

KASNEB

CICT PART I SECTION 2

COMPUTER SUPPORT AND MAINTENANCE

WEDNESDAY: 25 May 2016.

Time Allowed: 3 hours.

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

QUESTION ONE

- (a) David Mwera would like to set up a desktop computer to have a total hard drive of 250GB. The system drives have a capacity of 132GB.

Required:

- (i) Describe what David Mwera should do to increase the capacity of the hard drive. (2 marks)
- (ii) Analyse four hard drive interface standards. (4 marks)
- (iii) Outline four factors that could be considered when purchasing a new hard drive. (4 marks)
- (b) The key to successful working of wireless computer networks is good network security.

Required:

Examine how the following could enforce wireless network security:

- (i) Using a firewall. (3 marks)
- (ii) Changing and updating firmware default settings. (4 marks)
- (iii) Disabling service set identifiers (SSID) broadcasting. (3 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Discuss the following types of software installation:

- (i) Media based software installation. (2 marks)
- (ii) Web based software installation. (2 marks)
- (iii) Single exe installation. (2 marks)
- (iv) Windows installer installation. (2 marks)

- (b) Suggest two methods of troubleshooting a portable computer with the following problems:

- (i) Keypad does not work. (4 marks)
- (ii) Flickering screen. (4 marks)

- (c) Outline four features of automatic disk installation programs. (4 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Citing a suitable example in each case, differentiate between “active” and “passive” preventive maintenance as used in computer support and maintenance. (6 marks)

- (b) Justin Okoth acquired a new software and was provided with a documentation booklet.

Required:

Explain three possible uses of the documentation booklet. (6 marks)

- (c) Outline four ways of controlling heat inside the system unit of a computer. (4 marks)

- (d) A technician noted that one of the computers was over heating and shutting down unexpectedly. The technician confirmed that the problem was with its processor.

Required:

- (i) Suggest two possible causes of the problem. (2 marks)
- (ii) Explain two ways in which the problem in (d)(i) above could be solved. (2 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Pre-installation system preparation and application testing are important aspects of the software installation process.

Required:

Identify five tasks that should be undertaken as part of this process. (5 marks)

- (b) Describe the following processor features:

(i) Multicore. (3 marks)

(ii) Hyper-threading. (3 marks)

- (c) Highlight five safety precautions to observe when assembling or disassembling a computer. (5 marks)

- (d) Marion Wanjiku installed a new application software but the software could not load successfully.

Required:

Advise Marion Wanjiku how to troubleshoot the problem. (4 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Describe the following desirable characteristics of a help desk in an organisation:

(i) Availability. (2 marks)

(ii) Measurable. (2 marks)

(iii) Flexibility. (2 marks)

- (b) Mwanzo Institute, a new computer college is in the process of selecting and acquiring computer hardware and software. The management has been requested to undertake a requirements analysis.

Required:

Explain two types of activities undertaken in a requirements analysis. (4 marks)

- (c) John Mbabi is planning to buy a flat panel monitor and has approached you for assistance on selecting an ergonomic monitor mounting method.

Required:

Highlight two technical specifications that John Mbabi should consider. (4 marks)

- (d) Describe the following types of monitor stands:

(i) Monitor arm. (2 marks)

(ii) Monitor stand. (2 marks)

(iii) Wall or post mount. (2 marks)

(Total: 20 marks)

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