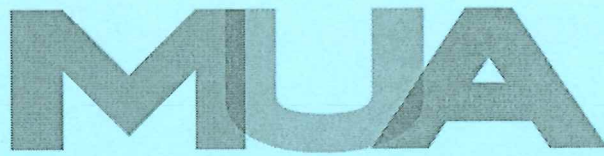


The
Management
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DIPLOMA UNIVERSITY EXAMINATIONS

SCHOOL OF MANAGEMENT AND LEADERSHIP

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY/

DIPLOMA IN BUSINESS INFORMATION TECHNOLOGY.

DIT 202 : INTRODUCTION TO COMPUTER ORGANISATION.

DATE: 30TH MARCH 2022

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:

TRAINTIPS

Kenchique is a consultancy firm that offers training and instruction services to corporate and individuals. Ahmed is overall Manager who is responsible for the overall activities of his team. As a business entity, they are the solution to business owners who outsource training and knowledge needs.

After acquiring the necessary approval, Kenchique, in turn, invites professionals in a field of the approved area of specialization. The professional will handle the joint conferences and workshop presentation lecture.

Kenchique has invited you as a professional in a deal where you will be expected to lecture about Computers, taking into account its architectural organization and performance and their relatedness.

As a guideline, Kenchique has sent you the following topics which will be used for presenting to the trainees.

- i. The computer system
- ii. Machine level representation of data instruction sets
- iii. CPU structure and functions
- iv. Memory system organization and architecture
- v. System input/output
- vi. Multiprocessors
- vii. Digital logic

Required:

- a) Discuss five major computer components in detail, giving examples

[10 MARKS]

- b) Describe the cache memory of the system, explain its importance
[4 MARKS]
- c) Define to your panel the I/O synchronization, mention 2 examples of I/O operation synchronization
[6 MARKS]
- d) Discuss the difference between multiprocessor and multicomputer systems
[6 MARKS]
- e) During the session, a question arose about the computer processor. Explain to the attendees what the CPU is? state the three parts of the CPU
[4 MARKS]

QUESTION TWO

- A) Below are some Computer terms used in the organization of a system. Define each term
[8 MARKS]
- i. Arithmetic and Logic Unit
 - ii. Control Unit
 - iii. Random Access Memory
 - iv. Read Only Memory
- B) Describe the machine cycle
[2 MARKS]

QUESTION THREE

- A) To process an instruction, the Central Processing Unit (CPU) goes through a cycle with four stages. List the four stages
[4 MARKS]
- B) State and analyze the difference between the SSD and HDD
[6 MARKS]

QUESTION FOUR

- A) Differentiate the following terms
[6 MARKS]
- i. Gigabit
 - ii. Megabit

iii. Byte

B) Explain the different types of operating systems [4 MARKS]

QUESTION FIVE

A) Describe the instruction set architecture [4 MARKS]

B) In your own understanding while giving examples differentiate between volatile and non-volatile memory [6 MARKS]

QUESTION SIX

A) Explain any 4 computer devices located in the system unit [4 MARKS]

B) Explain the memory hierarchy process [6 MARKS]