English for Computing

Spring 1404 Homework 1

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Question 1)

Part A)

1. motherboard: the main board that connects components to one and other, CPU: the central processing unit consisting of register file and ALU, memory: used to store data for short term use, storage: stores data for long term, I/O devices: used to help user interact with the pc
2. Input devices such as keyboard and camera let the user enter data to the computer, while output devices such as monitor and speakers let the user receive the result of the computation and observe them
3. Its role is to simplify the interaction between the user and the computer, by applying visual effects and graphical designs to the computer's logical world in order to make the experience more and more user friendly and better understandable for humans
4. Considering there's not much face-to-face conversations in computer-assisted language learning, the IPA helps you make sure you're pronouncing words correctly
5. ergonomic practices and proper ventilation around the computer

Part B)

A) OS

B) IPA

C) SSDs

D) CPU

E) Ergonomic

Part C)

1) motherboard
2) optical
3) grounding
4) icons

Part D)

1) It's able to read and write data much faster than an HDD
2) By having proper shape and posture while working with a computer, the pressure and the force applied to different parts of the body (such as neck and backbone) is considerably reduced which can lessen the probability of related health issues over the long run

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Question 2)

A) the state of a qubit, which is neither 1 nor 0, but a range in between these two

B) by observing the number of photons admitted by a qubit, we can determine the state of that qubit

C) A quantum state describes the condition of a quantum system (represented mathematically), including all possible information about it.

D) Superconducting quantum computers use circuits made from superconducting materials, operating at extremely low temperatures. In order to manipulate qubits, microwave pulses are used. Trapped ion quantum computers, on the other hand, use individual ions, controlled with lasers. Superconducting qubits tend to be faster, while trapped ion qubits have longer coherence times.

E) Indeed, I don't have much technical knowledge about this specific subject. But I feel like this whole quantum computing is more of a theoretical marvel that's still far from everyday use. Over the past few years, I've seen so many news headlines about how game-changing this could possibly be, but we haven't actually seen first-tier tech companies really dive into it and make much investment in this field. And that gives me a clue that maybe this old dream is just not going to come true, or even if it possibly can, it's not worth it.

Question 3)

Part A) vehicles – advocates – eliminate – adjust – commuters – congestions – emissions – predict

Part B)

1) c

2) c

3) b

4) c

5) c