

DICT LEVEL II

COMPUTER SUPPORT AND MAINTENANCE

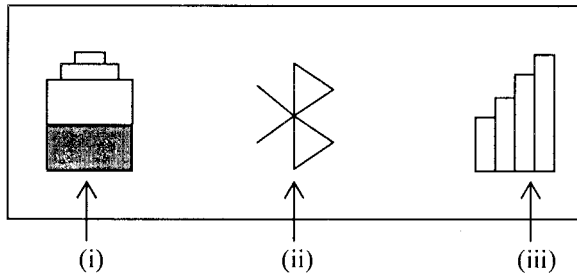
TUESDAY: 21 May 2019.

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)**
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