

**DICT LEVEL II**

**COMPUTER SUPPORT AND MAINTENANCE**

**TUESDAY: 28 November 2017.**

**Time Allowed: 3 hours.**

**Answer ALL questions. Marks allocated to each question are shown at the end of the question.**

**QUESTION ONE**

(a) Highlight five common computer printer problems. (5 marks)

(b) You have been employed as a computer technician at Rwako Technical College. One of your staff members has determined that her computer has a hard disk problem.

**Required:**

Summarise the steps you would take to replace a faulty hard disk drive. (6 marks)

(c) Describe three safety concerns which need to be attended to when fixing computer hardware problems. (6 marks)

(d) Sarah Wendo bought a new motherboard for her desktop computer and discovered an accompanying surround plate (back plate).

**Required:**

Outline three steps of installing the back plate. (3 marks)

**(Total: 20 marks)**

**QUESTION TWO**

(a) Explain the uses of each of the following tools in computer maintenance.

(i) Extension magnet. (2 marks)

(ii) MSDS sheets. (2 marks)

(b) Identify four parts that could be found on the back of the power supply unit. (4 marks)

(c) Define each of the following terminologies as used in computing:

(i) Hot swappable device. (2 marks)

(ii) Plug and play (PnP). (2 marks)

(d) Stability of computers is important to avoid peripherals knock down accidents.

**Required:**

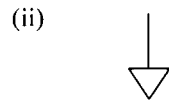
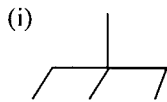
Describe each of the following computer peripherals installation methods:

(i) Wall-mount. (2 marks)

(ii) Clamp method. (2 marks)

(iii) Grommet method. (2 marks)

(e) Anita came across the following symbols when repairing computers:



**Required:**

Explain to her the purpose of each symbol.

(2 marks)

**(Total: 20 marks)**

**QUESTION THREE**

(a) Identify five risks which an organisation could be exposed to as a result of outsourcing its computer systems selection and acquisition. (5 marks)

(b) Summarise three structural differences between NLX and LPX motherboard form factors. (6 marks)

(c) Describe each of the following computer display terminologies:

(i) Dynamic focusing. (2 marks)

(ii) Dual frequency monitors. (2 marks)

(d) A newly recruited technician is trying to install software in the laboratory with little success.

**Required:**

Highlight five reasons why the technician is experiencing problems when trying to install the software. (5 marks)

**(Total: 20 marks)**

**QUESTION FOUR**

(a) Describe each of the following hard disk states:

(i) Self-healing. (2 marks)

(ii) Error verification. (2 marks)

(iii) Scan required. (2 marks)

(b) After running a virus scan on his computer, Tom realised that some files have been quarantined.

**Required:**

Suggest the action that Tom should take to the files in the quarantine bearing the following alert levels:

(i) Severe. (2 marks)

(ii) Low. (2 marks)

(c) Sam purchased a new memory module but upon disassembling the system unit, he could not trace the memory slots.

**Required:**

Suggest to him four possible ways of locating the memory slots. (4 marks)

(d) A computer working in a dusty environment requires regular cleaning.

**Required:**

Outline in six steps, how to clean the computer power supply unit.

(6 marks)

**(Total: 20 marks)**

**QUESTION FIVE**

- (a) A personal computer (PC) is a modular type of computer which can be assembled using hardware components made by different manufacturers, so as to have a custom built computer according to one's specific needs.

**Required:**

Summarise six components that should be available when building a personal computer (PC). (6 marks)

- (b) Traditional hard drives are mechanical devices that eventually wear out. There are many signs of imminent failure before a hard disk finally becomes completely defective.

**Required:**

Outline five signs of imminent hard disk failure. (5 marks)

- (c) Describe the following terms which could be used to describe a computer that has suddenly stopped working while in use:

(i) Freezing. (2 marks)

(ii) Hanging. (2 marks)

(iii) Crashing. (2 marks)

- (d) Identify three tasks of computer disk cleanup tool. (3 marks)

**(Total: 20 marks)**

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