Lesson Plan

Name of Faculty : Sanjay Kumar
Discipline : Electronics and Communication Engg.
Semester : 4th Semester
Subject : **Microcontroller and Microprocessor**
Work Load (Lecture/Practical) per week (in Hours) : Lectures- 03, Practical- 04

Week	**Theory**			
	Lecture Day	**Topic (including Assignment/test)**	**Working Week**	**Topics**
1	1	Unit 1 Introduction to Microprocessors and Microcontrollers :- Basic Introduction about Microcontroller	1	Understand 8051 development board
	2	comparison of Microcomputer, Microprocessor, and Microcontroller,		
	3	Selection of Microcontroller		
2	4	Selection of Microcontroller		
	5	Introduction to 8051- History,	2	Generating Hex File using Keil Compiler
	6	Architecture,		
3	7	Pin Diagram,		
	8	Crystal Circuit, Reseat Circuit.		
	9	Revision of Unit 1	3	Programming and interfacing of RELAY and Buzzer
4	10	Unit 2 Programming Languages and Instruction Set:- Different Types of Programming languages for 8051		
	11	Advantages of Programming in C, Addressing Modes		
	12	1st Sessional Test		
5	13	Instruction Set of 8051	4	Viva- Voce
	14	Types of Instructions		
	15	Types of Instructions		
6	16	Data types and time delay in 8051		
	17	I/O programming in 8051 C	5	Programming to interface switches and LEDs
	18	Hex file generation using Keil Compiler		
7	19	Unit 3 8051 Timers :- Timers and Registers of 8051		
	20	Timer / Counter logic and modes		
	21	Programming of 8051 timers	6	Programming and interfacing of LCD
8	22	Programming Timer 1 using C		
	23	Programming Timer 1 using C		

	24	Revision of Unit 3		
9	25	2nd Sessional Test	7	Programming for A/D converter, result on LCD.
	26	Unit 4 Serial Port Communication :- Serial Port of 8051 –Basics of serial communication		
	27	Basics of serial communication		
10	28	Serial Communication-SCON		
	29	Assignment/Revision	8	Viva- Voce
	30	SBUF		
11	31	Modes of serial communication		
	32	Modes of serial communication		
	33	8051 connection to RS232	9	Programming for D/A converter, result on LCD
12	34	8051 connection to RS232		
	35	Interrupts		
	36	Interrupts		
13	37	Assignment/Revision	10	Interfacing Stepper Motor with 8051.
	38	3rd Sessional Test		
	39	Unit 5 Real World Interfacing with 8051 :- I/O Interfacing		
14	40			
	41	LED Interfacing	11	Interfacing different sensors with 8051.
	42	LCD Interfacing		
15	43	Keyboard Interfacing		
	44	Interfacing ADC		
	45	Interfacing DAC	12	Viva- Voce
16	46	Sensor Interfacing		
	47	Signal Conditioning		
	48	Assignment/Revision		