explain some of the trouble shooting tasks for memory problems **(5 marks)**
- Q3. a) Explain what SCSI is Technology **(4 marks)**
- b) Outline the main advantages and disadvantages of Fibre channel SCSI technology **(6 marks)**
- c) List and explain the precautions to take when handling CDs, DVDs, and BDs **(7 marks)**
- d) Outline THREE methods that can be used to Protect private data on hard drives **(3 marks)**
- Q4. a) List the most important points to consider when caring for Note books **(15 marks)**
- b) Outline THREE methods that are used to install a printer **(3 marks)**
- c) Name two ways in which one can use in Extending printer working life **(2 marks)**
- Q5. a) When upgrading a computer, list the steps on how one goes about Dealing with unrecognized add-on or error message? **(7 marks)**
- b) What are the Factors that affect capacity, features, and performance in a DIMM **(8 marks)**
- c) Differentiate between SRAM and DRAM **(5 marks)**

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