**Review Questions Chapter 1**

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| 1. **What, in general terms, is the distinction between computer organization and computer architecture?**   Computer architecture refers to those attributes of a system visible to a programmer or, put another way, those attributes that have a direct impact on the logical execution of a program. Computer organization refers to the **operational units and their interconnections that realize the architectural specifications.**   1. **What, in general terms, is the distinction between computer structure and computer function?**   Computer structure deals with the way the components in the computer are interrelated, while computer function deals with the operation of the individual components as part of the structure.   1. **What are the four main functions of a computer?**   Data processing  Data storage  Data movement  Control   1. **List and briefly define the main structural components of a computer**.  * **Central processing unit** - Controls the operation of the computer and performs its data processing functions; often simply referred to as processor. * **Main memory** - Stores data. * **I/O**: Moves data between the computer and its external environment. * **System interconnection -** Some mechanism that provides for communication among CPU, main memory, and I/O. A common example of system interconnection is by means of a system bus, consisting of a number of conducting wires to which all the other components attach.  1. **System interconnection**: **List and briefly define the main structured components of a processor**.  * **Control Unit** : Controls the operation of the CPU and hence the computer * **Arithmetic and logic unit** (ALU): Performs the computer’s data processing functions * **Registers**: Provides storage internal to the CPU * **CPU interconnection :** Some mechanism that provides for communication among the control unit, ALU, and registers. |