



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

**UNIVERSITY EXAMINATION FOR:**

**DIPLOMA IN TECHNOLOGY ELECTRICAL AND ELECTRONICS**

**ENGINEERING**

**ETI 2302: COMPUTER APPLICATIONS II**

**SERIES: AUGUST 2019**

**TIME: 2 HOURS**

**DATE: 4 Aug 2019**

## Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other **TWO** questions.

**Do not write on the question paper.**

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## Question ONE

- (a) Using a simple diagram, define a Computer. (2mks)
- (b) (i) Define Computer generation
- (ii) Briefly describe the Computer generations. (12mks)
- (c) State four disadvantages of computers. (4mks)
- (d) Describe the booting process of Computers. (4mks)
- (e) Define and describe the history of the internet. (4mks)
- (f) Differentiate between network operating system and real time operating system (4mks)

## Question TWO

- (a) Explain the purpose of the following computer hardware components;
- (i) CPU
  - (ii) BIOS
  - (iii) CACHE
  - (iv) RAM
- (4mks)**
- (b) Discuss the classification of computers. **(10mks)**
- (c) Describe four minimum hardware requirements for operating system installations. **(6mks)**

## Question THREE

- (a) Differentiate between a Static RAM and a Dynamic RAM. **(4mks)**
- (b) Discuss the functions of an Operating System. **(10mks)**
- (c) Explain the purpose of wearing a wrist band when handling Computers. **(2mks)**
- (d) Differentiate between SATA and PATA interfaces as applied in Hard disk. **(4mks)**

## Question FOUR

- (a) Describe the motherboard architecture of a Computer. **(10mks)**
- (b) Explain the purpose of the following system software;
- (i) Drivers
  - (ii) Database Management system
  - (iii) Utility programs
  - (iv) Antivirus
- (6mks)**
- (c) Describe the operation of a light pen and a digitizer. **(4mks)**

## Question FIVE

- (a) List ten computer input devices. **(5mks)**
- (b) Differentiate the operation of an inkjet printer and LaserJet printer. **(4mks)**
- (c) Briefly describe the following types of memory;
- (i) ROM
  - (ii) PROM
  - (iii) EPROM
  - (iv) EEPROM
- (4mks)**
- (d) Explain the following internet terminologies;
- (i) Browser
  - (ii) Search Engine
  - (iii) www
  - (iv) Website
- (4mks)**
- (e) State three technologies for connecting mouse peripheral to a computer. **(3mks)**

