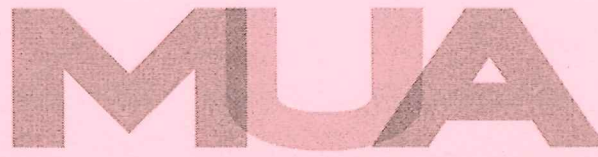


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**UNDERGRADUATE UNIVERSITY EXAMINATIONS**  
**SCHOOL OF MANAGEMENT AND LEADERSHIP**  
**DIPLOMA IN BUSINESS INFORMATION TECHNOLOGY**

**DBT 100 : COMPUTER REPAIR AND MAINTENANCE**

**DATE: 5<sup>TH</sup> DECEMBER 2024**

**DURATION: 2 HOURS**

**MAXIMUM MARKS: 7**

**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 **THREE** 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:**

In January 2024, Karama Tech Solutions, a 100-person mid-sized software development company, experienced a spike in computer problems. Work was severely hampered by issues with hot desktop computers, sluggish laptops, unresponsive software, malfunctioning power supply units, and malware attacks. Overheating was noted by about 25% of desktop users, slow laptops were a problem for 30% of administrative staff, and software freezes affected a few workers. To resolve these problems, the IT support staff performed diagnostics, changed out malfunctioning hardware, upgraded RAM and SSDs, installed software patches, and instituted a monthly preventative maintenance schedule. Because of the effective repairs and preventive actions, computer performance improved and complaints decreased by 70% the next month. This led to an increase in overall productivity.

**Required:**

- a) Identify five major hardware and software problems reported by employees at Karama Tech Solutions and explain how the IT support team addressed these issues?  
(10 Marks)
- b) Demonstrate the preventive measures which were introduced to avoid future computer issues  
(5 Marks)
- c) Explain the reasons why computer maintenance is important  
(8 Marks)
- d) Define the following terms:
  - i. Operating system  
(2 Marks)
  - ii. Data Input  
(2 Marks)
  - iii. Software vs Hardware  
(2 Marks)

## QUESTION TWO

- a) Explain the advantages of CRT. (4 Marks)
- b) List the types of computers (6 Marks)

## QUESTION THREE

- a) Discuss in detail the three major computer system components (6 Marks)
- b) State the difference between partitioning and formatting a hard drive (4 Marks)

## QUESTION FOUR

- a) Differentiate between HDD and SSD (4 Marks)
- b) Describe the likely remedies for the following issues (6 Marks)
  - i. Problem: The Computer Turns On, but displays nothing
  - ii. Problem: The Blue Screen of Death
  - iii. Problem: PC can't find the hard drive

## QUESTION FIVE

- a) Elaborate the types of computer maintenance. (4 Marks)
- b) Explain the process of troubleshooting a processor (6 Marks)

## QUESTION SIX

- a) With an aid, of a diagram explain how the power supply unit works (7 Marks)
- b) List the factors to consider when buying a laptop/PC (3 Marks)

