

Electronics and Communication Engg. Department**Session 2024-25 (4th Semester)****Subject: Microcontroller****Load:- L-3****P-4**

Week	Theory		Practical
	Lecture day	Topic (including assignment/ test)	Topic
1st	1	Introduction to Microcontroller	Introduction
	2	Difference between Microcontroller & Microprocessor	
	3	Selection of Microcontroller	
2nd	4	Architecture of 8051 Microcontroller	Familiarization with Micro-controller Kit and its different sections
	5	Pin Configuration	
	6	Crystal Circuit and Reset Circuit circuit	
3rd	7	Programming Languages	Familiarization with Assembly Language Programming (PC Based)
	8	Addressing Modes	
	9	Addressing Modes	
4th	10	Instruction Set of 8051	Programming to interface switches and LEDs
	11	Data file and Time Delay	
	12	Hexafile using Keil Compiler	
5th	13	Timers of 8051 Microcontroller	Viva
	14	Timers of 8051 Microcontroller	
	15	Programming of 8051 Microcontroller	
6th	16	Programming of 8051 Microcontroller	Programming and interface of Seven Segment and LCD
	17	Serial Communication	
	18	Serial Communication SCON	
7th	19	Serial Communication SBUF	Programming and interfacing of Graphical LCD
	20	Serial Communication SCON	
	21	Serial Communication SBUF	
8th	22	Interfacing to devices	Programming to interface Hex 4x4 matrix Keypad
	23	Interrupts	
	24	Interrupts	
9th	25	Interfacing to devices	Viva
	26	Interfacing to LED	
	27	Interfacing to LCD	

10th	28	Interfacing to ACD	Programming for A/D converter, result on LCD
	29	Interfacing to ADC	
	30	Interfacing to LCD	
11th	31	Sensor Interfacing	Programming for D/A converter, result on LCD
	32	7- segment interface	
	33	Signal Conditioning	
12th	34	REVISION	Viva
	35	REVISION	
	36	REVISION	

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