



SCOTT CHRISTIAN UNIVERSITY

PROGRAMME: 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)