



TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

ECS 2101: Computer Systems & Organization

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2019

TIME: 2 HOURS

DATE: Pick Date 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.

Question ONE

a) Explain the meaning of the following terms

- i. Computer Program
- ii. Hardware
- iii. BIT and Byte
- iv. Hardware and Software

(8 Marks)

b) Complete the following table:

Binary	Decimal	Octal	Hexadecimal
101010	-	-	-
-	240	-	-
-	-	47	-
-	-	-	F2

(12 Marks)

Question TWO

- a) Explain the meaning and importance of computer safety in relation to health issues. (10 Marks)
- b) Describe the following ICT equipment found in an organization.
- i. Photocopier
 - ii. Fax Machine
 - iii. Telephone
 - iv. Projector
 - v. Scanner
- (10 Marks)

Question THREE

- a) List the SIX components of computer hardware and explain their functions. (12 Marks)
- b) Explain the different software components that can be found in any computer installation. (8 Marks)

Question FOUR

- a) Explain the memory hierarchy as used in computing providing examples of each category (8 Marks)
- b) Briefly explain any SIX input/output devices stating their area of application. (12 Marks)
- c) Briefly explain the following input/output devices stating their area of application.
- i. Keyboard
 - ii. Mouse
 - iii. Monitor
 - iv. Barcode reader
 - v. Plotter
 - vi. Printer
- (12 Marks)

Question FIVE

- a) Describe the roles of any FIVE computer personnel found in an ICT organization (10Marks)
- b) Explain the classification of computers with respect to size. (8 Marks)
- c) Explain the meaning of the term ergonomics. (2 Marks)

(d)