## **Lecture Plan**

## **5EE2A : MICROPROCESSOR AND COMPUTER ARCHITECTURE**

<b>B.Tech. 5th Semester</b>		Electrical Engineering
Unit No.	Lecture No.	Content
1	1	Introduction of 8085 Microprocessor Architecture
	2	CPU, address bus, data bus, and control bus
	3	Input/ Output devices, buffers
	4	Encoders, latches and memories
	5	Internal Data Operations and Registers
	6	Pins and Signals
	7	Peripheral Devices and Interrupts
	8	Memory Organization
2	9	8085 Microprocessor Instructions: Introduction
	10	Classification of 8085 Microprocessor Instructions
	11	Format of Instructions
	12	Timing Diagram
	13	8 Bit Instruction sets
	14	16 Bit Instruction sets
	15	Programming of 8085 Microprocessor
	16	Debugging, Subroutines
3	17	8085 Microprocessor Interfacing: Introduction
	18	8259chips and their applications
	19	8257 chips and their applications
	20	8255 chips and their applications
	21	8253 chips and their applications
	22	8155 chips and their applications
	23	A/D conversion, Memory and keyboard
	24	Display interface (8279).
4	25	8086 Microprocessor: Architecture: Introduction
	26	Architecture of INTEL 8086
	27	Register organization,

	28	Memory addressing, memory segmentation
	29	Operating Modes
	30	Instruction Set of 8086: Addressing Modes and Instruction formats
	31	Discussion on instruction Set: Groups: data transfer, arithmetic, logic string, branch control transfer, processor control.
	32	Interrupts: Hardware and software interrupts responses and types.
5	33	Basic Computer Architecture: Central Processing Unit, memory and input/output Interfacing.
	34	Memory Classification Volatile and non-volatile memory
	35	Primary and secondary memory, Static and Dynamic memory
	36	Logical, Virtual and Physical memory.
	37	Types Of Memory: Magnetic core memory, binary cell, Rom architecture
	38	Different types of ROM, RAM architecture, PROM, PAL, PLA, Flash and Cache Memory
	39	SDRAM, RDRAM and DDRAM. Memory latency,
	40	Memory bandwidth, memory seek time.