



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

JANUARY – APRIL 2015 TRIMESTER

FACULTY OF SCIENCE

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

REGULAR PROGRAMME

DIT 010: INTRODUCTION TO HARDWARE AND TECHNICAL SUPPORT

Date: April 2015

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions

- Q1. a) Briefly describe the following terminologies as used in computer hardware technical support.
- i) Boot
 - ii) Bus
 - iii) Troubleshoot
 - iv) Electrostatic discharge (ESD) **(8 marks)**
- b) Briefly describe the POST Process. **(2 marks)**
- c) Describe the following types of memory.
- i) DRAM
 - ii) SRAM
 - iii) EPROM **(6 marks)**
- d) List any 2 memory banks that are likely to be found on a computer motherboard today. **(2 marks)**
- e) Describe how you would access the MS-DOS Command prompt from a windows operating system **(2 marks)**

- f) With valid examples provide the use of the following MS-DOS commands;
i) EDIT
ii) TYPE **(4 marks)**
- g) Provide a description on the assembly procedure of the following hardware components:
i) DVD Drive
ii) Power supply unit **(6 marks)**
- Q2. a) For each of the file systems; FAT16, FAT32, NTFS; state:
i) 1 operating system that uses each of the file system. **(3 marks)**
ii) The maximum partition size that is supported by each of the file systems. **(3 marks)**
iii) 1 feature of each of the file systems. **(3 marks)**
iv) 1 disadvantage of each of the file systems. **(3 marks)**
- b) Briefly describe 4 items that can be configured from the CMOS settings. **(8 marks)**
- Q3. a) Describe the use of the following components within a windows operating system environment.
i) Device manager
ii) Windows registry
iii) Windows control panel
iv) Windows task manager
v) Microsoft Management Console (MMC) **(10 marks)**
- b) Describe the interfaces of the following components.
i) Hard disk
ii) Mouse
iv) Printer
v) Keyboard
vi) Screen **(10 marks)**

- Q4. a) Using valid examples, identify the use of the following MS-DOS command
- i) MKDIR
 - ii) Copy
 - iii) Move
 - iv) Copy CON
 - v) REN **(10 marks)**
- b) Describe the features of any **THREE** antivirus programs you are aware of. **(6 marks)**
- c) Describe the role of the BIOS in a computer system. **(4 marks)**
- Q5. a) List and describe the functions of any **FIVE** key components used in assembling a new computer system. **(10 marks)**
- b) State the interface of each of the components mentioned in (a) above. **(5 marks)**
- c) Describe the procedure of installing window operating system in a new machine that had no other operating system. Describe only the key initial stages. **(5 marks)**

END