SYNERGY SCHOOL OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING

Discipline :COMP. SC. Engineering	**Semester:- 4th sem**	**Name of the teaching faculty:-PRAJNAPARAMITA KABI**
Subject:- Microprocessor and microcontroller	**No. of Days/week class Allotted:-5**	**No. of weeks:-15** **SESSION-2023-2024 SUMMER**
No. of week	**No. of class**	**Topic to be Taught**
1st	1st	Introduction class
	2nd	Introduction to microprocessor and distinguish them
	3rd	Concept of address bus
	4th	Concept of control bus & system bus
	5th	General bus structure block diagram
2nd	1st	General bus structure block diagram
	2nd	Basic architechure
	3rd	Basic architechture of 8085 mp
	4th	Signal description
	5th	Pin diagram of 8085 microprocessor
3rd	1st	Resistor organization
	2nd	Distinguish between SPR and GPR
	3rd	Timing and control module
	4th	Stack stack pointer stack top
	5th	8085 interupts
4th	1st	Masking of interupts
	2nd	Addressing data one byte two byte and three byte instruction set
	3rd	Addressing mode of instruction
	4th	Instruction set data transfer
	5th	Simple assembly language programming
5th	1st	Simple assembly language programming
	2nd	Logic operation
	3rd	Counter and time delay
	4rd	Looping counting indexing
	5rd	Stack and subroutines programming
6th	1st	Code conversion BCD arithmetic
	2nd	16 bit data operation
	3rd	Block transfer
	4th	Compare between two numbers
	5th	Array handling
7th	1st	Memory i/p and o/p addressing
	2nd	Define opcodecoperand
	3rd	Define t state machine cycle instructuin cycle
	4th	Discuss the concept of time diagram
	5th	Draw timming diagram memory read memory write

8th	1st	Discuss machine cycle
	2nd	Draw neat sketch of timming diagram for 8085 mp
	3rd	Draw neat sketch of timming diagram for 8085 mp
	4th	Concept of interfacing
	5th	Define mapping data transfer
9th	1st	Memory mapping
	2nd	Concept of memory interfacing
	3rd	Concept of addressing decodingfor I/o device
	4th	Programmable peripheral interfacing
	5th	ADC and DAC with interfacing
10th	1st	Seven segment display
	2nd	Generate squre wave on all lines of 8255 mp
	3rd	Traffic light control system
	4th	Stepper motor control system using 8255
	5th	Resistor organization of 8086 m,p
11th	1st	Architechture cof 8086 mp
	2nd	Signal description of 8086mp
	3rd	Bus operation
	4th	Memory organization
	5th	Minimum mode and timming
12th	1st	Maximum mode and timming
	2nd	Interrupts and interrupts service routines
	3rd	Non maskable interupts
	4th	Instruction set of 8086 example
	5th	Addressing mode
13th	1st	Assembly language programming
	2nd	Distinguish between microprocessor and micro controller
	3rd	8 bit and 16 bit micro controller
	4th	SISC and RISC processor
	5th	Architecture of 8051 microcontroller
14th	1st	Architecture of 8051 microcontroller
	2nd	Signal description
	3rd	Memory organization
	4th	INTERFACING AND SUPPORT CHIPS f 8051 microcontroller
	5th	Addressing modes of 8051 microcontroller
15th	1st	Simple assembly language programming
	2nd	Simple assembly language programming
	3rd	Interrupts timmer counter
	4th	Serial communication
	5th	Microcontroller interrupts
	6th	Interfacing 8255

Signature of the faculty 14/11/24

HOD,EE