

Doc	Topic
2	Difference between cores vs threads Define: hyper threading, multithreading, single-core cpu, multi-core cpu
3	Intel 8259 pic: features, block diagram, advantage-disadvantage
4	Intel 8259 Pic : Functional Description, Interrupt Sequence, Cascading The 8259a
5	Microprocessor: Definition, function, block diagram, working procedure, Microcomputer, organization of microcomputer based system, difference between microprocessor and microcomputer, 8086: Feature, addressing mode, instruction set
6	-Draw and explain the block diagram of the programmable peripheral interface (8255A). -Explain 8255A I/O Operating Modes -Explain BSR Mode of the programmable peripheral interface (8255A) with necessary diagrams. -Explain 8255A Control Word and Control Register with necessary diagram. -What is the need of the programmable interrupt controller (8259A)? -Draw and explain the block diagram of 8259A -features of 8259 -8259 Internal Block Diagram -Explain I/O interfacing Methods -Comparison of Memory-Mapped I/O and Peripheral Mapped I/O
7	-Draw and explain 8086 Logical Block diagram, -Explain 8086 Registers -Draw the format of a Flag register of an 8086 microprocessor -Explain Segmentation in 8086 -How to calculate physical address from segment address -How is a 20-bit physical address obtained if data bus is of 16-bit -Explain 8086 pin diagram -Describe the architecture of the 80286 with a neat block diagram. -Explain Register Organization of 80286 -80286 Flag Register, Machine Status Word (MSW) Register -Real Mode, Protected Virtual Address Mode (PVAM) -Differentiate between the real mode and protected mode of an 80286 microprocessor. -Page Translation Mechanism in 80386 -Features of 80386 -Explain the architecture of the 80386 with a neat block diagram. -Register organization of 80386 -Register organization of 80386 -Explain features of 80486, -Features of Pentium Processor
8	-DMA controller 8257/8237: feature, operation, Modes of DMAC, advantage-disadvantage -Define paging, How paging works
9	- 8086 Interrupts, types and difference
10	All topics
12	-feature and functional block diagram of 8051 microcontroller -execution of an interrupt -memory organization:
13	PLC: features, -plc programming languages, define ladder diagram (ld) with of ladder symbol/ element, -logical function: and, or