

The
Management
University
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CERTIFICATE UNIVERSITY EXAMINATIONS
SCHOOL OF MANAGEMENT AND LEADERSHIP
CERTIFICATE IN INFORMATION COMMUNICATION
TECHNOLOGY

CIT 105: FOUNDATIONS OF COMPUTER ORGANIZATION

DATE: 2ND APRIL 2025

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:

COMPUTERS AS AN INEVITABLE TOOL FOR PERFORMANCE

Consider being assigned a task that requires you to locate the population of a particular country. You would need to compile the results, but there is no such thing as a computer. That may seem impossible, but it was one of the issues that the world faced in the past. Simple problems require a great deal of time and storage space to solve. Then what occurred? The computer was invented to make human life easier.

When most people hear the word computer, they think of a personal computer such as a desktop or laptop. Before 20th century, most information was processed manually or by use of simple machines. However, computers come in many shapes and sizes, and they perform many different functions in our daily lives. When you withdraw cash from an ATM, scan groceries at the store, or use a calculator, you're using a type of computer.

Today, millions of people are using computers in offices and at home to produce and store all types of information. How a computer completes a given set of desired instructions is called the function of a computer. Initially, when the user provides input to the computer from the input device the input data is stored in the primary memory then later the data is moved to the CPU (Central Processing Unit).

Computer security threats are the occurrence of activities that steal data, cause malfunction in the system, or disturb the environment of the devices. There can be several reasons for these attacks; hence, the open reveal of all vulnerabilities of the devices makes it easy for them to enter the system and run their unwanted catastrophic operations.

Required:

- a) Discuss FOUR (4) components of a computer system **[8 MARKS]**
- b) Evaluate FOUR (4) functions of a computer **[8 MARKS]**
- c) Asses THREE (3) threats to data and information in an organization **[6 MARKS]**
- d) Discuss three categories of a software application **[4 MARKS]**

- e) Analyze TWO legal issues to be considered by an it officer in a busy organization [4 MARKS]

QUESTION TWO

- a) Define the term BIOS [2 MARKS]
- b) Explain the concept of memory hierarchy in computer systems. [4 MARKS]
- c) Describe the difference between proprietary software and open-source software [4 MARKS]

QUESTION THREE

- a) Discuss the primary purpose of an operating system in a computer [2 MARKS]
- b) List two examples of input devices [2 MARKS]
- c) Assess the primary functions of the following components in a computer system: [6 MARKS]
- i. CPU
 - ii. RAM
 - iii. Hard Drive

QUESTION FOUR

- a) Evaluate one way on how to protect a computer from malware [2 MARKS]
- b) Describe the term phishing [2 MARKS]
- c) Assess the need of a motherboard in a computer [4 MARKS]
- d) Describe one way on how to improve the performance of an old computer [2 MARKS]

QUESTION FIVE

- a) Explain the difference between SSD (Solid State Drive) and HDD (Hard Disk Drive) [4 MARKS]
- b) Explain difference between system software and application software [2 MARKS]
- c) Compare and contrast RISC and CISC instruction sets [4 MARKS]

QUESTION SIX

- a) List two examples of operating system [2 MARKS]
- b) Explain the concept of copyright [2 MARKS]
- c) Explain the difference between RAM and ROM [2 MARKS]
- d) Describe the machine cycle in the context of computer architecture [4 MARKS]