## CHUKA



## UNIVERSITY EXAMINATIONS

## SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF ARTS IN COMMUNICATION AND MEDIA

## COMM 230: INFORMATION TECHNOLOGY 1

STREAMS: BA (COMMUNICATION AND MEDIA) Y2S1 TIME: 2 HOURS
DAY/DATE: MONDAY 03/12/2018
11.30 A.M. - 1.30 P.M.

## INSTRUCTIONS:

- Answer question ONE and TWO other questions
- Do not write anything on the question paper
- Write your answers legibly and use your time wisely


## Question One Compulsory [30 marks]

(a). Define the following terms: computer, data and information technology[4mks]
(b). When using any mail handling program for sending and receiving an email, what is the purpose of the following?
i) Inbox
ii) C.C
iii) Subject marks]
(b) Highlight the differences in the following computing terminologies:
i. Information Systems and Information Technology [4 marks]
ii. Computer software and computer hardware [4 marks]
iii. Laser and Inkjet printer [4 marks]
iv. Desktop and portable computer [4 marks]
(d) Social sites such as Facebook and twitter are currently very popular in our society. Discuss two advantages and two disadvantages of these sites.
[2 marks]
(e) Perform the following number conversions.
(i). $100111011_{2}$ to decimal equivalent
(ii). $32_{10}$ to its binary equivalent

## SECTION B (ANSWER ONLY TWO QUESTIONS FROM THIS SECTION) Question Two (20 marks)

(a) Explain the differences between main memory and secondary memory in a computer system.
(b) All web browsers provide users with a variety of tools that enable them to navigate through complex collections of web pages. State any two and explain the functions for these tools. marks]
(c) Fred is the head of a local Network consulting company. His company has won a contract to design and develop a network for a middle level college in Chuka. Explain three advantages the college will gain by implementing the network.
[6 marks]
Giving examples, explain THREE security issues posed by Cyber space. [6 marks]

## Question Three (20 marks)

a) Briefly describe the THREE basic categories of computers. [6 marks]
b) What do you understand by the following terms
i) Machine language
ii) Compiler
iii) Assembler
c) Describe any FOUR basic operations performed by a computer system?
[8 marks]

## Question Four (20 marks)

a) Briefly discuss any FOUR common operating system software available in the market today
b) State four responsibilities of the Information Technology department of a large company
c) Write a simple Java program that displays the phrase "HELLO FRIEND, YES!" on the screen. [8 marks]

## Question Five [20 marks]

a) List FOUR popular Utility programs. [4 marks]
b) Explain the TWO components of Information Technology.
c) Describe the following terms with respect to a Spreadsheet package
i. Cell
ii. Formula
d) The table below shows bonus points for staff members at Tellam International Limited.

| Index | A | B | C | D | E |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Name | Month 1 | Month 2 | Month 3 | Month 4 |
| $\mathbf{1}$ | James | 48 | 89 | 65 | 89 |
| $\mathbf{2}$ | Mary | 54 | 76 | 68 | 80 |
| $\mathbf{3}$ | Korir | 17 | 88 | 76 | 86 |
| $\mathbf{4}$ | John | 99 | 60 | 65 | 58 |

Use the information above to answer the questions below.
(i). Write a formula and function in MS Excel that would calculate the mean score for Mary.
(ii). Write a function in MS Excel that would compute the highest score in month 3.
(iii). Explain the features of a simple IF function in Microsoft Excel.

