

GOVT. POLYTECHNIC, KENDRAPARA

LESSON PLAN

Session (2024-2025)

Discipline: ETC	Semester: 4 th , summer/2025	Name of the Teaching Faculty: Jogeswar Naik (Lecturer L-2)
Subject: Microprocessor and Microcontroller Theory-3	No. of Days/Week Class Allotted - 05	Semester From Date: 04.02.2025 To Date: 17.05.2025 No. of Weeks: 15
Week	Class Day	Theory Topics
1 st week of Feb	1st	Discussion of microprocessor and its application
	2nd	Distinguish between microprocessor and microcomputer
	3rd	Discussion of Architecture of processor and Bus system in processor
	4th	Pin configuration of Intel 8085 microprocessor
	5th	Pin configuration of Intel 8085 microprocessor
2 nd week of Feb	1st	Architecture of Intel 8085 processor
	2nd	Revising the taught portions
	3rd	Doubt clearance
	4th	Pin configuration of Intel 8085 microprocessor
3 rd week of Feb	5th	Revising the taught portions
	1st	Architecture of Intel 8085 processor
	2nd	Registers of Intel 8085. Distinguish between SPR and GPR
	3rd	Stack, stack pointer and stack top

		Addressing modes in Intel 8085
	4th	Types of instruction
4 th week of Feb	1st	Simple programming examples
	2nd	Basic assembler Directives
	3 rd	Programming on logic operations
	4 th	Basic assembler Directives
	5th	Programming on logic operations
1 st week of Mar	1 st	Programming on Delay
	2 nd	Quiz 1
	3 rd	Programming on looping, counting, Indexing(JMP and CALL)
	4 th	Programming on Delay
	5th	Compare between two numbers, Array Handling, code conversion
2 nd Week of Mar	1 st	T-state, Fetch cycle, Machine cycle and Instruction cycle
	2 nd	T-state, Fetch cycle, Machine cycle and Instruction cycle
	3 rd	Differentiate between Instruction cycle, machine cycle and T state
	4 th	Differentiate between Instruction cycle, machine cycle and T state
	5th	Timing diagram of MOV,DCR,MVI,LLDA,DCX
3 rd week of Mar	1 st	Timing diagram of MOV,DCR,MVI,LLDA,DCX
	2 nd	Timing diagram of MOV,DCR,MVI,LLDA,DCX
	3 rd	Timing diagram of MOV,DCR,MVI,LLDA,DCX
	4 th	Timing diagram of MOV,DCR,MVI,LLDA,DCX
	5th	Timing diagram of MOV,DCR,MVI,LLDA,DCX
4 th Week of Mar	1 st	Revision of Timing diagram Doubt clearance
	2 nd	Pin configuration of Intel 8255 and discussion of interfacing
	3 rd	Memory mapping and IO mapping
	4th	Memory interfacing with RAM and EPROM
	5th	Memory interfacing with RAM and EPROM

1 st week of Apr	1 st	8257 DMA controller and 8259 programming interrupt controller
	2 nd	Traffic light controlling, stepper motor control
	3 rd	ADC and DAC interfacing
	4 th	Internal architecture of Intel 8086, maximum and minimum mode
	5 th	Revision
2 nd Week of Apr	1 st	Internal architecture of Intel 8086, maximum and minimum mode
	2 nd	Assignment
	3 rd	Checking of assignment
	4 th	Class test
	5 th	Copy checking
3 rd week of Apr	1 st	Internal ready revision
	2 nd	Pin details of 8086
	3 rd	Pin details of 8086
	4 th	Addressing modes of 8086
	5 th	Addressing modes of 8086
4 th week of Apr	1 st	Instruction set of 8086
	2 nd	Instruction set of 8086
	3 rd	Simple programming
	4 th	Quiz -2
	5 th	Evulation of Quiz
5 th week of Apr	1 st	Distinguish between Microprocessor & Microcontroller
	2 nd	8 bit & 16 bit microcontroller
	3 rd	CISC & RISC processor
	4 th	Architecture of 8051 Microcontroller
	5 th	Architecture of 8051 Microcontroller
		Signal Description of 8051 Microcontrollers
2 nd Week of May	1 st	Memory Organisation-RAM structure, SFR
	2 nd	Registers, timers, interrupts of 8051 Microcontrollers
	3 rd	Addressing modes of 8051
	4 th	Addressing modes of 8051
3 rd Week of May	1 st	Simple 8051 Assembly Language Programming

James
Dev ETC
U.P.D.