THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

CERTIFICATE IN INFORMATION TECHNOLOGY (CIT)

EIT 1121: INFORMATION PROCESSING

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: MAY/JUNE 2012
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*

This paper consist of **FIVE** questions
Answer any **THREE** questions. Question **ONE** is Compulsory
Maximum marks for each part of a question are as shown
This paper consists of **THREE** printed pages

Question One (Compulsory - 30 Marks)

a) Define data processing   (2 marks)
b) Describe data representation   (2 marks)
c) Define system design and describe its significance   (3 marks)
d) Differentiate between information processing and data processing   (2 marks)
e) Differentiate between Computer Input and Computer Output   (5 marks)
f) State any **THREE** main factors to consider when purchasing computer software and hardware

                                                                            (3 marks)
g) Distinguish between real-time and online processing techniques and their areas of application
                                                                            (6 marks)
h) State any **FOUR** advantages of using computers   (4 marks)
i) List the characteristics of a good password   (3 marks)

Question Two (15 marks)

a) State and describe the types of data files   (10 marks)

b) Define data security and describe three different ways that data security can be achieved.
                                                                            (5 marks)

Question Three (15 marks)

a) Define system analysis   (2 marks)
b) Define the following:
   - A Byte
   - A Megabyte
   - A Gigabyte
   - A Terabyte
   - A Kilobyte   (5 marks)

c) State and explain the information processing cycle   (8 marks)

Question Four (15 marks)

a) What is the purpose of documenting all the activities that are done during software development
                                                                            (5 marks)
b) Outline the advantages of using an automated systems as compared to using a manual system
                                                                            (10 marks)

Question Five (15 marks)

a) As an IT Specialist, you have been contacted to develop the student management system. Describe the process. Describe the process that you will follow to come up with the information system   (4 marks)

b) Describe the main different types of information systems   (8 marks)

c) Define file security and describe how organizations can achieve file security   (3 marks)