SCOTT CHRISTIAN UNIVERSITY

PROGRAME: BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

UNIT NAME: HARDWARE SUPPORT AND MAINTAINANCE

UNIT CODE: BBIT 122

DECEMBER 2017 EXAM – 3 HOURS

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO

QUESTION ONE

a) Differentiate the following computer components:
- i)   Integrated Device Electronic (IDE) and Basic Input Output System (BIOS)   (2 Marks)
- ii)   PCI Slots and ISA slots   (2 Marks)
- iii)   PROM and EEPROM   (2 Marks)

b) Describe THREE characteristics of RAM   (3 Marks)

c) Explain the importance of CMOS battery to a computer System   (2 Marks)

d) Describe the probable causes of a computer monitor/screen appearing blank even after being powered   (3 Marks)

e) Define the term Computer motherboard   (2 Marks)

f) Explain two main types of Computer Motherboards used by computer Systems
                                                                    (4 Marks)

g) Explain two differences between SIMM and DIMM Memory Modules   (4 Marks)

h) Explain in detail the entire procedure of assembling a computer system   (6 Marks)

QUESTION TWO

a) Explain the importance of the following processor components:
- i) Control unit   (1 Mark)
- ii) ALU   (1 Mark)
- iii) Registers   (1 Mark)

b) Explain the difference between Disk formatting and Disk defragmentation (2 Marks)

c) Identify two tools required to perform computer maintenance from technician's toolkit   (2 Marks)

d) List four steps a PC technician needs to take to protect themselves against electrical shock and burns.   (4 Marks)

e) What is an operating system and what are its main tasks in a computer system?
                                                                    (4 Marks)

QUESTION THREE

a) Name and describe FIVE main form factors to motherboards. **(5 Marks)**

b) Name and describe FIVE processor features affect performance and compatibility with motherboards. **(5 Marks)**

c) Describe the term Troubleshooting as used in computing **(1 Mark)**

d) Distinguish between multi – tasking and multi – processing as used in processors **(2 Marks)**

QUESTION FOUR

a) Briefly describe the main steps of installing an operating system to a computer's system **(6 Marks)**

b) Explain the difference between system software and application software **(4 Marks)**

c) Briefly describe the following electrical measurements as used in computers **(1 Mark each)**

    i.   Amps

    ii.   Ohms

    iii.   Volts

    iv.   Watts

    v.   Continuity

QUESTION FIVE

a) briefly describe the following components found in a computer's motherboard **(4 Marks)**

    i.   Resistor

    ii.   Capacitor

    iii.   Diode

    iv.   Transistor

d) Briefly explain the following diagnostic tools included as part of the operating system **(2 Marks each)**

    i.   BIOS POST

    ii.   DEFRAG.EXE

    iii.   MSD.EXE

    iv.   SCANDISK.EXE

    v.   SYSEDIT.EXE

e) Describe the protocol that is used to automatically set up the IP address configuration of network PC **(1 Mark)**