



**THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

**(A Constituent College of JKUAT)**

(A Centre of Excellence)

# **Faculty of Engineering & Technology**

**DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

**BACHELOR OF TECHNOLOGY IN INFORMATION COMMUNICATION TECHNOLOGY-  
BITI/JAN2012**

**BIT 2103: INTRODUCTION TO COMPUTER APPLICATIONS  
EIT 4101: FUNDAMENTALS OF COMPUTING**

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: OCTOBER 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

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**Question One (Compulsory - 20 marks)**

(a) (i) Define the following terms:-

- a) Bit
- b) Modem
- c) Interface
- d) Hardware
- e) Information

**(5 marks)**

(ii) Describe the following computer generations:-

- a) 3<sup>rd</sup> Generation computers
- b) 4<sup>th</sup> Generation
- c) 5<sup>th</sup> Generation

**(3 marks)**

- (b) (i) Briefly describe the classifications of analogue computers **(2 marks)**
- (ii) Differentiate between a minicomputer and microcomputer. **(2 marks)**
- (c) (i) Mention any four factors to consider when trying to acquire an application package.
- (ii) Mention two Demerits of application packages. **(6 marks)**
- (d) Briefly describe two varieties of ROM. **(2 marks)**

**Question Two (20 marks)**

- (a) (i) Distinguish between Formula bar and Status bar.
- (ii) The following MS Excel table represents the financial comparison for the month of January for Company Z.

	A	B	C
1	ITEMS	KSHS	KSHS
			ACTURAL
2	INCOME	BUDGET	TRANSACTIONS
3	Babysitting Sales	100,000.00	210,000.00
4	Furniture sales	50,000.00	43,000.00
5	Salary	14,000.00	13,000.00
6	Sales of feeds	70,000	90,000.00
7	Miscellaneous	10,000	-
8	TOTAL	Q	T
9	EXPENSES		
10	Clothes	5,000.00	2,000.00
11	Lunches	15,000.00	17,000.00
12	Entertainment	4,000.00	7,000.00
13	TOTAL	R	U
14	Surplus	S	V
15			

- (i) Write the formulae and or function to calculate values in cells - Q, R, S, T, U and V.
- (ii) Write the formulae to calculate the difference between actual transaction and budget plan. **(8marks)**
- (iii) Outline the procedure for creating a chart in MS Excel using chart wizard. **(3marks)**
- (b) Outline the procedure for creating folders in MS Excel/MS Word. **(3 marks)**
- (c) (i) Distinguish between:- (I) DELETE button and Backspace button  
(II) Menu bar and Task bar.
- (ii) Outline the procedure of using Thesaurus in MS Word. **(6marks)**

### Question Three (20 marks)

- a) MPUC admits 2,000 students in different courses each semester. The secretary writes admission letters to each student. This exercise takes one month, since the letter of offer contains four pages. Use this information to answer the following questions:

Assuming you have been hired to advise the secretary,

- i) Propose an approach that would help the secretary generate the letters faster and economically.
  - ii) Outline the steps the secretary would use to generate the letters using the approach in you proposed in (i) above. **[10 marks]**
- b) Suggest the importance of the following features in document preparation:
- i) Thesaurus
  - ii) Spell checkers
  - iii) Track Changes **[6 marks]**
- c) Suggest **FOUR** page settings a secretary can perform before printing a document. **[4 marks]**

### Question Four (20 marks)

- (a) (i) Explain any **FIVE** Services rendered by the Internet. **(5 marks)**
- (ii) Using your E-mail address state and explain **FOUR** parts contained in it. **(8 marks)**
- (b) Describe **TWO** classifications of Main Memory. **(4 marks)**
- (c) Mention any **THREE** Merits of semiconductor Memory as compared to Core Memories. **(3 marks)**

### Question Five (20 marks)

- (a) (i) Describe the following Main Components of Central Processing Unit:
- (I) Control Unit
  - (II) Arithmetic Logic Unit
  - (III) Primary Memory **(6 marks)**
- (ii) Describe briefly the following types of Memories:-
- (I) Cache Memory
  - (II) Bubble Memory
  - (III) Holographic Memory
  - (IV) Core Memory **(8 marks)**
- (b) Describe any **THREE** Common Service Programs **(6 marks)**