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)**