



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

MAIN EXAMINATION

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

AUGUST – DECEMBER 2018 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER AND LIBRARY SCIENCE

REGULAR PROGRAMME

CMT 102: FUNDAMENTALS OF COMPUTER TECHNOLOGIES

Date: DECEMBER 2018

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions

- Q1. a) Briefly explain the meaning of the following terms. Give one example for term. i) Topology **(4 Marks)**
ii) Multimedia
- b) State and explain any four reasons why people need Information in modern organizations. **(4 Marks)**
- c) Explain what is a computer and how it works **(2 Marks)**
- d) State and explain five major characteristics of computers. **(5 Marks)**
- e) In the evolution of computers, explain computer generations stating the major technology in each generation? **(4 Marks)**
- f) Using a well labeled block diagram identify and briefly describe the four hardware component that constitutes a computer. **(8 Marks)**
- g) Describe any three types of computer crimes. Give one security measure that can be applied to protect the system against each crime. **(3 Marks)**
- Q2. a) Briefly describe the following terms .give one example for each term. **(2 Marks)**
i) Information systems
ii) Language processors

- b) Information is essential in modern organizations. Give four characteristics of a quality information. **(4 Marks)**
- c) The number of internet usage is increasingly becoming popular in modern society. Briefly explain any three uses of internet. **(3 Marks)**
- d) Discuss Computer memory classification. **(2 Marks)**
- e) In computer architecture how is the CPU and the memory connected? **(3 Marks)**
- d) Identify and briefly explain three main roles of an operating system software in a computer system. **(6 Marks)**

Q3. Explain the following terms as used in information technology:

- i) Branded computer **(2marks)**
- ii) Hardware **(2marks)**
- iii) Internet **(2marks)**
- iv) Gigabyte **(2marks)**
- v) Computer System **(2marks)**
- vi) World Wide Web **(2marks)**
- vii) Control Unit **(2marks)**
- viii) Device driver **(2marks)**
- ix) Database **(2marks)**
- x) RAM **(2marks)**

- Q4. a) Differentiate between Application software and System software **(4marks)**
- b) In recent days, many computer users have been noticed to prefer using Graphical user interface based operating system software like MS Windows. Explain why this is so. **(8marks)**
- c) Identify and briefly explain the four legal methods that organizations can use to acquire software products **(8marks)**

- Q5. a) Identify and briefly explain any four advantages of using computer based word processing software as compared to using a typewriter **(8marks)**
- b) Briefly explain any four features that are associated with an application software that will qualify to be classified as a spreadsheet **(8marks)**
- c) List any two Word processing and any two spreadsheet programs that are available in the market today **(4marks)**

END