

Name of Faculty: Priyanka			Discipline: Computer Engineering	
Semester: 4th			Subject: Microprocessor & Peripheral Devices	
LESSON PLAN DURATION : - 15 weeks (from Jan- 2019 to May- 2019)			WORK LOAD (LECTURE/PRACTICAL) PER WEEK (IN HOURS):- LECTURE-03, PRACTIACL-03	
weeks	Theory		Practical	
	Lectures/ hrs	Topics(including assignments & test)		Experiments
1	1	Evolution of Microprocessor ,Typical organization of a microcomputer system and functions of its various blocks.		
	2	Microprocessor, its evolution,		
	3	Function and impact on modern society		
			1	Familiarization of different keys of 8085 microprocessor kit and
			2	
		3		
2	4	Architecture of a Microprocessor		
	5	Concept of Bus, bus organization of 8085,		
	6	Functional block diagram of 8085 and function of each block		
			1	Steps to enter, modify data/program and to execute a programme on
			2	
		3		
3	7	Pin details of 8085 and related signals		
	8	Demultiplexing of address/data bus generation of read/write control signals		
	9	Steps to execute a stored programme		
			1	Revision of Practical Perf
			2	
		3		
4	10	Instruction Timing and Cycles		
	11	Instruction cycle, machine cycle and T-states,		
	12	Fetch and execute cycle		
			1	Writing and execution of ALP for addition and subtraction of two 8 bit
			2	
		3		
5	13	Assignment 1st		
	14	Brief idea of machine and assembly languages,		
	15	Machines and Mnemonic codes. Instruction format and Addressing mode		
			1	Writing and execution of ALP for multiplication and division of two 8 bit
			2	
		3		
6	16	Sessional 1st		
	17	Identification of instructions as to which addressing mode they belong.		
	18	Concept of Instruction set.		
			1	Revision of Practical Perf
			2	
		3		
7	19	Explanation of the instructions of the following groups of instruction set. Data transfer group, Arithmetic Group,		
	20	Logic Group, Stack, I/O		
	21	Machine Control Group.		
			1	Writing and execution of ALP for arranging 10 numbers in
			2	
		3		
8	22	Programming exercises in assembly language		
	23	Memories and I/O interfacing		
	24	Concept of memory mapping,		
			1	Writing and execution of ALP for 0 to 9 BCD
			2	

			3	counters (up/down
9	25	partitioning of total memory space.		
	26	Address decoding,		
	27	concept of peripheral mapped I/O and memory mapped I/O.		
			1	Revision of Practical Perf
			2	
		3		
10	28	Interfacing of memory mapped I/O devices.		
	29	Assignment 2nd		
	30	Sessional 2nd		
			1	Interfacing exercise on 82
			2	
		3		
11	31	Concept of interrupt, Maskable and non-maskable,		
	32	Edge triggered and level triggered interrupts		
	33	Software interrupt, Restart interrupts and its use,		
			1	Interfacing exercise on 82
			2	
		3		
12	34	Various hardware interrupts of 8085, Servicing interrupts,		
	35	extending interrupt system		
	36	Concept of programmed I/O operations,		
			1	Revision of Practical Perf
			2	
		3		
13	37	sync data transfer, async data transfer		
	38	Interrupt driven data transfer,		
	39	DMA		
			1	Interfacing exercise on 8279 programmable KB/display interface like
			2	
		3		
14	40	Serial output data, Serial input data		
	41	Peripheral devices		
	42	8255 PPI, 8253 PIT ,8257 DMA controller		
			1	Use of 8085 emulator for
			2	
		3		
15	43	block diagram of 8086		
	44	Minimum and Maximum mode pin and signals		
	45	Sessional test 3		
			1	Revision of Practical Perf
			2	
		3		