



**TECHNICAL UNIVERSITY OF MOMBASA**  
**INSTITUTE OF COMPUTING AND INFORMATICS**

**UNIVERSITY EXAMINATION FOR:**

**DICT**

**EIT 2101: COMPUTER SYSTEMS & ORGANISATION:** Type unit name.

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2016**

**TIME: 2 HOURS**

**DATE:** Pick Date Select Month Pick Year

**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 any **THREE** questions.

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

**QUESTION ONE**

- a) Define the term "computer" (2 marks)
- b) Explain the following classes of computers
  - i) Digital computers
  - ii) Analog computers (6 marks)
- c) Explain the characteristics of computers (12 marks)

**QUESTION TWO**

- a) Explain the components of a computerized system (12 marks)
- b) Explain the input-process-output concept of a computer (8 marks)

**QUESTION THREE**

- a) Explain the components of the CPU of the computer hardware (10 marks)
- b) Explain any five different areas of application of computers (10 marks)

#### QUESTION FOUR

- a) Define the term “ergonomics” (2 marks)
- b) Explain the importance of ergonomics (12 marks)
- c) Explain any three tips you would give for an ergonomic workstation (6 marks)

#### QUESTION FIVE

- a) Convert the following numbers into binary
  - i) 956
  - ii) 2642
  - iii) 1737 (6 marks)
- b) Convert the following binary numbers to base 10
  - i) 10110
  - ii) 100111
  - iii) 111000 (6 marks)
- c) Explain the functions of operating systems (8 marks)