

QUESTION 2

[30]

Examine the advertisement below and answer the questions posed:

The advertisement for the Lenovo Ideapad 110 Core i5 features a laptop with a green Lenovo logo on the screen. A red heart graphic with the text 'SAVE R1200' is overlaid on the laptop. The text 'was R4999' is in the top right corner. The product name 'LENOVO IDEAPAD 110 CORE i5' is at the top. The specifications listed are: 15.6" HD (1366x768) Slim Display, Intel Core i5 6200U up to 2.8GHz, 4GB DDR RAM | 1TB Hard Drive, DVD Super Multi Writer, Intel Shared Graphics, LAN and Wireless LAN, Bluetooth and Webcam, Dolby Advanced Audio, Windows 10 Home 64bit, and 1 Year Carry in Warranty. A green badge on the bottom left says 'UNLIMITED* CLOUD BACK UP FOR 24 MONTHS VALUED AT R1700'. The price 'R7999' is displayed in large, stylized letters at the bottom left. Stickers for 'Intel Inside CORE i5' and 'Windows 10' are visible on the bottom right of the laptop.

Figure 1

2.1 Types of Memory:

- 2.1.1 Give ONE example of primary and ONE example of secondary Memory from the advert above (Figure 1)/
(Note: State clearly which type of memory you are referring to.) (2)
- 2.1.2 List the main difference between primary memory and secondary memory. (1)
- 2.1.3 The processor has cache memory.
What is the function of the cache memory? (2)
- 2.1.4 What is ROM?
(Note: Simply expanding on the acronym is not sufficient as an answer.) (1)
- 2.1.5 Why is ROM important in a computing device? (2)

2.2. Types of Storage:

- 2.2.1 Expand the acronym: HDD. (1)
- 2.2.2 HDDs will be replaced by Solid State Drives (SSD).
List THREE advantages and TWO disadvantages of SSDs. (5)
- 2.2.3 Define 'Flash' memory. (1)



- 2.2.4 Besides SSDs that have 'Flash' memory, name TWO other computing devices that also have 'Flash' memory. (2)
- 2.2.5 The laptop has a DVD drive.
Comment on why this hardware device is becoming obsolete. (2)
- 2.2.6 The deal mentioned on Figure 1, page 4, also offers 'UNLIMITED CLOUD BACK UP'.
Is there a difference between cloud storage and cloud backup?
Substantiate your response. (2)

2.3. Utilities

- 2.3.1 Windows offers two utilities to maintain your hard drive, namely, the Disk Cleanup and the Disk Defragmenter.

Distinguish between these two utilities and state when the Disk defragmenter needs be used. (4)
- 2.3.2 Is backing up and archiving the same?
Distinguish between these concepts in reference to data storage. (2)
- 2.3.3 What are the benefits of having 'Install updates automatically' set for your Windows Update utility, as depicted in Figure 2 below?

Also, comment critically on the update time scheduled. (3)

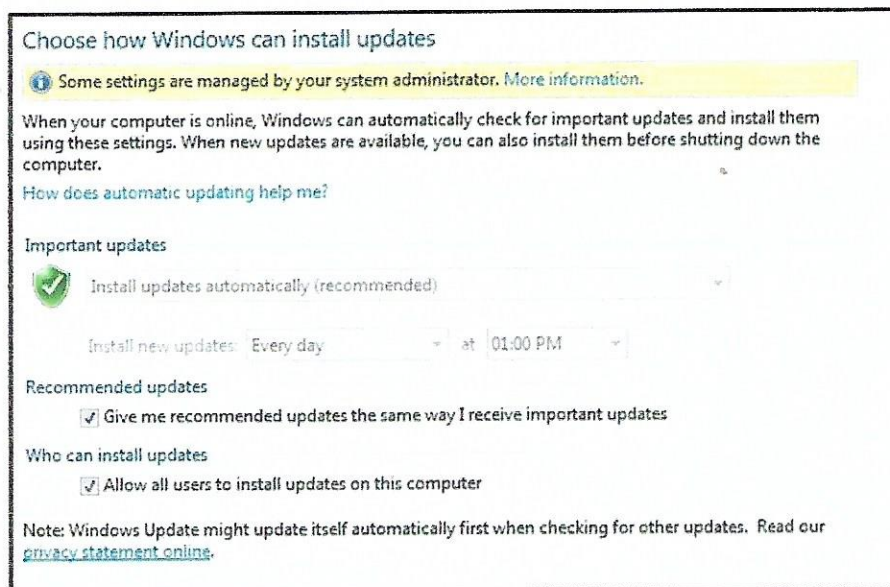


Figure 2



QUESTION 3

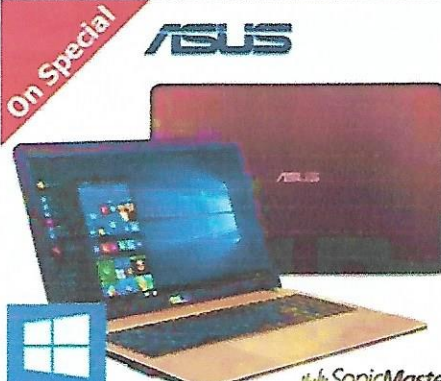
[20]

SCENARIO

Christo wants to set up a SOHO (Small Office Home Office) business which provides digital print, design and promotional products and services to businesses and private individuals. He is starting with a small work force which will consist of a receptionist, a newly qualified graphic designer and himself, as senior designer and manager.

He has to buy suitable computing devices for all the staff. Christo found these specifications for a laptop and workstation.

Option 1 (Incredible Connection)



On Special

ASUS

Asus F540LA Intel Core i3 5005U 2.0GHz CPU (4x threads) / 4GB RAM / 500GB Hard Drive / 15.6" 16:9 HD (1366x768) LED Display / Integrated Intel® HD Graphics 5500 / DVD RW / 802.11bgn Wireless LAN / Bluetooth 4.0 / 3-in-1 card reader (SD/SDHC/SDXC) / VGA Web Camera / ASUS SonicMaster Technology / Windows 10 64-bit / Ultra-Light 1.9 kg / 1 Year Warranty / Core i3 Laptop Deal [F540LA-XX815T]

Designed for Productivity and Entertainment

Be the first to review this product.

View (4) Similar Products

Intel Core i3-5005U 2.0GHz CPU
4GB DDR3 RAM / 500GB HDD
15.6" HD 1366x768 Display
Intel HD Graphics 5500

2.0GHz CORE i3
4GB RAM
NO SSD
500GB HDD

Ask a Question? Tell a Friend Add To Wishlist

Price: R 5 999

Option 2 (Evetech)

PC Case: Antec GX330 WHITE Clear Side Panel USB3.0 Case - Included
Power Supply: Antec 700W 80+ High Performance Power Supply - Included
Processor: Intel Core i7-7700 (3.6GHz, 8M Cache, 8x Cores, 4.2GHz Turbo) - Included
Heatsink & CPU Fan: Standard Heatsink & CPU Fan - Included
Motherboard: MSI Z270 PC MATE DDR4 USB 3.1 Motherboard - Included
Memory: 32GB DDR4 2400Mhz High Performance Gaming RAM [+ R2,499.00]
Graphics Card: NVIDIA Quadro M4000 8GB 1664 CUDA Core Workstation Card - Included
Sound Card: Integrated 7.1 Channel HD Audio - Included
Primary Hard Drive: 250GB Ultra-Fast SSD Upto 500MB/s+ Speed Solid State Drive - Included
Secondary Hard Drive: Not Included
Main Optical Drive: 24x Dual Layer DVD +/- Writer - Included
Secondary Optical Drive: Not Included
External Hard Drive: Not Included
Memory Card Reader: Not Included
Network Adapter: Integrated Gigabit Network - Included

Price: R30 099



Core i7 M4000 Workstation



3.1 Which of the two options should Christo purchase for himself and his graphic designer?

Motivate your choice by referring to the type of software needed and the hardware requirements to run the software. (4)

3.2 Option 2 has a Core i7 CPU.

3.2.1 What generation of processor is the Core i7?
Substantiate your answer by extracting the appropriate information from the advert. (2)

3.2.2 List TWO functions of a CPU. (2)

3.3 Explain and compare the graphical capability of both systems:

Option 1: Integrated Intel HD graphics
Option 2: NVIDIA Quadro M4000 8GB. (3)

3.4 Why would it be better for Christo to buy a desktop computer instead of a laptop for his type of business? List TWO Reasons. (2)

3.5 Option 1 has a VGA Web Camera.

3.5.1 What is a web camera? (1)

3.5.2 Give TWO possible uses for a web camera in Christo's business. (2)

3.6 Option 1 has Windows 10.

3.6.1 Windows 10 is an example of systems software.

Define systems software. (2)

3.6.2 List TWO functions of an operating system. (2)

TOTAL MARKS: [60]

