Course code : CSC 110
Course title : FUNDAMENTALS OF COMPUTING

DATE: 08/01/2018       TIME: 9:00 A.M – 11:00 A.M

INSTRUCTIONS TO CANDIDATES

Answer questions one and any other two.
QUESTION ONE [30 MARKS] [COMPULSORY]

a) Define the following: [3 marks]
   (i) Computer
   (ii) Data
   (iii) Primary memory

b) Discuss the history of computers. [12 mks]

c) Convert the binary number $1101101_2$ [4 mks]

d) Differentiate between a bit and a byte. [1 mks]

e) Briefly describe the types of computers that exist today. [8 mks]

f) Using examples, explain system software. [2 mks]

QUESTION TWO [20 MARKS]

a) Explain why a fast growing organization would need to network its computing resources. [4 mks]

b) Discuss briefly any TWO computer input devices used at a point of sale. [2 mks]

c) Convert the following to binary number system. [4 mks]
   (i) 34
   (ii) $24_8$

d) Outline FOUR differences between RAM and ROM. [4 mks]

e) Explain any FOUR areas the internet has widely been used. [6 mks]
QUESTION THREE [20 MARKS]

a) Discuss the characteristics of computers. [4 mks]
b) Distinguish between application software and utility software, giving examples. [2 mks]
c) Outline any FOUR software and the type of task you would accomplish while using them in an organization. [8 mks]
d) Describe the two common data representation schemes in a computer. [4 mks]
e) Explain any two system buses in a computer. [2 mks]

QUESTION FOUR [20 MARKS]

a) Define the following:
   i. Computer network. [1 mk]
   ii. Data communication [1 mk]
b) Explain briefly any THREE types of networks that you know. [3 mks]
c) Your lecturer has asked you to write a term paper using a computer. Explain how the following will help you? ROM, RAM, Application software, secondary storage devices. [4 mks]
d) With the aid of diagrams explain any three types of network topologies. [6 mks]
e) Discuss briefly the primary storage of a computer. [5 mks]
QUESTION FIVE [20 MARKS]

a) Differentiate between hardware and software components of a computer. [3 mks]
b) Explain the functions of the processor of computer. [3 mks]
c) Discuss any three pointing devices. [6 mks]
d) With examples explain the different classifications of computers. [4 mks]
e) Briefly explain the following: [4 mks]
   i. Programming language
   ii. Machine language
   iii. Assembly language
   iv. High level language