

Subject: Microcontrollers**Faculty: Sh. Anit Kumar****Semester : 5Th**

WEEK	THEORY		Practical
	DAY	TOPIC	TOPIC
1 st	1 st & 2 nd	Architecture of 8051Microcontroller	Introduction
	3 rd & 4 th	Architecture of 8051Microcontroller	
	5 th	Architecture of 8051Microcontroller	
2 nd	1 st & 2 nd	Pin details	Familiarization with Micro-controller Kit and its different sections
	3 rd & 4 th	I/O Port structure	
	5 th	Memory Organization	
3 rd	1 st & 2 nd	Special Function Registers (SFRs)	Familiarization with Assembly Language Programming (PC Based)
	3 rd & 4 th	External Memory	
	5 th	Instruction Set of 8051	
4 th	1 st & 2 nd	Instruction Set of 8051	Programming to interface switches and LEDs
	3 rd & 4 th	Instruction Set of 8051	
	5 th	Addressing Modes	
5 th	1 st & 2 nd	Types of Instructions	Programming and interface of Seven Segment and LCD
	3 rd & 4 th	Timer operation	
	5 th	Serial Port operation	
6 th	1 st & 2 nd	Test	Programming and interfacing of Graphical LCD
	3 rd & 4 th	Serial Port operation	
	5 th	Interrupts	
7 th	1 st & 2 nd	Interrupts	Programming to interface Hex 4x4 matrix Keypad
	3 rd & 4 th	Assembler directives	

	5 th	Assembler operation	
8 th	1 st & 2 nd	Compiler operations	Programming for A/D converter, result on LCD
	3 rd & 4 th	De bugger	
	5 th	Design and Interface	
9 th	1 st & 2 nd	Design and Interface	practice
	3 rd & 4 th	Keypad interface	
	5 th	Keypad interface	
10 th	1 st & 2 nd	Keypad interface	Programming for D/A converter, result on LCD
	3 rd & 4 th	7- segment interface	
	5 th	7- segment interface	
11 th	1 st & 2 nd	LCD interface with programming	Programming for serial data transmission from PC to Kit or Vice versa
	3 rd & 4 th	A/D interface with programming	
	5 th	D/A interface with programming	
12 th	1 st & 2 nd	RTC interface with programming	revision
	3 rd & 4 th	RTC interface with programming	
	5 th	Introduction to Liquid Crystal and LED Screen Televisions	
13 th	1 st & 2 nd	Introduction of PIC Micro controllers	Programming and interfacing of RELAY and
	3 rd & 4 th	Introduction of PIC Micro controllers	
	5 th	Introduction of PIC Micro controllers	
14 th	1 st & 2 nd	Introduction of PIC Micro controllers	
	3 rd & 4 th	Revision	
	5 th	Revision	
15 th	1 st & 2 nd	Revision	
	3 rd & 4 th	Revision	
	5 th	Test	

Note: Last (6th) Lecture of week will be the revision lecture. Practical/Lab. Experiments will be conducted as per the latest guidelines of Higher Authority.