

The Maharaja Sayajirao University of Baroda Polytechnic Diploma in Electronics & Communication Engg. (HPP)			ACADEMIC YEAR 2022-23		
Year	II	MICROPROCESSOR & INTERFACING(ELE3430)	Lecture/Lab Hrs per week	4/2	
Semester	II		Max marks	100	
Pre-Requisite: Basic Mathematics, Basic Electronics					
CO1	Explain 8085 architecture, addressing modes, machine cycles, and bus operations.				
CO2	Apply 8085 instruction set, timing concepts, and assembly programming.				
CO3	Implement stack operations, subroutines, and interrupt-driven routines.				
CO4	Interface memory and I/O devices using mapped and multiplexed techniques.				
CO5	Describe 8086 architecture, memory segmentation, instruction set, and peripheral interfacing (8255, 8253, 8251).				
BT	1. Remember 2. Understand 3. Application 4. Analysis 5. Evaluation 6. Creation				
COURSE CONTENT/SYLLABUS					
Unit	Unit Name		Hrs	Weightage	CO
1	Architecture of microprocessor, Addressing modes of 8085 and its timing diagrams, Machine cycle, T- states, Bus structure.		8	16	CO1
2	Instruction set of 8085, Groping of instructions, Instruction cycle and their timing diagrams, Assembly language programming.		12	20	CO2
3	Stacks and sub routines, related instructions, Interrupts, and associated instructions, Expanding interrupts, ALP for stacks and interrupt service routines		8	14	CO3
4	Memory Interfacing, I / O mapped and memory mapped modes, interfacing of input and output devices, Multiplexed and matrix interfacing.		10	18	CO4
5	Architecture of 8086 and segmentation of memory, Odd-even memory and I / O interfacing, General and specific instructions of 8086, Assembly language programming with simple examples.		10	18	CO5
6	Study and Interfacing of 8255, 8253, 8251 with microprocessor.		8	14	CO5
			56	100	
REFERENCE BOOKS:					
1.	Microprocessors Architecture, Programming and applications with 8085 By Gaonkar R.S, Penram Publishing, Edition				
2.	Microprocessors Architecture, Programming and applications with 8085 By B.RAM, Penram Publishing, Edition				