MERI COLLEGE OF ENGINEERING AND TECHNOLOGY

Asanda, Near Sampla

(www.meri.edu.in/engineering/)

LESSON PLAN

Name if the faculty : Er. Gaurav Kumar

Discipline : Electrical & Electronics Engineering

Semester : 5th

Subject : MPI

Lesson Plan Duration : 15 weeks (From August, 2018 to November 2018)

Work Load (Lecture/ Practical) per week (in hours): Lecture-04, Practical-02

Week	Theory		Practical	
	Lecture day	Topic(Including assignment/test)	Practical Day	Topic
1st	1st	Introduction to microprocessor	1st	To study development tools/environment for ATMEL/PIC Microcontroller program and Architecture.
	2nd	Architectures of 8085 microprocessor		
	3rd	Architectures of 8085 microprocessor		
	4th	instruction set		
2nd	1st	instruction set	2nd	Write a program to interface 7 segment LED using PIC16F877A microcontroller and count from 0 to 9.
	2nd	instruction set		
	3rd	interrupt structure		
	4th	interrupt structure		
3rd	1st	Assembly language programming	3rd	Write a program to blink 8 LED using PIC16F877A microcontroller
	2nd	Assembly language programming		
	3rd	Pin Diagram of 8051		
	4th	Pin Diagram of 8051		
4th	1st	Addressing modes	4th	Write a program to interface 7 segment display using PIC16F877A microcontroller and display 7
	2nd	Addressing modes		
	3rd	Pin Diagram of 8051		
	4th	Architectures of 8086		

		microprocessor		
5th	1st	simple operations	5th	Write a program to interface 7 segment LED using PIC16F877A microcontroller and display codes from 00 to 99.
	2nd	Discussion on previous year question papers		
	3rd	Microcontroller 8051- Architecture, Pin Diagram		
	4th	I/O Ports, Internal RAM and Registers, Interrupts		
6th	1st	Addressing Modes, Memory Organization and External Addressing	6th	Write a program to interface dc motor with PIC16F877A microcontroller and L293D interfacing IC.
	2nd	Real Time Applications of Microcontroller- Interfacing with LCD		
	3rd	Interfacing with ADC, DAC, Stepper Motor		
	4th	Interfacing with ADC, DAC, Stepper Motor		
7th	1st	Interfacing with ADC, DAC, Stepper Motor	7th	Write a program to interface two dc motor with PIC16F877A microcontroller using L293D IC and control the direction of rotation by using switch.
	2nd	Interfacing with ADC, DAC, Stepper Motor		
	3rd	Interfacing with ADC, DAC, Stepper Motor		
	4th	Interfacing with Key Board and Sensors		
8th	1st	Embedded Systems-Introduction, Classification	8th	Write a program to interface 7 segment LED with 8051 microcontroller and using switch count the digits from 0 to 9.
	2nd	Embedded Systems-Introduction, Classification		
	3rd	Processors, Hardware Units		
	4th	Software Embedded into System		
9th	1st	Applications and Products of Embedded Systems	9th	Write a program for toggling of LED in 8051 microcontroller and using switch.
	2nd	Applications and Products of Embedded Systems		
	3rd	Structural Units in Processor		
	4th	Structural Units in Processor		
10th	1st	Memory Devices	10th	Write a program to blink the port in 8051 microcontroller.
	2nd	Interfacing of Processor Memory and I/O Devices		
	3rd	Discussion on previous year question papers		

	4th	Interfacing of Processor Memory and I/O Devices		
11th	1st	Case Study of an Embedded System for a Smart Card	11th	Write a program to interface stepper motor with 8051 microcontroller using interface IC ULN2803.
	2nd	Discussion on previous year question paper		
	3rd	Interfacing 0f 8051 with seven segment LED		
	4th	Interfacing 0f 8051 with seven segment LED		
12th	1st	Assembly Language Programming Example	12th	Write a program to interface stepper motor with 8051 microcontroller using interface IC ULN2803.
	2nd	Assembly Language Programming Example		
	3rd	Assembly Language Programming Example		
	4th	Assembly Language Programming Example		
13th	1st	CPU registers	13th	Write a program to interface dc motor with 8051 microcontroller by using L293D IC to interface and control the direction of motor by using switch.
	2nd	Memory Interfacing		
	3rd	Discussion on previous year question papers		
	4th	Assembly Language Programming Example		
14th	1st	I/O Devices, Buses	14th	Write a program to interface dc motor with 8051 microcontroller by using L293D IC to interface and control the direction of motor by using switch.
	2nd	Jump instructions, Call instructions		
	3rd	Discussion on previous year question papers		
	4th	Discussion on previous year question papers		
15th	1st	Discussion on previous year question papers	15th	Write a program to interface two dc motor with 8051 microcontroller using interfacing IC L293D.
	2nd	Discussion on previous year question papers		
	3rd	Discussion on previous year question papers		
	4th	Discussion on previous year question papers		