



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

(A Centre of Excellence)

Faculty of Engineering & Technology

**DEPARTMENT OF COMPUTER SCIENCE & INFORMATION
TECHNOLOGY**

**UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN DEVELOPMENT STUDIES/BACHELOR OF
SCIENCE IN TOURISM MANAGEMENT
(BSC.DS SEP 12/BSC.TM SEP12)**

EIT 4101: COMPUTER APPLICATIONS

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2012

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

- a) Define computer. **(2 marks)**
- b) State and explain **TWO** classifications of software giving examples in each case. **(6 marks)**
- c) Convert the following numbers to the base provided. Show the working. **(8 marks)**
- (i) 10₁
- (ii) 0 11₂ $\xrightarrow{\text{base}_{10}}$
- (iii) 724₈ $\xrightarrow{\text{base}_{10}}$
- (iv) 125₁₀ $\xrightarrow{\text{base}_2}$

(v) 705_8 \longrightarrow base₂

- d) Explain **SIX** features of Ms Word screen. (6 marks)
- e) State and explain the functions of operating system. (6 marks)
- f) Define software (2 marks)

Question Two

- a) Differentiate between the following terms as used in computing. (6 marks)
 - (i) RAM and ROM
 - (ii) Cold booting and warm booting
 - (iii) Hard copy and soft copy
- b) Write down **FOUR** areas where spreadsheet is applicable. (4 marks)
- c) Explain classification of computer based on their speed and memory size. (8 marks)
- d) What is database management system? (2 marks)

Question Three

- a) Describe **THREE** operating system techniques that enables user(s) to concurrently share single or multiple CPU. (12 marks)
- b) Compute the following: (4 marks)

(i)
$$\begin{array}{r} 10101 \\ + 11001 \\ \hline \end{array}$$

(ii)
$$\begin{array}{r} 1110 \\ \times 1011 \\ \hline \end{array}$$

- c) Describe parameter involved in accessing data stored in magnetic disk. (4 marks)

Question Four

- a) What is an operating system? (2 marks)
- b) Explain the two broad types of operating system. (6 marks)
- c) Briefly describe the **FIVE** generations of computers, clearly showing the technological advancement from one generation to the next. (10 marks)
- d) Write **TWO** advantages of database. (2 marks)

Question Five

- a) With an aid of a diagram, explain the functions of computer system touching on input, output processing, storage and output giving examples in each case. (10 marks)
- b) Describe the following input devices. (8 marks)
 - (i) Optical Mark Reader
 - (ii) Magnetic Ink Character Recognition
 - (iii) Optical Character recognition
 - (iv) Touch screen
- c) Write down procedure for creating a folder in Ms Word. (2 marks)

