



GANDHI SCHOOL OF
ENGINEERING, BHABANDHA, BERHAMPUR

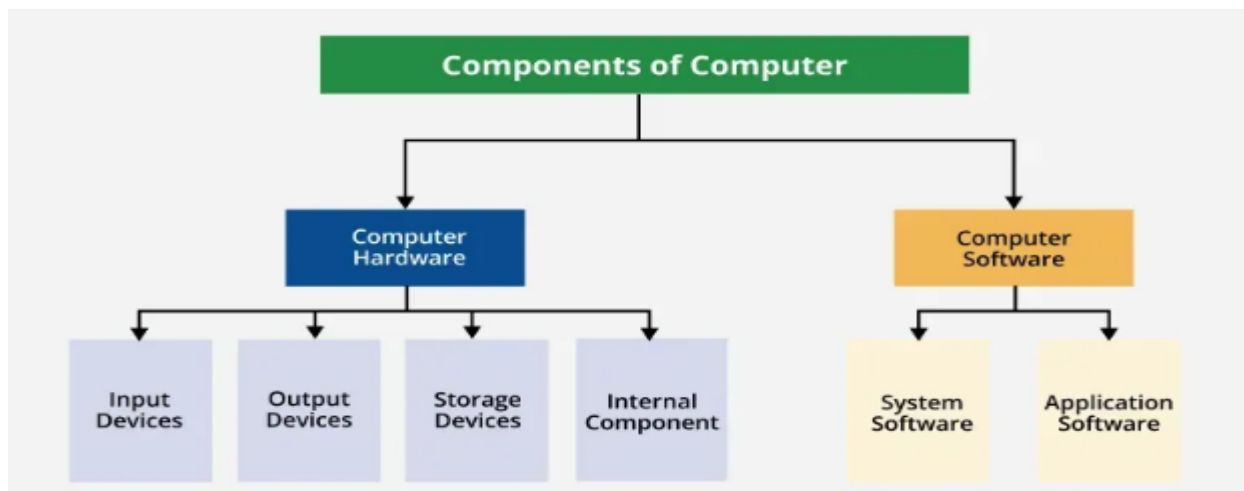
TEACHING AND LEARNING MATERIAL

SUBJECT: COMPUTER SYSTEM ARCHITECTURE
SEMESTER: 3RD

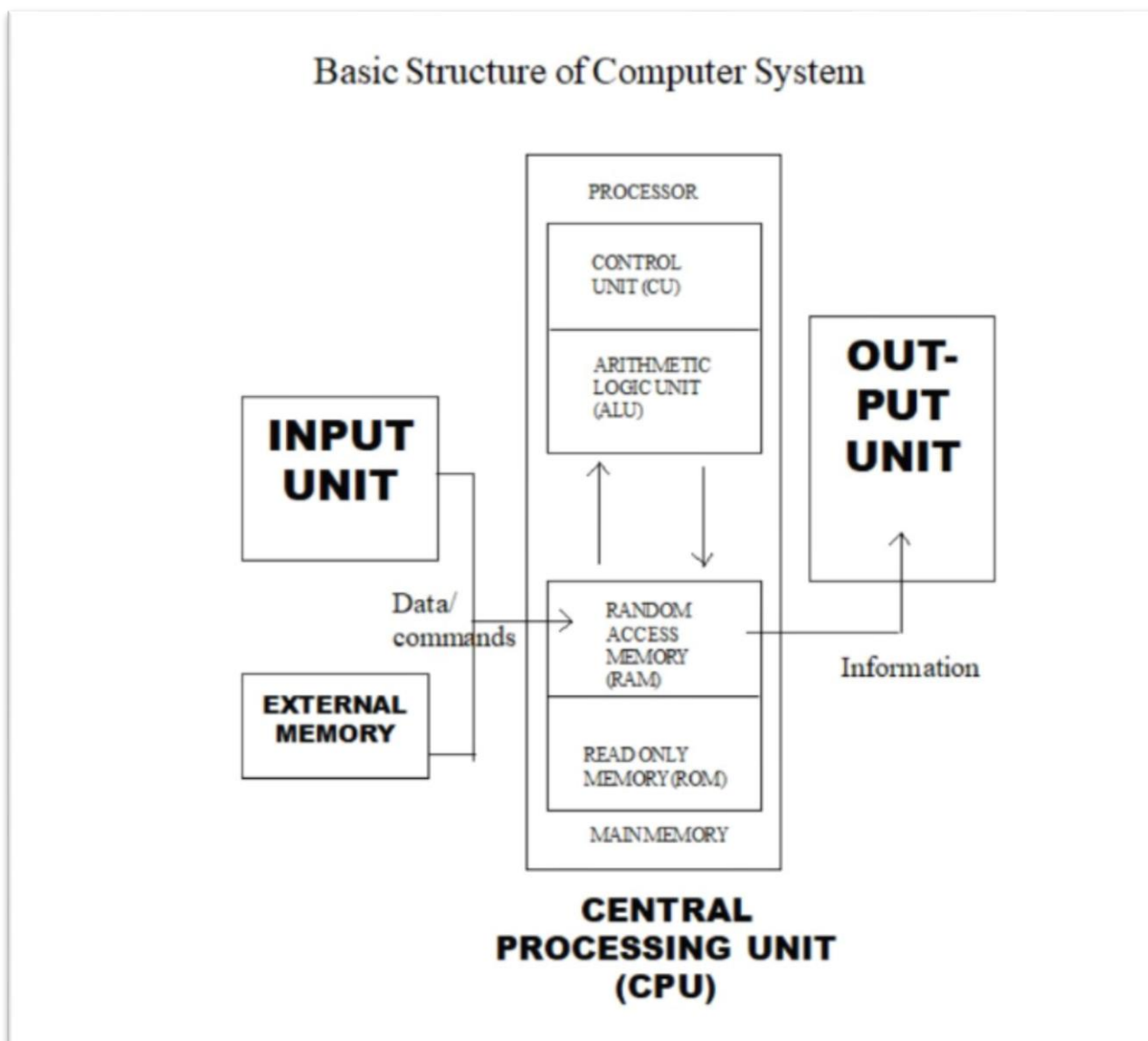
SUBMITTED BY:-ER.SANTOSH KUMAR BISHOYEE

CHAPTER-1

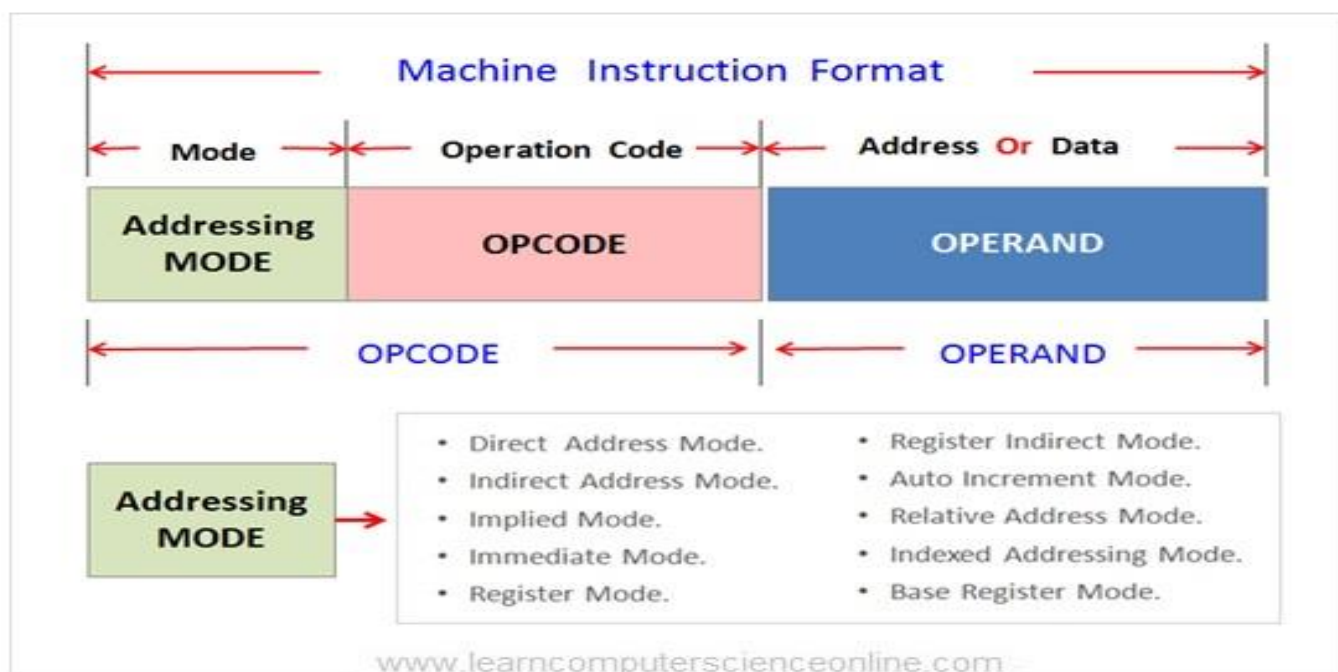
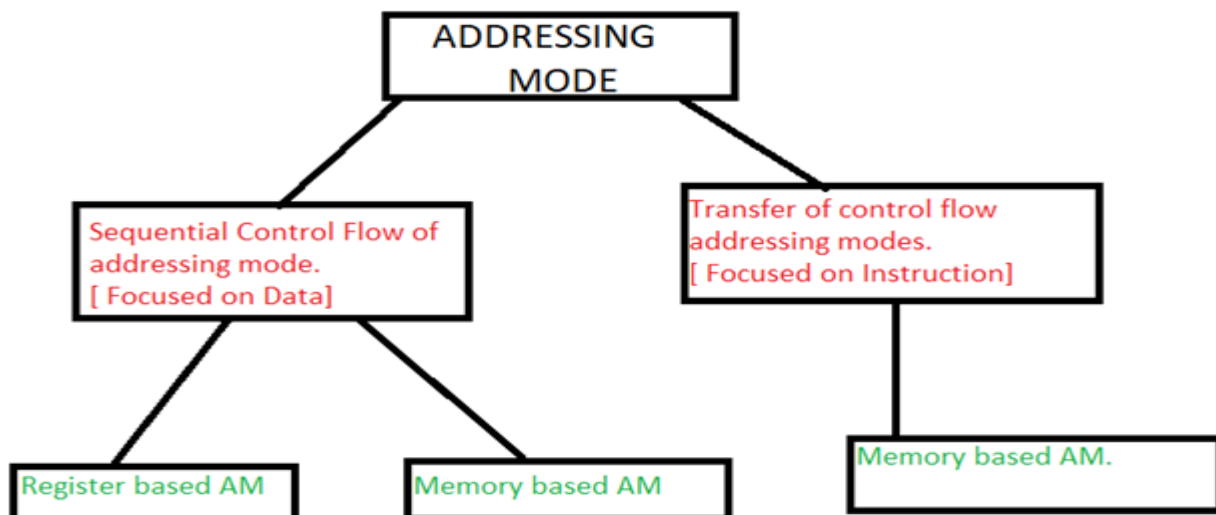
DIFFERENT COMPONENTS OF COMPUTER



STRUCTURE OF COMPUTER SYSTEM

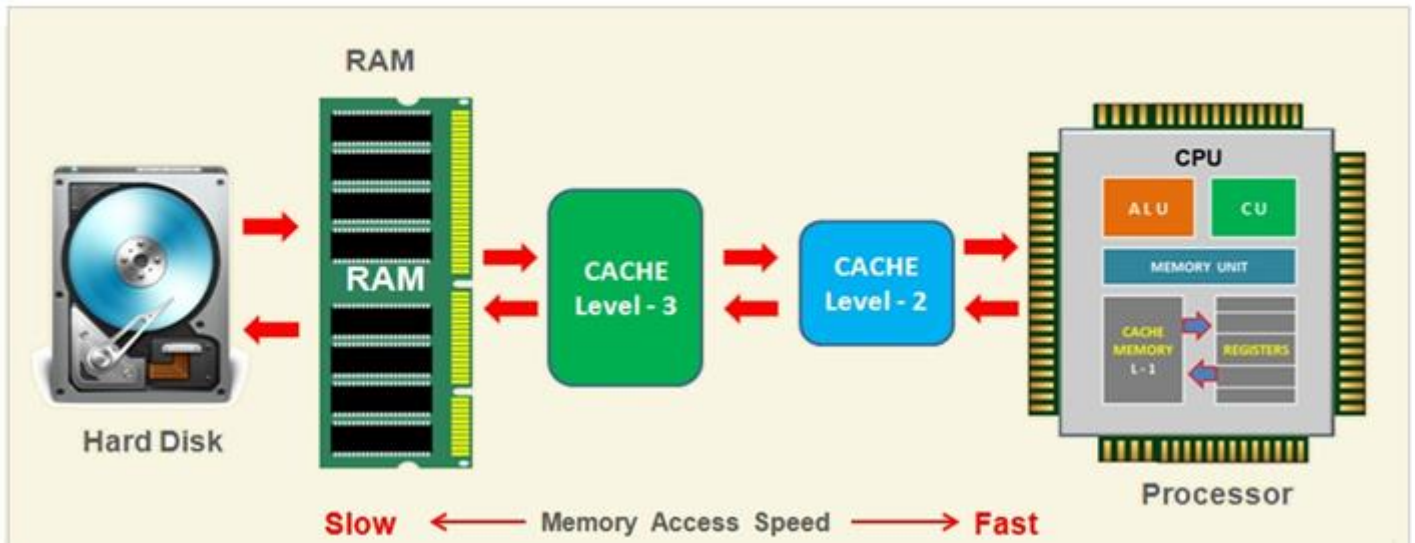


CHAPTER-2

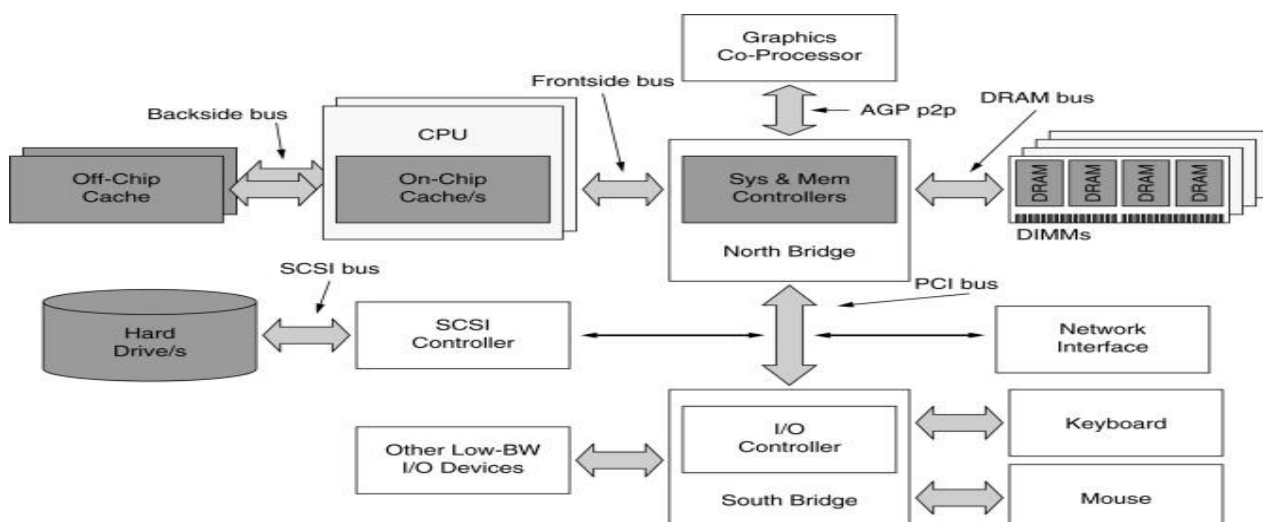
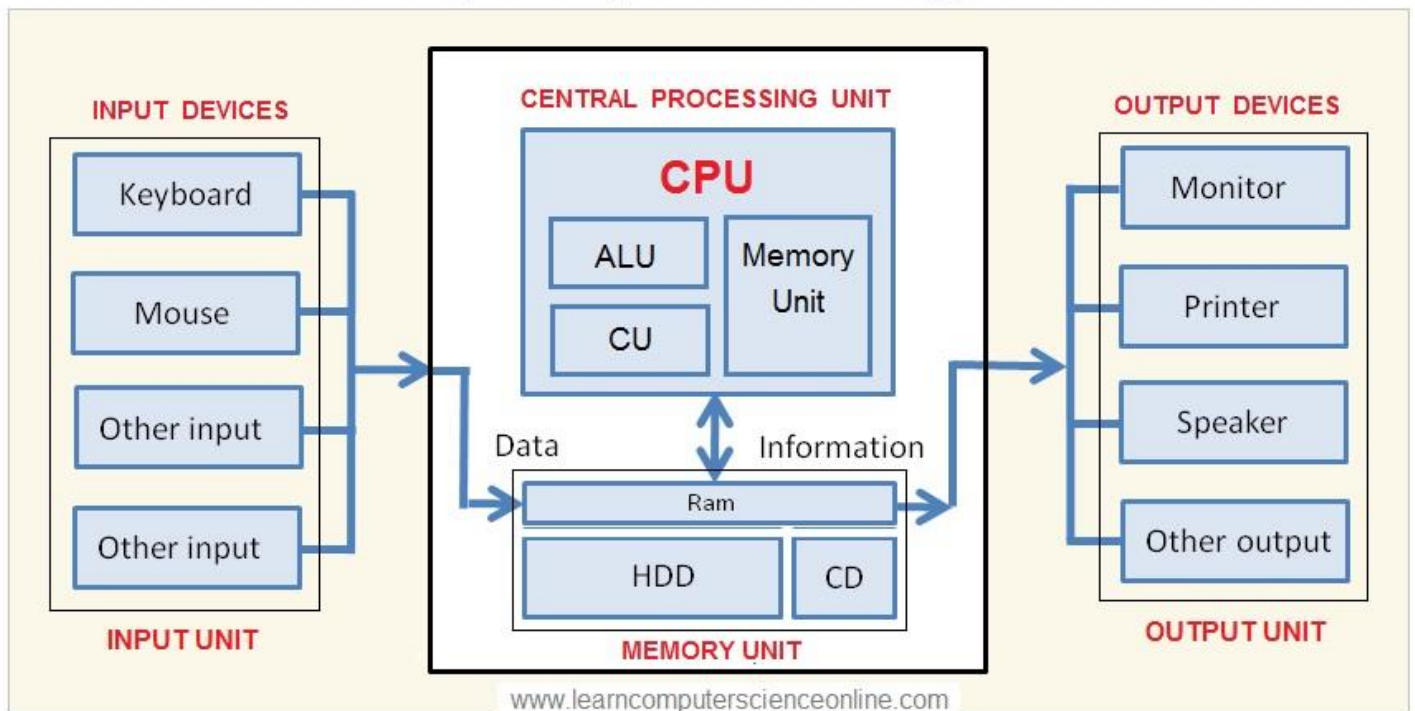


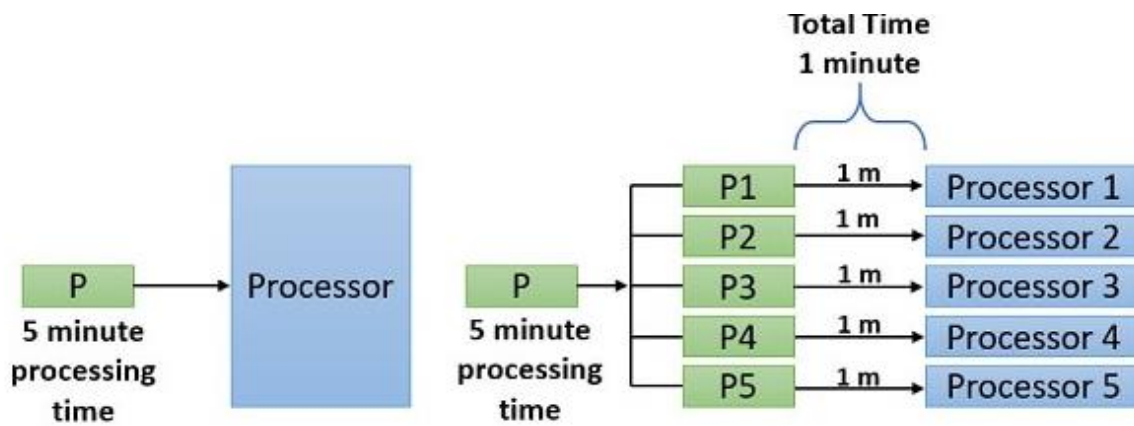
| Instruction Format Type | Instruction Format | Example |
|---------------------------|---|--------------------------------------|
| Zero Address Instruction | MODE OPCODE | CMA CME |
| One Address Instruction | MODE OPCODE OPERAND | ADD 06H LDA 20H |
| Two Address Instruction | MODE OPCODE OPERAND 1 OPERAND 2 | MOV R1 , R2 ADD AX , BX |
| Three Address Instruction | MODE OPCODE OPERAND 1 OPERAND 2 OPERAND 3 | ADD R1 , R2 , R3 SUB R1 , R2 , R3 |

Computer System Memory Hierarchy



Computer System Block Diagram





Single Processor Vs Multiprocessor in Parallel processing

Sequential and parallel processing

