SSN College of Engineering
Kalavakkam - 603110
Department of Computer science & Engineering

EC6504   MICROPROCESSORS AND MICROCONTROLLERS

Name of Staff	Mr. K. R. Sarath Chandran	**Class:** II Yr CSE
Designation	Assistant Professor	**Semester** IV B

S.No	Unit No.	Topic	No. of Hours	
			Proposed	**Actual**
UNIT I - THE 8086 MICROPROCESSOR				
1	I	Introduction to 8086	1	
2		Microprocessor architecture	1	
3		Addressing Modes	1	
4		Assembler directives	2	
5		Assembly language programming	1	
6		Modular Programming	1	
7		Linking & Relocation	1	
8		Procedures – Macro & Stack	1	
9		Interrupts and interrupt service routines.	1	
10		Byte String Manipulation	1	
UNIT II - 8086 SYSTEM BUS STRUCTURE				
1	II	8086 Signals	1	
2		System bus timing	2	
3		System design using 8086	1	
4		IO Programming	1	
5		Introduction to Multi programming	1	
6		Coprocessor Configuration	1	
7		Closely & Loosely Coupled Configuration	1	
8		Introduction to advanced processors	1	
UNIT III - I/O INTERFACING				
1	III	Memory Interfacing and I/O interfacing	1	
2		Parallel communication interface	1	
3		Serial communication interface	1	
4		Timer	1	
5		Keyboard /display controller	1	
6		Interrupt controller	1	
		DMA controller	1	
7		Programming and applications – Examples	3	

		UNIT IV - MICROCONTROLLER		
1		Architecture of 8051	1	
2		Special Function Register (SFR)	2	
3	IV	I/O Pins Ports and Circuits	1	
4		Instruction Set	2	
5		Addressing Modes	1	
6		Assembly language programming	1	
		UNIT V - INTERFACING MICROCONTROLLERS		
1		Programming 8051 Timers	1	
2		Serial Port Programming & Interrupts	2	
3	V	Interfacing Keyboard , LCD, ADC,DAC&Sensor	2	
4		External Memory Interface	1	
5		Stepper Motor & Waveform generator	1	
		Total	**45**	

Prepared by   **Approved by**
K. R. Sarath Chandran   **HOD/CSE**