# Part A

**Objective:** Name and describe each component

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
| Label | Name each component | Description |
| A | power supply unit | (PSU) is a type of power converter that provides direct current (DC) voltage to internal computer components. |
| B | Hard Drive | is a non-volatile data storage device “Non-volatile” refers to storage devices that maintain stored data when turned off. All computers need a storage device, and HDDs are just one example of a type of storage device. |
| C | Processor Heatsink | A heat sink is a metallic device that sits directly on the CPU, drawing heat away from the chip into its cooler, aluminium, fin-like structure |
| D | CPU | is a chip installed on the motherboard, from which it interacts with the rest of the components in the computer. Without the CPU, the computer wouldn't function. |
| E | Graphics Processing Unit | GPU is a chip or electronic circuit capable of rendering graphics for display on an electronic device. |
| F | **Random Access Memory**) | RAM is a computer's short-term memory, where the processor use to store the data temporarily |

# Part B

## Objective

Compare a pre-assembled system and the components that could be assembled to build a comparable system. After completing this practical, you should be able to:

1. Identify the components of a pre-assembled system
2. Locate prices for components needed to assemble a comparable system
3. Compare the cost of a pre-assembled system and a self-assembled system.

If you can’t find exact match for components, find the closest possible substitute. Use the Internet and available computer-related publications as your sources for information. Examples of websites for computer parts [www.komplett.ie,](http://www.komplett.ie/) [www.dell.ie,](http://www.dell.ie/) [www.custompc.ie](http://www.custompc.ie/) [www.amazon.de](http://www.amazon.de/)

MAKE SURE TO INCLUDE VALID LINKS TO WEB REFERENCES

|  |  |  |
| --- | --- | --- |
|  | **Pre-Assembled Computer Package** | **Computer Package Components** |
| **CPU** |  |  |
| **Storage / Memory** |  |  |
| RAM      Hard Drive |  |  |
| **Input/Output** |  |  |
| Keyboard    Pointing Device    Monitor      Speakers      Network Adapter |  |  |
| **Bundled Software**  (Including Operating System) |  |  |
| **Total Cost** |  |  |

# Part C

## Objective

You have been asked by a family friend to assist them with a computer purchase. They’re unfamiliar with technology and the terms used and have presented you with two alternatives machine choices. They would like to be able to write word documents, surf internet and play Minecraft © Mojang and Half-Life © Valve Software. They are considering playing Fortnight but are not sure yet, as it depends on machine cost and if they can extract some money from their Bitcoin wallet.

Compare Personal Computer Option A and B in relation to each of the side headings and recommend a system and any alterations.

|  |  |  |
| --- | --- | --- |
|  | Personal Computer Option A | Personal Computer Option B |
| CPU | 2.2 GHz Intel Celeron 450 | 3.2 GHz Intel Core i5 |
| Memory |  |  |
| Cache  RAM  Hard Drive  CD ROM/DVD | 512 KB Cache  4 GB RAM  320 GB Hard Drive DVD+/-RW drive | 4 MB Cache  8 GB RAM  1 TB Hard Drive  DVD+/-RW drive |
| Input/Output |  |  |
| Keyboard  Pointing  Device  Screen  Speakers  Network Adapter | USB multifunction keyboard USB optical mouse 20’’ HD flatscreen monitor  Multimedia Speaker System  Integrated 10/100/1000 Ethernet | wireless multifunction keyboard wireless optical mouse 25’’ HD flatscreen monitor  Dolby Surround Sound Speakers Integrated 10/100/1000 Ethernet |

|  |
| --- |
| **Recommendations** |
|  |

## Your Recommend System

|  |  |
| --- | --- |
|  | Personal Computer Recommendation |
| **CPU** |  |
| **Memory** |  |
| RAM      Hard Drive    SSD Drive |  |
| **Input/Output** |  |
| Keyboard    Pointing  Device    Screen      Speakers      Network  Adapter    GPU |  |

Hand up this practical report at the end of session and ensure it has been checked

|  |  |  |  |
| --- | --- | --- | --- |
| **Student Name** | **Ahmad Muselmani** | **Student Number** | **C00276504** |
| **Date** | **21/09/2022** | **Checked** |  |
| **Group** | **B** |  |  |