



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

*Faculty of Engineering and Technology*

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**CERTIFICATE IN CONSTRUCTION (PART I)**

EIT 1101: INTRODUCTION TO COMPUTER SCIENCE

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: FEBRUARY/MARCH 2012**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer booklet*

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 **TWO** printed pages

## SECTION A (COMPULSORY)

### Question 1

- a) Briefly explain the term ‘operating mode of a computer’ (10 marks)
- b) Convert the following numbers into their respective bases:
- (i) 2230 to base 2
  - (ii) 1104 to base 3
  - (iii) 2150 to base 4
  - (iv) 6130 to base 8
- (10 marks)

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

### Question 2

- a) State **FIVE** causes of virus attack on computers (5 marks)
- b) Briefly describe classification of computers based on sizes (8 marks)
- c) Explain briefly method of detail hitching by a hardware system (7 marks)

### Question 3

- a) Define booting (2 marks)
- b) State:
- (i) Two kinds of computers
  - (ii) **FOUR** types of system software
- (3 marks)
- c) Briefly explain the following:
- (i) Computer storage
  - (ii) Difference between cold and warm booting
- (15 marks)

### Question 4

- a) Briefly describe the evaluation of an operating system (10 marks)
- b) Convert the following numbers in respective bases to their natural numbers
- (i)  $1000100_2$
  - (ii)  $110111_2$
  - (iii)  $1010101_2$
  - (iv)  $1001001_2$
- (10 marks)

### Question 5

- a) Briefly explain **FIVE** functions of an operating system (10 marks)
- b) Briefly illustrate any **FOUR** commands applied when using Microsoft word (10 marks)