Lesson Plan

Name of the Faculty   :   Ms. Sucheta
Discipline   :   Computer Engg.
Semester   :   4th
Subject   :   MPD
Lesson plan duration :   06 March 2023 to 23 june2023

Week	Theory		Practical	
	Lecture Day	**Topic (including assignment / test)**	**Practical Day**	**Topic**
1st	1st	Introduction to Micro- Processor, historicalback ground of MP & its evoluation	1st	Introduction to Microprocessor, how Microprocessor works and its features.
	2nd	Org. of Micro Computer & its variousBlocks		
	3rd	Microprocessor and function of its variousblocks		
2nd	1st	Various application of MP & its impact onsociety	2nd	Familiarization of different Keys of 8085 microprocessor kit and its memory map
	2nd	Introduction to system bus, bus org. of 8085		
	3rd	Block diagram of 8085 & its blocks/IstAssignment		
3rd	1st	Functions of various blocks of 8085	3rd	Steps to enter, modify data/program and to execute a program on 8085 kit
	2nd	Pin Layout of 8085		
	3rd	Details of various pins and related signalsof 8085		
4th	1st	Various multiplexed pins of 8085	4th	Writing and execution of ALP for addition and
	2nd	Demultiplexing of address		

	3rd	Data bus ,Generation of RD/WR control Signals, Steps to execute a stored programme		sub station of two 8 bit numbers
5th	1st	Various level of programming: M/C level programming, assembly level prog, high level programming instruction): 1- byte instuction, 2- byte inst, 3-byte instruction,	5th	Writing and execution of ALP for multiplication and division of two 8 bit numbers
	2nd	Introduction to Instruction Cycle, Instruction cycle, M/C cycle, T-state		
	3rd	Fetch & execution cycle: various steps to fetch & execute an instruction		
6th	1st	Timing diagram for opcode fetch operation ,memory read operation	6th	Writing and execution of ALP for arranging 10 numbers in ascending /descending order
	2nd	Timing diagram for memory write operation		
	3rd	Timing diagram for I/O Read, I/O Write operation , Memory read & memory write operation of processor		
7th	1st	Introduction to machine & assembly language	7th	Writing and execution of ALP for 0 to 9 BCD counters(up/down counter according to choice stored in memory)
	2nd	M/C & assembly languages, M/C code & mnemonics codes		
	3rd	Instruction format: opcode, operend, 1-byte inst, 2- byte inst, 3-byte instruction, Introduction to Addressing Modes/2nd Assignment		
8th	1st	Addressing modes: identification of instruction(to which addressing mode they belong)	8th	Interfacing exercise on 8255 like LED display control
	2nd	Introduction to instruction set& introduction to various Groups		
	3rd	Data transfer group of Instr		
9th	1st	Arithmetic group of inst.	9th	Interfacing exercise on 8253 Programmable interval timer
	2nd	Logic group, stack group of instr.		
	3rd	I/O & memory control group of instruction, Programming exercise of AssemblyLanguage		

10th	1st	Introduction to storing elements, Memories	10th	Interfacing exercise on 8253 Programmable interval timer
	2nd	Concept of various signals/pins of memory Devices		
	3rd	Basic concept of memory mapping & its techniques		
11th	1st	Partitioning of total memory space, Introduction to Address Decoding	11th	Interfacing exercise on 8279 programmable KB/display interface like to display the hexcode of key pressed on display
	2nd	Address decoding, need of Decoder		
	3rd	Address decoding by using NAND gate decoder & 2 : 4 line decoder		
12th	1st	Address decoding by using 3 : 8 line decoder & PROM Decoder	12th	Revision
	2nd	Peripheral mapped I/O & Memory mapped I/O Scheme		
	3rd	Difference between Peripheral mapped I/O & Memory mapped I/O Scheme, Interfacing of memory mapped I/O devices		
13th	1st	Introduction to Interrupts: Maskable& non- maskable interrupt, Edge triggered & Level triggered interrupts,	13th	Interfacing exercise on 8279 programmable KB/display interface like to display the hexcode of key pressed on display
	2nd	Various H/W interrupt, S/W Interrupt, Restart interrupt & its use		
	3rd	Servicing interrupts, extending interrupt services		
14th	1st	Programmed I/O operation, overview of data transfer Schemes	14th	Revision
	2nd	Sync. Data transfer , Asyn data transfer (hand-shaking schemes)		
	3rd	Interrupt driven data transfer schemes, Introduction to DMA/3rd Assignment		
15th	1st	DMA data transfer schemes, serial I/P data, serial O/P data	15th	Use of 8085 emulator for hardware testing
	2nd	Introduction to peripheral devices, 8255 PPI		
	3rd	8253 pit controller, basics of direct memory access		
16th	1st	DMA operation & 8257 DMA controller	16th	Revision

	2nd	8237 DMA controller and its operation		
	3rd	Introduction to 8279 programmable KB controller& its pin layout, 8251 Communication Interface Adapter		