

LESSION PLAN

Discipline: CSE		Name of the Teaching Faculty: ABHAYA GHOSH	
Semester: 4 th		Semester:	
Subject: MPMC		From Date: 16-01-2024 To Date: 26-04-2024	
No. Of Days/per week class allotted: 5 periods per week (MON,TUE,WED, THU,SAT)		Number of weeks-15	
CLASS DAY		THEORY TOPICS	
1 st	16.01.2024	1	Syllabus Discussion
	17.01.2024	1	1.1 Introduction to Microprocessor and Microcontroller
	18.01.2024	1	Microprocessor and Microcontroller & distinguish between them.
	20.01.2024	1	1.2 Concept of Address bus, data bus, control bus & System Bus
2 nd	22.01.2024	1	1.2 Concept of Address bus, data bus, control bus & System Bus
	24.01.2024	1	1.3 General Bus structure Block diagram.
	25.01.2024	1	1.4 Basic Architecture of 8085 (8 bit) Microprocessor
	27.01.2024	1	1.5 Signal Description (Pin diagram) of 8085 Microprocessor
3 nd	29.01.2024	1	1.5 Signal Description (Pin diagram) of 8085 Microprocessor
	30.01.2024	1	1.6 Register Organizations
	31.01.2024	1	Distinguish between SPR & GPR
	01.02.2024	1	Timing & Control Module
	03.02.2024	1	1.7 Stack, Stack pointer & Stack top.
4 th	05.02.2024	1	1.8 Interrupts:-8085 Interrupts
	06.02.2024	1	Masking of Interrupt(SIM,RIM)
	07.02.2024	1	2.1 Addressing data
	08.02.2024	1	Differentiate between one-byte, two-byte & three-byte instructions with examples.
	10.02.2024	1	2.2 Addressing modes in instructions with suitable examples.

5 TH	12.02.2024	1	2.3 Instruction Set of 8085(Data Transfer, Arithmetic, Logical, Branching, Stack& I/O , Machine Control)
	13.02.2024	1	2.4 Simple Assembly Language Programming of 8085
	15.02.2024	1	2.4.1 Simple Addition & Subtraction
	17.02.2024	1	2.4.2 Logic Operations (AND, OR, Complement 1's & 2's) & Masking of bits
6 TH	19.02.2024	1	2.4.3 Counters & Time delay (Single Register, Register Pair, More than Two Register)
	20.02.2024	1	2.4.4 Looping, Counting & Indexing (Call/JMP etc). Register Pair, More than Two Register)
	21.02.2024	1	2.4.5 Stack & Subroutines programmes.
	22.02.2024	1	2.4.6 Code conversion, BCD Arithmetic & 16 Bit data Operation, Block Transfer
	24.02.2024	1	2.4.7 Compare between two numbers
7 TH	26.02.2024	1	2.4.8 Array Handling (Largest number & smallest number in the array)
	27.02.2024	1	2.5 Memory & I/O Addressing
	28.02.2024	1	3.1 Define opcode, operand, T-State, Fetch cycle, Machine Cycle, Instruction cycle & discuss the concept of timing diagram.
	29.02.2024	1	3.2 Draw timing diagram for memory read, memory write, I/O read, I/O write machine cycle.
	02.03.2024	1	3.3 Draw a neat sketch for the timing diagram for 8085 instruction (MOV,MVI, LDA instruction).
8 TH	04.03.2024	1	Assignment-1 cum Doubt clearing
	06.03.2024	1	CLASS TEST-I
	07.03.2024	1	4.1 Concept of interfacing
	09.03.2024	1	4.2 Define Mapping &Data transfer mechanisms - Memory mapping & I/O Mapping
9 TH	11.03.2024	1	4.3 Concept of Memory Interfacing:- Interfacing EPROM & RAM Memories
	12.03.2024	1	4.3 Concept of Memory Interfacing:- Interfacing EPROM & RAM Memories
	13.03.2024	1	4.4 Concept of Address decoding for I/O devices
	14.03.2024		4.5 Programmable Peripheral Interface: 8255
	16.03.2024	1	4.6 ADC & DAC with Interfacing.
10 th	18.03.2024	1	4.7 Interfacing Seven Segment Displays
	19.03.2024	1	4.8 Generate square waves on all lines of 8255
	20.03.2024	1	4.9 Design Interface a traffic light control system using 8255.
	21.03.2024	1	4.10 Design interface for stepper motor control using 8255.

	23.03.2024	1	Assignment-2 cum Doubt clearing
	27.03.2024	1	CLASS TEST-2
11 TH	28.03.2024	1	5.1 Register Organisation of 8086
	30.03.2024	1	5.3 Signal Description of 8086
	01.04.2024	1	5.4 General Bus Operation & Physical Memory Organisation
	02.04.2024	1	Internal assessment examination
12 th	03.04.2024	1	Internal assessment examination
	04.04.2024	1	5.5 Minimum Mode & Timings
	06.04.2024	1	5.6 Maximum Mode & Timings
	08.04.2024	1	5.7 Interrupts and Interrupt Service Routines, Interrupt Cycle, Non-Maskable Interrupt, Maskable Interrupt
13 TH	09.04.2024	1	5.8 8086 Instruction Set & Programming: Addressing Modes, Instruction Set, Assembler Directives and Operators,
	10.04.2024	1	5.9 Simple Assembly language programming using 8086 instructions.
	13.04.2024	1	6.1 Distinguish between Microprocessor & Microcontroller
	15.04.2024	1	6.2 8 bit & 16 bit microcontroller
14 TH	16.04.2024	1	6.3 CISC & RISC processor 6.4 Architecture of 8051 Microcontroller
	18.04.2024	1	6.5 Signal Description of 8051 Microcontrollers 6.6 Memory Organisation-RAM structure, SFR 6.7 Registers, timers, interrupts of 8051 Microcontrollers
	20.04.2024	1	6.8 Addressing Modes of 8051
	22.04.2024	1	6.9 Simple 8051 Assembly Language Programming Arithmetic & Logic Instructions, JUMP, LOOP, CALL Instructions, I/O Port Programming
15 TH	23.04.2024	1	6.10 Interrupts, Timer & Counters 6.11 Serial Communication
	24.04.2024	1	6.12 Microcontroller Interrupts and Interfacing to 8255
	25.04.2024	1	Previous Year Question Discussion