

Lesson Plan				
Name of Faculty :		JYOTI SINGLA		
Discipline :		Electronics & Communication Engg.		
Semester :		4th		
Subject :		microprocessor and Microcontrollers		
Lesson Plan Duration : 15 weeks				
Work Load (Lecture /Practical) per week in hours : Lecture -3 Practical-4				
Week	Theory		Practical	
	Lecture DAY	Topic (Including assignment/test)	Practical	Topic
1st	1st	Introduction	1st	Understand 8051 development board
	2nd	Basic Introduction and comparison of Microcomputer Microprocessor &		
	3rd	Microprocessor &		
2nd	4th	Selection of Microcontroller, Introduction to 8051- History,	2nd	Generating Hex File using Keil Compiler
	5th	8051-Architecture		Generating Hex File using Keil Compiler
	6th	8051- Pin Diagram		
3rd	7th	8051- Crystal Circuit, Reset Circuit.	3rd	Revision
	8th	Revision		Revision
	9th	Programming languages for 8051		
4th	10th	Advantages of Programming in C	4th	Programming and interfacing of RELAY and Buzzer
	11th	Addressing Modes		
	12th	Instruction Set of 8051		
5th	13th	Instruction Set of 8051	5th	Programming to interface switches and LEDs
	14th	Types of Instructions		Programming to interface switches and LEDs
	15th	Revision		

6th	16th	Addressing Modes,	6th	Revision
	17th	Addressing Modes,		Revision
	18th	Types of Instructions		
7th	19th	Data types and time delay in 8051	7th	Programming and interfacing of LCD
	20th	I/O programming in 8051 C		
	21st	Hex file generation using Keil Compiler		
8th	22nd	Revision	8th	
	23rd	8051 Timers :Timers and Registers of 8051		Programming for A/D converter, result on LCD.
	24th	Registers of 8051		
9th	25th	Timer / Counter logic and modes	9th	Programming for D/A converter, result on LCD
	26th	Programming of 8051 timers		Programming for D/A converter, result on LCD
	27th	Programming Timer 1 using C		
10th	28th	Revision	10th	Revision
	29th	Revision		
	30th	Serial Port of 8051		
11th	31st	Serial Communication-SCON, SBUF	11th	Interfacing Stepper Motor with 8051.
	32nd	Modes of serial communication		Interfacing Stepper Motor with 8051.

	33rd	8051 connection to RS232		
12th	34th	Interrupts	12th	Interfacing different sensors with 8051
	35th	Interrupts		
	36th	Revision		
13th	37th	I/O Interfacing – LED, LCD	13th	Revision
	38th	I/O Interfacing – LED, LCD		Revision
	39th	Keyboard Interfacing		
14th	40th	Interfacing ADC and DAC	14th	Revision
	41st			
	42nd	Sensor Interfacing and Signal Conditioning		
15th	43rd	Revision	15th	Revision
	44th	Revision		
	45th	Revision		

11th	Block diagram of FM Receiver, function of each block and waveforms at input and output of different blocks.
8th	Group 2: Exp. 2-To observe the waveforms at different stages of a Radio Receiver (Revision)
12th	Need for limiting and de-emphasis in FM reception
5th	
13th	Block diagram of communication receivers
9th	Group 1:Exp.3-To align AM broadcast radio receiver
14th	Differences with respect to broadcast receivers
10th	Group 2: Exp. 3-To align AM broadcast radio receiver
15th	Assignment and class test/Quiz
6th	
16th	Unit-3-Antennas:- Electromagnetic spectrum and its various ranges: VLF, LF, MF, HF, VHF, UHF, Microwave.
11th	Group 1: Exp. 3-To align AM broadcast radio receiver (Revision)
17th	Physical concept of radiation of electromagnetic energy from a dipole. Concept of polarization of EM Waves
12th	Group 2: Exp. 3-To align AM broadcast radio receiver (Revision)
18th	Definition and physical concepts of the terms used with antennas like point source, gain, directivity, aperture, effective area, radiation pattern, beam width, radiation resistance, loss resistance.
7th	
19th	Types of antenna: Half wave dipole, folded dipole antenna
13th	Group 1: Exp.4-To identify and study the various types of antennas used in different frequency ranges.
20th	Medium wave (mast) antenna
14th	Group 2: Exp. 4-To identify and study the various types of antennas used in different frequency ranges.
21st	Patch antenna
8th	
22nd	Yagi –Uda antenna
15th	Group 1: Exp. 4-To identify and study the various types of antennas used in different frequency ranges. (Revision& Viva)
23rd	Ferrite rod antenna
16th	Group 2: Exp. 4-To identify and study the various types of antennas used in different frequency ranges. (Revision& Viva)
24th	Loop Antenna

