KENYA METHODIST UNIVERSITY

END OF 1ST TRIMESTER 2010 EXAMINATIONS

FACULTY : **COMPUTING AND INFORMATICS**
DEPARTMENT : **COMPUTER INFORMATION SYSTEMS**
UNIT CODE : **DBIT 103**
UNIT TITLE : **COMPUTER OPERATIONS AND MANAGEMENT**
TIME : **2 HOURS**

Instructions:
- *Answer question 1 and any other 2 questions.*

Question 1 (30 marks)

a) Describe the following hardware components. (10 mks)
   i) Heat sink
   ii) Power supply
   iii) Mother board
   iv) Memory chip
   v) ROM BIOS
   vi) Lithium battery
   vii) SVGA card
   viii) Hard disk
   ix) Processor
   x) NIC card

b) Briefly describe the POST process and explain how it performs this event. (2 mks)

c) With reference to hard disk compare EIDE and SATA. (4 mks)

d) Explain the purpose of the config.sys and autoexec.bat file in the MSDOS/Windows Opertaing System. (4 mks)

e) Write the above abbreviations in full and write short notes on each. (10 mks)
   i) FAT
   ii) NTFS
   iii) RAID
   iv) CMOS
   v) BIOS

Question 2 (15 marks)

a) Briefly describe two ways of protecting your system from electrical spikes. (2 mks)

b) Describe the most common ways that device drivers are installed on Windows PCs.
   (4 mks)

c)   List and describe the three types of resources in device manager.   (6 mks)

d)   What is an active partition?   Explain its relevance in Windows.   (3 mks)

Question 3 (15 marks)

a)   Describe two types of ports. (2 mks)

b)   Differentiate AT from XT keyboards.   (2 mks)

c)   Explain the general guidelines to follow when dealing with laser printers.   (3 mks)

d)   Define a bus connector.   (2 mks)

e)   Explain the following types of bus connectors;

   i)   EISA   (2 mks)

   ii)   VESA   (2 mks)

   iii)   PCI   (2 mks)

Question 4 (15 marks)

a)   List the general rules for memory installation.   (2 mks)

b)   Explain the factors to consider when purchasing the highest quality hard drive.   (3 mks)

c)   Describe three main issues to consider when installing a Windows server operating system. (3 mks)

d)   Define a programmed threat. (2 mks)

e)   Explain the terms below:

   i)   Virus   (1 mk)

   ii)   Trojan horse (1 mk)

   iii)   Worm   (1 mk)

   iv)   Salami attack (1 mk)

   v)   Logic bomb   (1 mk)