TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

BIT 2223: PC HARDWARE & TROUBLESHOOTING

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

DATE: Pick Date May 2016

Instructions to Candidates
You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.
Do not write on the question paper.

Question ONE

a) Explain the significance of the Last known good configuration in windows start option.   (4 Marks)

b) Explain the following terms
   i.   SATA
   ii.   PCI
   iii.   DIMM   (6 Marks)

c) List and explain the THREE main functions of CMOS BIOS program.   (6 Marks)

d) Give the error message and suggest a possible solution if one of the following error conditions were to occur
   i.   A Boot failure
   ii.   A dislodged SATA cable to a hard disk drive
   iii.   Incorrect setting for hard disk drive   (6 Marks)

e) Explain the purpose of preventive maintenance.   (4 Marks)

f) Explain the activities undertaken during a preventive maintenance exercise   (4 Marks)

Question TWO

a) Using diagrams explain any FOUR power connectors found in a power supply unit. (8 Marks)

b) Using diagrams explain any SIX internal connectors found on a motherboard. (12 Marks)

Question THREE

a) Name any SIX system unit components and give the observations one would make if any of the named component were to fail. (12 Marks)

b) Name FOUR software components that are found in any computer installation providing an example in each case. (8 Marks)

Question FOUR

a) List and explain the function of any FOUR utility programs. (8 Marks)

b) State the minimum system requirements for installing an application program of your choice. (4 Marks)
c) Explain the steps one needs to take to perform the following tasks
   i.   Detect hardware conflict
   ii.   Uninstall a device driver software
   iii.   Determine memory allocation for a given application
   iv.   Disable audio services (8 Marks)

Question FIVE

a) State the likely cause and suggest a solution of the following CMOS errors
   i.   CMOS Display mismatch
   ii.   CMOS Memory size mismatch
   iii.   CMOS Options not set
   iv.   CMOS Checksum failure
   v.   CMOS date and time not set (10 Marks)

b) Explain the purpose of a CPU heat sink/cooler fan assembly. (4 Marks)

c) Explain the term upgrade with reference to computer hardware. (2 Marks)

d) Distinguish between Default installation and Custom installation of new software. (4 Marks)