



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

MAY – JULY 2019 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER AND LIBRARY SCIENCE

REGULAR PROGRAMME

DIT 002: FUNDAMENTALS OF INFORMATION TECHNOLOGY

Date: JULY 2019

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions

- Q1. a) Differentiate between the terms Hardware and Software as used in information technology **(4marks).**
- b) Identify and list any four methods that can be used to acquire software legally **(4marks).**
- c) On the basis of computing power, identify and briefly explain any five features you would seek to evaluate to differentiate between Micro, Mini, Mainframe and super computers. **(10marks)**
- d) Identify and briefly explain any two advantages of adapting electronic data processing as compared to manual systems **(4marks).**
- e) Define / Explain the following terms as used in information Technology:
- i) Peripheral device **(2marks)**
 - ii) Byte **(2marks)**
 - iii) Clone computer **(2marks)**
 - iv) Compiler **(2marks)**
- Q2. a) Differentiate between Application Software and System Software **(4marks)**
- b) Identify and briefly explain any four main functions of an operating system software **(8marks).**

- c) "Many computer users have been noticed to prefer using graphical user interface based systems as compared to command line or Menu driven interfaces". Justify this Statement. **(8marks).**
- Q3. a) Define / Explain the term Network Topology **(2marks).**
- b) Using the help of a sketch diagram, briefly explain the following network topologies:
- i) Bus topology **(4marks)**
 - ii) Star topology **(4marks)**
 - iii) Ring topology **(4marks)**
- c) Identify and briefly explain any three benefits of using computer Networks **(6marks).**
- Q4. a) Suppose you have a personal computer that you would like to use for browsing the internet and sending e-mails. List and briefly describe the items you will need in terms of the hardware, software and other provisions so that you can achieve the desired objective. **(20marks).**
- Q5. a) Computer based Word processing is said to be a 5-step process. List and briefly explain how each of these processes are provided for by the MS Word program. **(10 marks)**
- b) List and briefly explain any four advantages of using computer based word processing as compared to type writer based systems. **(8marks).**
- c) List any two commonly used professional word processing programs in the market today **(2marks).**

END