



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

## (A Constituent College of JKUAT)

## Faculty of Engineering & Technology

## **DEPARTMENT COMPUTER SCIENCE & INFORMATION TECHNOLOGY**

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY- BSCIT 11M

## **ICS 2174: 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 consist of **FIVE** questions in **TWO** sections **A** & **B** Answer question **ONE (COMPULSORY)** and any other **TWO** questions Maximum marks for each part of a question are as shown This paper consists of **THREE** printed pages

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Question	n 1			
a) (i)	Define th	e following terms:-		
	I.	Bit		
	II.	Modem		
	III.	Interface		
	IV.	Hardware		
	V.	Information	(5 marks)	
<ul> <li>(ii) Describe the following computer generations:-</li> <li>I. 3<sup>rd</sup> Generation computers</li> <li>II. 4<sup>th</sup> Generation</li> </ul>				
	III.	5 <sup>th</sup> Generation	(3 marks)	
(b) (i)	Briefly	describe the classifications of analogue computers.	(2 marks)	
(1	ii) Dif	fferentiate between a minicomputer and microcomputer.	(2 marks)	
(c)	(i) Ment	ion any four factors to consider when trying to acquire an applica	ation package.	

Mention two Demerits of application packages. (ii) (6 marks) (d) Briefly describe two varieties of ROM.

### **Question 2**

- 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.

	А	В	С
1	ITEMS	KSHS	KSHS
2	INCOME	BUDGET	ACTURAL 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	Т
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			

- (iii) Write the formulae and or function to calculate values in cells Q, R, S, T, U and V.
- (iv) Write the formulae to calculate the difference between actual transaction and budget plan. (8marks)
- (v) 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.

(2 marks)

(ii) Outline the procedure of using Thesaurus in MS Word.

## **Question 3**

- a) (i) Describe Two broad categories of MS DOS commands giving an example in each case.
  - (ii) Using relevant MS DOS directory commands:-
    - Create a directory called MSAPOLY in root directory of drive C. This directory contains a sub directory called DEPARTMENTS.
    - The department sub directory contains ELECTRICAL, BUILDING, MECHANICAL and COMPUTING sub directories.
    - Under ELECTRICAL create a sub directory called SECTION which contains sub directories POWER, ELECTRONICS, TELECOMMS and CONTROL.
    - Under POWER create sub directory BSC and under BSC create subdirectory SUBJECTS. The subjects sub directories include MATHS, PHYSICS, and DRAWING. (14 marks)
- b) (i) While under the sub directory MATHS of Q.3a (ii) create a file called Maths.txt with the following contents 4+5-4=9.
  - (ii) Copy Maths.txt file to the sub directory DEPARTMENTS, and then remove MATHS sub directory. (6 marks)

## **Question 4**

<ul><li>(a) (i) Explain Any FIVE Services rendered by the Internet.</li><li>(ii) Using your E-mail address state and explain FOUR parts contained in it.</li></ul>	(5 marks)				
(b) Describe TWO classifications of Main Memory.					
(c) Mention any Three Merits of semiconductor Memory as compared to Core Memories.					
(3 Question 5					
(a) (i) Describe the following Main Components of Central Processing Unit: (I) Control Unit (II) Arithmetic Logic Unit (III) Primary Memory					
<ul> <li>(ii) Describe briefly the following types of Memories:-</li> <li>(I) Cache Memory</li> <li>(II) Bubble Memory</li> <li>(III) Holographic Memory</li> </ul>					
(IV) Core Memory	(8 marks)				
(b) Describe any THREE Common Service Programs					