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(KNOWLEDGE FOR DEVELOPMENT)

KIBABII UNIVERSITY

(KIBU)

UNIVERSITY EXAMINATIONS

2020/2021 ACADEMIC YEAR

SPECIAL/SUPPLEMENTARY EXAMINATIONS

YEAR ONE SEMESTER ONE EXAMINATIONS

**FOR THE DIPLOMA IN INFORMATION
TECHNOLOGY**

COURSE CODE : DIT 057

**COURSE TITLE : COMPUTER SYSTEM REPAIR
AND MAINTENANCE**

DATE: 30/09/ 2021 TIME: 2.00 P.M. – 4.00 P.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [24 MARKS]

- a. Define the following terms [6 marks]
- i. Motherboard
 - ii. Heatsink
 - iii. CMOS
 - iv. POST
 - v. BIOS
 - vi. UPS
- b. What is the main work or purpose of a computer case? [6 marks]
- c. To become a computer service and repair technician, you need to have outstanding qualities. Elaborate at least SIX of these qualities. [6 marks]
- d. To be able to troubleshoot and repair computers, why should one have general hardware understanding? [6 marks]

QUESTION TWO [18 MARKS]

- a. Name and describe SEVEN components that are housed in inside a computer case. [6 marks]
- b. What are commonly errors displayed during POST [6 marks]
- c. What are some of the weekly and monthly maintenance procedures? [6 marks]

QUESTION THREE [18 MARKS]

- a. Kenya power has been the main company that generates and supply power to buildings in Kenya, people always complain about the damage caused when they experience power blackouts, fluctuations, and brownouts, as an experienced technician, explain how can this interference be controlled to avoid computer damage and data loss. [8 marks]
- b. Explain factors that may prevent a computer from powering on [6 marks]

QUESTION FOUR [18 MARKS]

- a. What is a motherboard? [2 marks]

- b. Your managers have been complaining about his laptop performance. He says that it overheats, freezes and shuts down. He has decided to sort help from you to help troubleshoot, repair and maintain the laptop to optimize its performance. Discuss the procedures you should follow. **[8 marks]**
- c. Computer systems always experience threats like theft, data loss, virus attacks and hacking. Discuss ways how this can be avoided. **[8 marks]**

QUESTION FIVE [18 MARKS]

- a. Explain different types of computer virus **[6 marks]**
- b. Discuss different types of data backup **[6 marks]**
- c. Explain the general method of recovering data from non-booting operating system. **[6 marks]**