

FUNDAMENTAL OF COMPUTER

COURSE INFO.

- Credit hours: 2
 - Practical : 2 hours
- Marks for the Practical classes: 20 marks
 - Final Exam : 10
 - Homework, Quizzes: 10

CLASS ROLES

- ◉ Phones in the bags.
- ◉ More than 15 minutes late is counted absence.
- ◉ Quizzes and absence: you need to inform me during the first week after the quiz.
- ◉ No talking.
- ◉ No cheating.

INTRO: WHAT IS COMPUTER

WHAT IS COMPUTER

- ◉ Computer is basically a group of electronic devices that can accept data, conduct a series of **arithmetic and logical operations** on it and give result of these operations as information that is useful to people.
- ◉ In other words, Computer is an electronic device capable of performing commands and these commands are basically input, output, storage, arithmetic and logical operations.

WHAT IS COMPUTER

- ◉ All the modern computers are digital and represents information in binary digits. They represent data using two distinct values.
- ◉ In binary system we have only two digits (bits) - 0 and 1 to represent data. Since the bit is a very small unit, virtually, it cannot convey much information while used single.
- ◉ Combination of eight bits is called a byte. A byte is the fundamental unit of data representation in computer. A byte can represent one character of data. Modern computers are capable of processing more than one byte at a time.

COMPUTER SYSTEM

- ◉ A computer system consists of two major components, namely, **hardware and software**.
- ◉ All physical components that forms computer system are known as **computer hardware**.
- ◉ Software is basically **collection of different programs** that tells computer's hardware what to do.

Computer System

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graph TD; A[Computer System] --> B[Hardware]; A --> C[Software]
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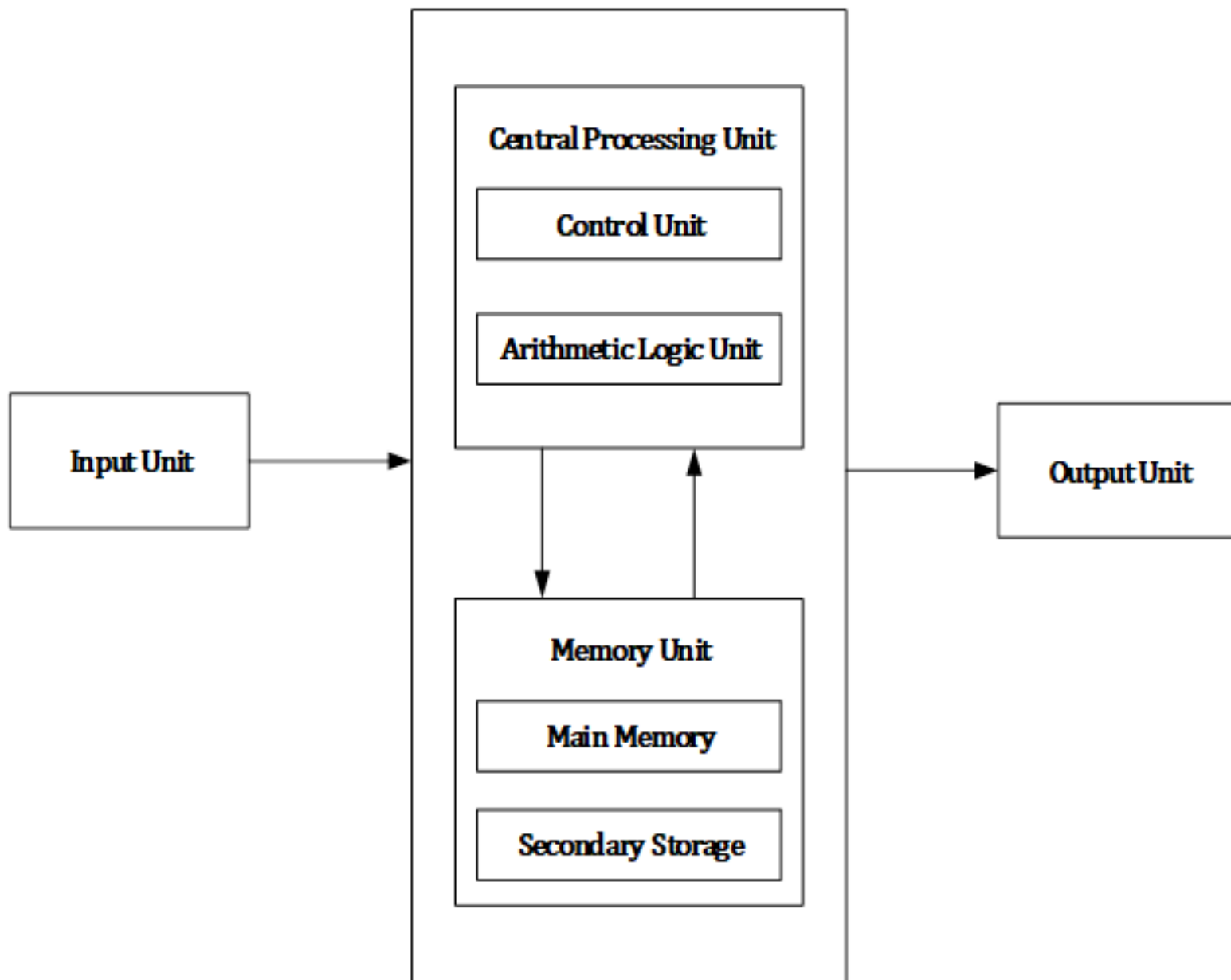
A hierarchical diagram with 'Computer System' at the top level. A vertical line descends from the bottom center of the 'Computer System' box to a horizontal line. From the left end of this horizontal line, a vertical line descends to the top center of the 'Hardware' box. From the right end of the horizontal line, a vertical line descends to the top center of the 'Software' box.

Hardware

Software

HARDWARE

- ◉ All physical components that make up a computer is known as computer hardware.
- ◉ Computer hardware consists of different functional units: input unit, central processing unit (CPU) which consists arithmetic logic unit (ALU) and control unit (CU), memory unit and output unit.



SOFTWARE

- ◉ Set of instructions that tells the computer hardware what to do is known as computer program. This program or collection of such programs is known as computer software.

