

Lesson Plan

Name of Faculty: Bharti

Discipline: Electronics & Comm. Egg.

Semester: 4th

Subject: MPMC

Lesson Plan Duration: 16 weeks

Work load (Lecture /Practical) per week (in Hours): Lectures—03, Practical—04

Week	Theory		Practical	
	Lecture Day	Topic (Including Assignment/ Test)	Practical Day	Topic
1 st	1	Basic Introduction	1	
	2	Comparison of Microcomputer, Microprocessor, and Microcontroller, Selection of Microcontroller		
	3	Introduction to 8051 - History		
2 nd	4	Architecture of 8051	2	Understand 8051 development board
	5	Pin Diagram of 8051		
	6	Crystal Circuit, Reseat Circuit		
3 rd	7	Assignment	3	Generating Hex File using Keil Compiler
	8	Different Types of Programming languages for 8051, Advantages of Programming in C		
	9	Addressing Modes of 8051		
4 th	10	Instruction Set of 8051	4	Programming and interfacing of RELAY and Buzzer
	11	Types of Instructions in 8051		
	12	Data types in 8051		
5 th	13	Time delay in 8051	5	Programming to interface switches and LEDs
	14	I/O programming in 8051 C		
	15	I/O programming in 8051 C		
6 th	16	Hex file generation using Keil Compiler	6	Programming and interfacing of LCD
	17	Assignment		
	18	Class test		
7 th	19	Timers and Registers of 8051	7	Programming for A/D converter, result on LCD
	20	Timer / Counter logic and modes		
	21	Programming of 8051 timers		
8 th	22	Programming of 8051 timers	8	Programming for D/A converter, result on LCD
	23	Programming of 8051 timers		
	24	Programming of 8051 timers		
9 th	25	Programming Timer 1 using C	09	Interfacing Stepper Motor with 8051
	26	Programming Timer 1 using C		
	27	Programming Timer 1 using C		
10 th	28	Test	10	Interfacing different sensors with 8051
	29	Serial Port of 8051		
	30	Basics of serial communication		
11 th	31	Serial Communication-SCON	11	Programming to interface switches and LEDs
	32	Serial Communication- SBUF		
	33	Modes of serial communication		
12 th	34	8051 connection to RS232	12	Generating Hex File using Keil Compiler
	35	Interrupts of 8051		
	36	Assignment		
13 th	37	I/O Interfacing – LED	13	Programming for A/D

	38	I/O Interfacing – LCD		converter, result on LCD
	39	I/O Interfacing – Keyboard Interfacing		
14 th	40	Interfacing ADC	14	Interfacing Stepper Motor with 8051
	41	Interfacing DAC		
	42	Sensor Interfacing		
15 th	43	Sensor Interfacing	15	Interfacing different sensors with 8051
	44	Signal Conditioning		
	45	Interfacing revision		
16 th	46	Assignment	16	Revision
	47	Class test		
	48	Revision		