



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE IN COMPUTER SCIENCE

SCT100: FUNDAMENTAL OF COMPUTING

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DATE: TUESDAY 3RD APRIL, 2012 TIME: 4.30 PM – 6.30 PM

INSTRUCTIONS

Instructions: Answer Question **ONE** and any other **Two Questions**

Question One (30 marks)

- (a) Using a suitable diagram describe the functional parts of the computer system. **(5 marks)**
- (b) Define the following terms:
- (i) Register
 - (ii) Peripheral
 - (iii) Compiler
 - (iv) Information
 - (v) Byte
- (5 marks)**
- (c) Carry out the following arithmetic calculations:
- (i) $AECD_{16} - C5F7_{16}$
 - (ii) $5724_8 + 3654_8$
 - (iii) $1111011_2 + 1010111_2 + 1101111_2$
- (6 marks)**
- (d) Convert the number $FED81_{16}$ into an equivalent octal number. **(4 marks)**
- (e) State and explain any five benefits that your institution can get by using the Internet. **(5 marks)**

- (f) With a suitable example differentiate between relative cell reference and absolute cell reference.

(5 marks)

Question Two (15 marks)

- (a) Define the term computer network.
(3 marks)
- (b) Based on the area of coverage discuss three physical sizes of computer networks.
(6 marks)

- (c) State and explain any seven risks that a computer installation faces.
(7 marks)

Question Three (15 marks)

- (a) State and explain any three generations of programming languages.
(6 marks)
- (b) State and explain any three resources that an operating system manages.
(6 marks)
- (c) Briefly explain the functions of the Utility programs.
(3 marks)

Question Four

- (a) (i) Define the term cell.
(2 marks)
- (ii) Give two reasons that make an electronic worksheet better than a manual worksheet.
(4 marks)
- (b) (i) List any four data types that are supported by a electronic worksheet.
(4 marks)
- (ii) Use the table below to answer question that follows:

	A	B	C	D	E
1	Customer Name	No. of Boxes	Amount	Unit Price	
2	Ukwala SuperMarket	548	(a)	68	
3	Administration	38	(b)		
4	Baba Susan Kiosk	15	(c)		
5	Sisi kwa Sisi	146	(d)		
6	Total Collection		(e)		
7					

Required:

The unit price is given in cell D2. Using absolute reference write down the formula to calculate the values in (a), (b), (c), (d) and (e).

(5 marks)

Question Five

- (a) (i) Differentiate between a dedicated wordprocessor and non-dedicated wordprocessor.
(2 marks)
- (ii) State and explain any four characteristics of a **good wordprocessor**.
(4 marks)
- (a) Briefly explain the steps one would follow to do the following:
 - (i) Underline an existing text
 - (ii) insert a picture
 - (iii) indent a paragraph from both left and right
(9 marks)