kasneb

DICT LEVEL II

COMPUTER SUPPORT AND MAINTENANCE
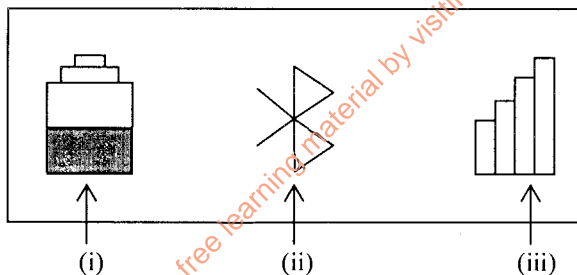
TUESDAY: 21 May 2019.   **Time Allowed: 3 hours.**

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

QUESTION ONE
(a)   Explain two circumstances under which a computer user would use a wireless printer connection.   (4 marks)

(b)   Make a sketch of a magnetic hard disk platter and label the following parts:

     (i)   A track.   (1 mark)

     (ii)   A sector.   (1 mark)

     (iii)   A cluster.   (1 mark)

     (iv)   An inter-track gap.   (1 mark)

(c)   The figure below shows notification signs of a micro computer.

Required:
Explain the function of each of the signs labelled (i) to (iii).   (6 marks)

(d)   Harry Butita's computer could not eject a compact disk (CD) from the optical drive after a successful software installation.

     Required:
     Outline in six steps how he can manually eject the tray of the optical drive to remove the compact disk (CD). (6 marks)
                                        (Total: 20 marks)

QUESTION TWO
(a)   Describe the following methods of operating system installation:

     (i)   Boot media.   (2 marks)

     (ii)   Disk imaging.   (2 marks)

(b)   Differentiate between "safe mode' and "last known good configuration."   (4 marks)

(c)   Outline four types of Random Access Memory (RAM).   (4 marks)

(d)   Lucy Luganda completed installing computer hardware components. When she started up the computer, its lights went on and the fans ran but the screen was blank. She rebooted the computer a couple of times without success.

Required:
(i)   Suggest two possible causes of the above problem.   (2 marks)

(ii)   If the solution is to disassemble and reassemble the computer, analyse any six steps involved in disassembling a computer.   (6 marks)
                                                                                (Total: 20 marks)

QUESTION THREE
(a)   Jayne Masese was installing software from a compact disk. She inserted the disk in the optical drive and the following information was displayed:

Name	Size	Type
autorun.inf	1KB	Setup information
eula.pdf	65KB	Portable document format
Readme.txt	32KB	Text file
Setup.exe	348KB	Application

Required:
Examine the purpose of each of the following files during the installation of the software on the compact disk.

(i)   Setup.exe   (2 marks)

(ii)   eula.pdf   (2 marks)

(iii)   autorun.inf   (2 marks)

(b)   Describe each of the following electrostatic discharge device damage:

(i)   Catastrophic failure.   (2 marks)

(ii)   Latent defect.   (2 marks)

(c)   Propose three possible generators of unwanted heat in a system unit.   (6 marks)

(d)   Maxwell Odidi's laptop drive C icon is displaying a red bar in file explorer indicating that it is almost full.

Required:
(i)   Identify two possible harms of C drive running out of space.   (2 marks)

(ii)   Suggest two methods of fixing C drive out of space problem.   (2 marks)
                                                                                (Total: 20 marks)

QUESTION FOUR
(a)   Explain the following terms as used in microprocessors:

(i)   Word length.   (2 marks)

(ii)   Instruction set.   (2 marks)

(iii)   Data types.   (2 marks)

(b)   After sales service is a factor that should be considered when purchasing computer hardware and software.

With reference to the above statement, explain why the following aspects need to be considered before purchasing a computer:

    (i)   Return policy.   (2 marks)

    (ii)   Warranty.   (2 marks)

    (iii)   Service agreement.   (2 marks)

(c)   (i)   Explain the meaning of "system level security" as used in computing.   (2 marks)

    (ii)   List three methods used to implement system level security.   (3 marks)

(d)   Highlight three problems associated with liquid crystal display (LCD) monitors.   (3 marks)
          (Total: 20 marks)

QUESTION FIVE

(a)   Suggest two different troubleshooting options of unfreezing a computer.   (2 marks)

(b)   Discuss three factors to consider before upgrading an operating system.   (6 marks)

(c)   Outline two preventive maintenance measures that needs to be undertaken on the following:

    (i)   Inside the computer case at least once a year.   (2 marks)

    (ii)   Hard disk drive monthly.   (2 marks)

(d)   Explain the implication of the following disk error messages:

    (i)   Non-system disk or disk error. Replace and strike any key when ready.   (2 marks)

    (ii)   Write-protected error.   (2 marks)

(e)   Analyse two functions performed by a computer's power supply unit.   (4 marks)
          (Total: 20 marks)