



LESSON PLAN, SESSION-SUMMER-2023
SWAMI VIVEKANANDA SCHOOL OF ENGG & TECH, BBSR


DISCIPLINE- E.T.C. ENGG.	SEMESTER- 4th	NAME OF THE FACULTY - ER. SRIDHARA KUMAR RATH / <i>Rakhal Chandra Sahoo</i>
SUBJECT - MP & MC	NO. OF CLASSES ALOTTED/WEEK - 5	SEMESTER FROM - 14/02/2023 NO. OF WEEKS -16
WEEK	DATE	TOPICS COVERED
3RD	14.02.2023	Introduction to Microprocessor and Microcomputer & distinguish between them.
	15.02.2023	Microprocessor (Architecture and Programming-8085-8-bit)
	17.02.2023	Concept of Address bus, Data bus, Control bus & System Bus
4TH	20.02.2023	General Bus structure Block diagram. Basic Architecture of 8085 (8 bit) Microprocessor
	21.02.2023	General Bus structure Block diagram, Basic Architecture of 8085 (8 bit) Microprocessor
	22.02.2023	Signal Description (Pin diagram) of 8085 Microprocessor
	24.02.2023	Register Organizations, Distinguish between SPR & GPR, Timing & Control Module,
5TH	27.02.2023	Stack, Stack pointer & Stack top
	28.02.2023	Revision
1ST	01.03.2023	Interrupts:-8085 Interrupts, Masking of Interrupt(SIM,RIM)
	03.03.2023	Instruction Set and Assembly Language Programming , Addressing data & Differentiate between one-byte, two-byte & three-byte instructions with examples.
	04.03.2023	Addressing modes in instructions with suitable examples. Instruction Set of 8085(Data Transfer, Arithmetic, Logical, Branching, Stack& I/O , Machine Control)
2ND	06.03.2023	Simple Assembly Language Programming of 8085 , Simple Addition & Subtraction , Logic Operations (AND, OR, Complement 1's & 2's) & Masking of bits
	07.03.2023	Counters & Time delay (Single Register, Register Pair, More than Two Register) , Looping, Counting & Indexing (Call/JMP etc).
	10.03.2023	Stack & Subroutine programmes. Code conversion, BCD Arithmetic & 16 Bit data Operation, Block Transfer
	11.03.2023	Compare between two numbers , Array Handling (Largest number & smallest number in the array)
3RD	13.03.2023	Memory & I/O Addressing,
	14.03.2023	TIMING DIAGRAMS. Define opcode, operand, T-State, Fetch cycle, Machine Cycle, Instruction cycle & discuss the concept of timing diagram.
	15.03.2023	Draw timing diagram for memory read, memory write, I/O read, I/O write machine cycle.
	17.03.2023	Draw a neat sketch for the timing diagram for 8085 instruction (MOV, MVI, LDA instruction).
	18.03.2023	Microprocessor Based System Development Aids , Concept of interfacing
4TH	20.03.2023	Define Mapping & Data transfer mechanisms - Memory mapping & I/O Mapping , Concept of Memory Interfacing:- Interfacing EPROM & RAM Memories
	21.03.2023	Concept of Address decoding for I/O devices
	22.03.2023	Programmable Peripheral Interface: 8255
	24.03.2023	ADC & DAC with Interfacing
	25.03.2023	Interfacing Seven Segment Displays
5TH	27.03.2023	Generate square waves on all lines of 8255
	28.03.2023	Design Interface a traffic light control system using 8255
	29.03.2023	Design interface for stepper motor control using 8255.
	31.03.2023	Basic concept of other Interfacing DMA controller, USART

2ND	03.04.2023	Microprocessor (Architecture and Programming-8086-16 bit) , Register Organisation of 8086
	04.04.2023	Internal architecture of 8086
	05.04.2023	Signal Description of 8086
	07.04.2023	General Bus Operation & Physical Memory Organisation
	08.04.2023	Minimum Mode & Timings
3RD	10.04.2023	Maximum Mode & Timings,
	11.04.2023	Interrupts and Interrupt Service Routines, Interrupt Cycle, Non-Maskable Interrupt, Maskable Interrupt
	12.04.2023	8086 Instruction Set & Programming: Addressing Modes, Instruction Set, Assembler Directives and Operators,
	14.04.2023	Simple Assembly language programming using 8086 instructions.
	15.04.2023	Simple Assembly language programming using 8086 instructions.
4TH	17.04.2023	Microcontroller (Architecture and Programming-8 bit)
	18.04.2023	Microcontroller (Architecture and Programming-8 bit)
	19.04.2023	Distinguish between Microprocessor & Microcontroller
	21.04.2023	8 bit & 16 bit microcontroller
	22.04.2023	CISC & RISC processor
5TH	24.04.2023	Architecture of 8051 Microcontroller
	25.04.2023	Class Test
	26.04.2023	Signal Description of 8051 Microcontrollers
	28.04.2023	Signal Description of 8051 Microcontrollers
	29.04.2023	Memory Organisation-RAM structure, SFR
1ST	01.05.2023	Registers, timers, interrupts of 8051 Microcontrollers
	02.05.2023	Registers, timers, interrupts of 8051 Microcontrollers
	03.05.2023	Revision
	05.05.2023	Addressing Modes of 8051
	06.05.2023	Addressing Modes of 8051
2ND	08.05.2023	Simple 8051 Assembly Language Programming Arithmetic & Logic Instructions
	09.05.2023	Simple 8051 Assembly Language Programming Arithmetic & Logic Instructions
	10.05.2023	JUMP, LOOP, CALL Instructions, I/O Port Programming
	12.05.2023	Interrupts, Timer & Counters
	13.05.2023	Revision
3RD	15.05.2023	Revision
	16.05.2023	Serial Communication
	17.05.2023	Microcontroller Interrupts and Interfacing to 8255
	19.05.2023	Microcontroller Interrupts and Interfacing to 8255
	20.05.2023	Doubt clearing class
4TH	22.05.2023	Doubt clearing class
	23.05.2023	Doubt clearing class

HOD

DEAN (ACADEMICS)


 PRINCIPAL

 H.O.D. 
 ETC Engineering
 S.V.S.E.T., Madanpur

 PRINCIPAL
 Swami Vivekananda School of Engg. & Tech
 Madanpur, BBSR