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)

....