



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

*Faculty of Engineering and Technology*

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**DIPLOMA IN ARCHITECTURE  
DIPLOMA IN CIVIL ENGINEERING  
DIPLOMA IN BUILDING & CIVIL ENGINEERING  
DIPLOMA IN CIVIL ENGINEERING & CAD**

EIT 2101: INTRODUCTION TO COMPUTER SCIENCE

**END OF SEMESTER EXAMINATION**

SERIES: AUGUST/SEPTEMBER 2011

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer booklet*
- *Mathematical tables/Calculator*

This paper consists of **FIVE** questions

Answer question **ONE** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

## SECTION A (COMPULSORY)

### Question 1

a) Briefly describe the following hardware

- (i) Motherboard
- (ii) CPU
- (iii) Hard disk
- (iv) Floppy disk drive
- (v) Graphic card

(20 marks)

b) Convert the following numbers into the respective bases

- (i) 2418 to base 2
- (ii) 2150 to base 4
- (iii) 6130 to base 8

(9 marks)

c) Define word processor

(1 mark)

## SECTION B (Answer *any TWO questions from this section*)

### Question 2

a) (i) State the difference between a BIT and a BYTE

(2 marks)

(ii) Briefly explain **FOUR** ways to safeguard safety of computers

(8 marks)

b) Briefly explain the need of studying computer architecture

(10 marks)

### Question 3

a) (i) Briefly explain the functions of a control unit

(5 marks)

(ii) Briefly describe classification of computers according to size

(8 marks)

b) (i) Define a computer virus

(2 marks)

(ii) State **FIVE** causes of virus attack on computers

(5 marks)

### Question 4

a) Briefly explain operations of an arithmetic and logic unit

(9 marks)

- b) (i) State **FOUR** characteristics of a computer virus (2 marks)
- (ii) Briefly explain **THREE** objectives of an operating system (9 marks)

**Question 5**

- a) (i) State **FOUR** characteristics of RAM and ROM (4 marks)
- (ii) Briefly explain **FOUR** features of main storage of a computer (4 marks)
- b) (i) State **SIX** possible causes of data loss in a computer (3 marks)
- (ii) Briefly explain **FOUR** uses of a computer in the construction industry (6 marks)
- (iii) Briefly explain **THREE** ways to check computer virus (3 marks)

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