

Dicipline:	CSE	Semester: 4th	Name of the Teaching Faculty Snehalata Rout	
Subject:	MPMC	No of Days/Week Class Allotted: 04	Semester From date: _____ To date _____	No. of Weeks:

WEEK	Class Day	Theory Topics
	1st	Introduction to Microprocessor (8bit - 8085)
	2nd	Introduction to Microcomputer
	3rd	Distinguish between Microprocessor & Microcomputer
	4th	Concept of address bus, databus
	5th	Concept of control bus and system bus
	1st	General Bus structure Block diagram
	2nd	Basic Architecture of 8085 (8bit Microprocessor)
	3rd	Signal description (Pin Diagram) of 8085 Microprocessor
	4th	Register organizations.
	5th	Distinguish between SPR & GPR
	1st	Timing & Control Module
	2nd	Stack, stack pointer & stack top
	3rd	Interrupts - 8085 interrupts
	4th	Masking of interrupt (SIM)
	5th	Masking of interrupt (RIM)

WEEK	Class Day	Theory Topics
	1st	Addressing data & Difference between one byte, two byte
	2nd	Addressing modes in instructions with examples
	3rd	Instruction set of 8085 (Data transfer)
	4th	Arithmetic, Logical, Branching, Stack & I/O, Machine control
	5th	Simple Assembly Language Program of 8085
	1st	Simple Addition & Subtraction
	2nd	Logic operations (AND, OR, Complement 1's & 2's) & Masking of bits
	3rd	Counters & Time delay (Single Register, Register pair, More than two register)
	4th	Looping, counting & indexing (CALL/JMP etc)
	5th	Stack & Subroutines programmes
	1st	Code conversion, BCD Arithmetic & 16 bits data operation.
	2nd	Block transfer, compare between two numbers
	3rd	Array finding (Largest number)
	4th	Array finding (Smallest number)
	5th	Memory & I/O Addressing

		Semester:	Name of the Teaching Faculty	
		No of Days/Week Class Allotted: _____	Semester From date: _____ To date _____	No. of Weeks:
Class Day	Theory Topics			
1st	Define opcode, operand, T-state Fetch cycle, machine cycle			
2nd	Instruction cycle & discuss the concept of timing diagram			
3rd	Draw timing diagram for memory read			
4th	Draw timing diagram for memory write			
5th	I/O read, I/O write machine cycle			
1st	Draw a neat sketch for the timing diagram for 8085			
2nd	MOV, MVI, LDA instruction			
3rd	Concept of interfacing			
4th	Define mapping & data transfer mechanisms			
5th	Memory mapping & I/O mapping			
1st	Concept of memory interfacing			
2nd	Concept of address decoding for I/O devices			
3rd	Programmable peripheral interface - 8255			
4th	ADC & DAC with interfacing			
5th	Interfacing seven segment displays			

WEEK	Class Day	Theory Topics
	1st	Generate square waves on all lines of 8255
	2nd	Designs interface a traffic control system using 8255
	3rd	Designs interface to stepper motor control using 8255
	4th	Register organization of 8086
	5th	Internal architecture of 8086
	1st	Signal description of 8086
	2nd	General BUS operation
	3rd	Physical memory organization
	4th	Minimum mode X Timings
	5th	Maximum mode X Timings
	1st	Interrupts and interrupt service routines, interrupt cycle
	2nd	Non-maskable interrupt
	3rd	Maskable interrupt, 8086 instructions
	4th	8086 instruction set & programming
	5th	Simple Assembly language programming using 8086 instructions



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	Semester:	Name of the Teaching Faculty	
	No of Days/Week Class Allotted: _____	Semester From date: _____ To date _____	No. of Weeks: _____
Class Day	Theory Topics		
1st	Distinguish Between Microprocessor & Microcontroller		
2nd	8 bit & 16 bit Microcontroller		
3rd	CISC & RISC processor		
4th	Architecture of 8051 Microcontroller		
5th	Signal Description of 8051 Microcontroller		
1st	Memory organization		
2nd	Registers, Timers, Interrupts of 8051 Microcontroller		
3rd	Addressing Modes of 8051		
4th	Simple 8081 Assembly Language.		
5th	Arithmetic & Logic Instructions, JUMP, LOOP, CALL Instructions		
1st	I/O port programming		
2nd	Interrupts, Timers & Counters		
3rd	Serial Communication		
4th	Microprocessor & Microcontroller Interrupts		
5th	interfacing to 8255		