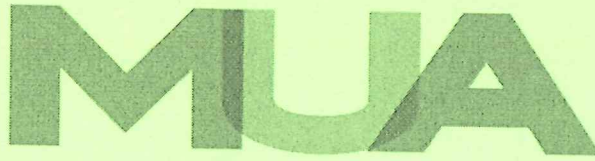


The
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DIPLOMA UNIVERSITY EXAMINATIONS

SCHOOL OF MANAGEMENT AND LEADERSHIP

DIPLOMA IN BUSINESS INFORMATION TECHNOLOGY

CBT 105: INTRODUCTION TO COMPUTER REPAIR AND MAINTENANCE

DATE: 4th APRIL 2023

DURATION: 2 HOURS

MAXIMUM MARKS: 70

INSTRUCTIONS:

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **SIX (6)** questions.
4. Question **ONE** is compulsory.
5. Answer any other **FOUR** questions.
6. Question **ONE** carries **30 MARKS** and the rest carry **10 MARKS** each.
7. Write all your answers in the Examination answer booklet provided.

QUESTION ONE

Read the Case Study below carefully and answer the questions that follow:

BABLO TECHNOLOGY

Bablo technology is savvy company transforming Africa through the innovative, state of the art tailor-made software solutions for banking, financial, agricultural, transport & public sector.

They operate on a sustainable commercial footing and are convinced that economic IMPACT is best achieved through developing a vibrant and resilient SME sector. Bablo has been a market leader in the provision of affordable innovative solutions within the continent by being the center bolt upon which multiple transactions are anchored through our solutions, such software assists in eliminating errors, completing business tasks, reporting activities and increases overall efficiency and effectiveness. Personal productivity software enhances its user's performance on a specific range of common tasks. The Company Opened a new branch in Kenya Everyone is proud of their effort and exited for the future. The Computers are new and fast, and everything is working perfectly.

When The Bablo Board assembled two months later for a meeting at the Headquarters, though it is apparent that there are a few problems. Not only is the offices dusty and hot, but there are already some signs of equipment problems. The computers are significantly slower, and ten has stopped working altogether. The board is now discouraged and wonders if all of the effort and funds were well spent

No one likes to see scenarios such as the one described above, but sadly this sort of situation is very common in new computer projects. If the computers are not well maintained, they easily fall prey to problems caused by heat, dust, viruses, misuse and

fluctuating electrical supplies. Therefore a computer lab manager needs to be well trained in ways to maintain computers.

Required:

- a) Define the term computer System [2 MARKS]
- b) Describe THREE basic components of a computer system [6 MARKS]
- c) Explain four types of Computer maintenance [4 MARKS]
- d) Indicate four safety precautions to observe on troubleshooting the computer [8 MARKS]
- e) Describe two relationships between computer software and computer hardware? [4 MARKS]
- f) Explain how the speed of the computer could be enhanced [6 MARKS]

QUESTION TWO

- a) Explain purpose of the motherboard and list 5 parts of the motherboard [4 MARKS]
- b) Describe the CPU and list at least 3 functions [6 MARKS]

QUESTION THREE

- a) Describe the following interfaces [4 MARKS]
 - i. IDE
 - ii. SATA
 - iii. Bus
 - iv. Ports

- b) Analyze FOUR (4) classification of computers based on size that an IT officer, is likely to interact with [6 MARKS]

QUESTION FOUR

- a) In Computers, communication ports can be divided into two types based on the type or protocol used for communication. They are Serial Ports and Parallel Ports Explain [4 MARKS]
- b) Explain FOUR Functions of Buses in computers [6MARKS]

QUESTION FIVE

- a) Describe Hardware troubleshooting [2] MARKS)
- b) List TWO types of Computer Memory and Discuss [4 MARKS]
- c) Analyze TWO Common type of Monitors [4 MARKS]

QUESTION SIX

- a) Differentiate between the following terms in reference to computer components: [4 MARKS]
- i. Open source and Freeware
 - ii. Commercial and Open source
- b) Define PSU (Power Supply Unit) [2 MARKS]
- c) Differentiate between BIOS (Input Output system) and CMOS (complementary metal-oxide-semiconductor) [4 MARKS]