**Matching Questions**

The following table of hardware components is related to questions 1, 2, and 3

|  |  |  |  |
| --- | --- | --- | --- |
| **Hardware Component** | **Location** | **Specification** | **Purpose** |
| Ethernet Interface |  |  |  |
| CPU Processor |  |  |  |
| Hard Disk Drive |  |  |  |
| Computer Monitor |  |  |  |

1. Complete the ***location*** column in the above table for each hardware component using the following answer choices. (Use the letter, e.g. A, B, C..., matching the best answer. ) **[2 Marks]**
   1. On the Motherboard
   2. Inside the PC case
   3. Outside the CP case
2. Complete the ***specification*** column in the above table for each hardware component using the following answer choices. (Use the letter, e.g. A, B, C..., matching the best answer. ) **[2 Marks]**
   1. Speed is measured in Megahertz
   2. Capacity is measured in Gigabytes
   3. Resolution is measured in pixels
   4. Transfer rate is measured in Megabits-per-second
3. Complete the ***purpose*** column in the above table for each hardware component using the following answer choices. (Use the letter, e.g. A, B, C..., matching the best answer. ) **[2 Marks]**
   1. To execute commands in computer programs
   2. To store programs and data
   3. To provide feedback to users
   4. To allow communication between computers
4. Complete the following table for the two Boolean expressions for each combination of A and B.

**[4 Marks]**

|  |  |  |  |
| --- | --- | --- | --- |
| **Value of A** | **Value of B** | **A or B** | **A and not B** |
| True | True |  |  |
| True | False |  |  |
| False | True |  |  |
| False | False |  |  |

1. Compare a computer program running on a PC to light switch in your bedroom. Provide some bullet point answers to complete the following table. **[4 Marks]**

|  |  |  |
| --- | --- | --- |
| **System Function** | **For a Computer Program** | **For a Bedroom Light Switch** |
| Input Device(s)  (Provide one example of an input device.) |  |  |
| Output Device(s)  (Provide one example of an output device.) |  |  |
| Control Logic  (What controls how the input devices are connected to the output devices.) |  |  |
| Decision Making  (Provide some examples of how using a input device to affect the output device is pre-determined and how there could be different effects.) |  |  |

**Short Answer Questions**

1. Explain the purpose and main features of a Privacy Policy. **[2 Marks]**
2. Explain the purpose and main features of a Terms of Service Agreement. **[2 Marks]**
3. Summarize the difference between a Privacy Policy and a Terms of Service Agreement.  
    **[1 Mark]**

1. In the Emoji Equity case study, identify a group of people that were affected (e.g. by Gender, Race, Religion, etc.) and explain how they are affected with specific details. **[3 Marks]**
2. In the Emoji Equity case study, describe some things that software developers are doing to improve the equity of their products. Provide some specific details. **[2 Marks]**

1. In the Bitcoin and Blockchains case study, list and explain two concerns for society (not related to the environment) regarding the use of this technology. **[2 Marks]**

1. In the Bitcoin and Blockchains case study, list and explain two concerns related to the environment regarding the use of this technology. **[2 Marks]**

1. In the Bitcoin and Blockchains case study, list and explain two benefits for society regarding the use of this technology. **[2 Marks]**

1. In the HSBC Pepper case study, list and explain two concerns for society regarding the use of Artificial Intelligence (AI). **[2 Marks]**

1. In the HSBC Pepper case study, list and explain two benefits for society regarding the use of Artificial Intelligence (AI). **[2 Marks]**