

Quiz 02 – Chapter 02 – The System Unit: Processing and Memory [70 Marks, 60 Minutes]

Name: _____

Roll No: _____

Question 1: [1x12 marks] [estimated time 12 minutes]
Supply the missing words to complete the statements.

1. The smallest piece of data (a 0 or 1) that can be represented by a computer is called a(n) _____.
2. _____ is an international coding system for text-based data using any written language.
3. The part of the CPU that performs logical operations and integer arithmetic is the _____.
4. The main circuit board of a computer, located inside the system unit, to which all computer system components connect is called _____.
5. USB stands for _____.
6. PCI (Peripheral Component Interconnect) bus is essentially been replaced with the _____.
7. USB 3.0 standard (also called SuperSpeed USB) is about _____ times as fast as USB 2.0.
8. In order to synchronize all of a computer's operations, _____ is used.
9. _____ ports and _____ ports are used to receive wireless transmissions from devices; because the transmissions are wireless, these ports do not use a plug.
10. If there are two or more processors or processing cores are located within a single computer, techniques that perform operations simultaneously such as _____ (where each processor or core typically works on a different job) and _____ (where multiple processors or cores work together to make one single job finish sooner) are possible.

Question 2: [1x9 marks] [estimated time 3 minutes]
Number the following terms from 1 to 9 to indicate their size from smallest to largest.

- a) Petabyte _____.
- b) Yottabyte _____.
- c) Zettabyte _____.
- d) Kilobyte _____.
- e) Exabyte _____.
- f) Terabyte _____.
- g) Gigabyte _____.
- h) Byte _____.
- i) Megabyte _____.

Question 3: [1x5 marks] [estimated time 5 minutes]
Circle T if the statement is true and F otherwise.

1. **T F** A storage medium that can hold 256 GB can hold about 256 billion characters.
2. **T F** The amount of data that can be transferred over a bus in a given time period determines the bus's volatility.
3. **T F** Cache memory is typically built into a CPU.
4. **T F** A bus is a pathway, such as on the motherboard or inside the CPU, along which bits can be transferred
5. **T F** Computers that process data with light are referred to as quantum computers.

Question 4: [5x6 marks] [estimated time 25 minutes]
Give Short answers to the followings**1. What is a Hot-swappable device?**

2. What is Moore's Law?

3. Differentiate bandwidth and throughput?

4. If your computer seems sluggish, list two things you could do to try to speed it up without resorting to purchasing an entirely new system.

5. Convert 13 in base 10 into a binary number?

6. Convert 1001110 in base 2 into a decimal number?

Question 5: [7x2 marks] [estimated time 5 minutes]
Name seven components inside the CPU (at diagram) and one-line purpose of each at following lines.


