

Bhubanananda Orissa School of Engineering

Lesson Plan

Discipline: E&TC	Semester: 4 th	Name of the Teaching Faculty: Soumya p mohanty
Subject: MPMC	No of Days/per week class allotted:5	Semester from 10.03. 2022 to 10.06.2022 No of weeks:15
Week No.	Class Day	Theory Topics
1 st	11-03-2022	1.1 Introduction to Microprocessor and Microcomputer & distinguish between them
	12-03-2022	1.2 Concept of Address bus, Data bus, Control bus & System Bus
2 nd	14-03-2022	1.3 General Bus structure Block diagram.
	15-03-2022	1.4 Basic Architecture of 8085 (8 bit) Microprocessor
	16-03-2022	1.4 Basic Architecture of 8085 (8 bit) Microprocessor (contd.)
	19-03-2022	1.5 Signal Description (Pin diagram) of 8085 Microprocessor
3 rd	21-03-2022	1.5 Signal Description (Pin diagram) of 8085 Microprocessor (contds)
	22-03-2022	1.6 Register Organizations,Distinguish between SPR & GPR, Timing & Control Module,
	23-03-2022	1.6 Register Organizations,Distinguish between SPR & GPR, Timing & Control Module(cond...)
	25-03-2022	1.7 Stack, Stack pointer &Stack top.

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	26-03-2022	1 st class test
4 th	28-03-2022	1.8 Interrupts:-8085 Interrupts, Masking of Interrupt(SIM,RIM)
	29-03-2022	1.8 Interrupts:-8085 Interrupts, Masking of Interrupt(SIM,RIM) (cont....)
	31-03-2022	2.1 Addressing data & Differentiate between one-byte, two-byte & three-byte instructions with examples
	2-04-2022	2.1 Addressing data & Differentiate between one-byte, two-byte & three-byte instructions with examples.(cont..)
5 th	4-04-2022	2.2 Addressing modes in instructions with suitable examples.
	05-04-2022	2.3 Instruction Set of 8085(Data Transfer, Arithmetic, Logical, Branching, Stack& I/O , Machine Control)
	06-04-2022	2.4 Simple Assembly Language Programming of 8085 2.4.1 Simple Addition & Subtraction
	08-04-2022	2.4.2 Logic Operations (AND, OR, Complement 1's & 2's) & Masking of bits
	9-04-2022	2.4.3 Counters & Time delay (Single Register, Register Pair, More than Two Register)
6 th	11-04-2022	2.4.4 Looping, Counting & Indexing (Call/JMP etc). 2nd Class Test

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	13-04-2022	2.4.6 Code conversion, BCD Arithmetic & 16 Bit data Operation, Block Transfer 2.4.7 Compare between two numbers
	15-04-2022	2.4.8 Array Handling (Largest number & smallest number in the array)
	16-04-2022	2.5 Memory & I/O Addressing
7 th	18-04-2022	TIMING DIAGRAMS. 3.1 Define opcode, operand, T-State, Fetch cycle, Machine Cycle, Instruction cycle & discuss the concept of timing diagram.
	19-04-2022	3.1 Define opcode, operand, T-State, Fetch cycle, Machine Cycle, Instruction cycle & discuss the concept of timing diagram. (cont..)
	20-04-2022	3.2 Draw timing diagram for memory read, memory write, I/O read, I/O write machine cycle. .
	22-04-2022	3.2 Draw timing diagram for memory read, memory write, I/O read, I/O write machine cycle. (cont.....)
	23-04-2022	3.3 Draw a neat sketch for the timing diagram for 8085 instruction (MOV, MVI, LDA instruction).
8 th	25-04-2022	Microprocessor Based System Development Aids 4.1 Concept of interfacing 4.2 Define Mapping & Data transfer mechanisms - Memory mapping & I/O Mapping
	26-04-2022	4.3 Concept of Memory Interfacing:- Interfacing EPROM & RAM Memories

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	27-04-2022	4.4 Concept of Address decoding for I/O devices 4.5 Programmable Peripheral Interface: 8255
	29-04-2022	4.6 ADC & DAC with Interfacing.
9 th	2-05-2022	4.7 Interfacing Seven Segment Displays
	3-05-2022	4.8 Generate square waves on all lines of 8255
	04-05-2022	4.9 Design Interface a traffic light control system using 8255.
	06-05-2022	4.10 Design interface for stepper motor control using 8255.
	7-05-2022	4.11 Basic concept of other Interfacing DMA controller,USART
10 th	09-05-2022	5.1 Register Organisation of 8086.
	10-05-2022	5.2 Internal architecture of 8086
	11-05-2022	1 ST INTERNAL TEST
	13-05-2022	5.3 Signal Description of 8086.
	16-05-2022	5.3 Signal Description of 8086(Cont....)
11 th	17-05-2022	5.4 General Bus Operation & Physical Memory Organisation

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	18-05-2022	5.5 Minimum Mode & Timings
	20-05-2022	5.6 Maximum Mode & Timings
	21-05-2022	5.7 Interrupts and Interrupt Service Routines, Interrupt Cycle, Non-Maskable Interrupt, Maskable Interrupt
	23-05-2022	5.8 8086 Instruction Set & Programming: Addressing Modes, Instruction Set, Assembler Directives and Operators
12 th	24-05-2022	Simple Assembly language programming using 8086 Instructions.
	25-05-2022	Microcontroller (Architecture and Programming-8 bit):- 6.1 Distinguish between Microprocessor & Microcontroller
	26-05-2022	6.2 8 bit & 16 bit microcontroller
	27-05-2022	6.3 CISC & RISC processor
13 th	28-05-2022	6.4 Architecture of 8051 Microcontroller
	30-05-2022	6.4 Architecture of 8051 Microcontroller (Cont..)
	31-05-2022	6.5 Signal Description of 8051 Microcontrollers
	1-06-2022	6.5 Signal Description of 8051 Microcontrollers (cont.....)
14 th	03-06-2022	6.6 Memory Organisation-RAM structure, SFR

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	04-06-2022	6.7 Registers, timers, interrupts of 8051 Microcontrollers
	06-06-2022	6.8 Addressing Modes of 8051
	07-06-2022	6.9 Simple 8051 Assembly Language Programming Arithmetic & Logic Instructions, JUMP, LOOP, CALL Instructions, I/O Port Programming
15th	8-06-2022	6.10 Interrupts, Timer & Counters
	9-06-2022	2 ND internal test
	10-06-2022	6.12 Microcontroller Interrupts and Interfacing to 8255
	11-06-2022	OVERALL REVISION

SPM
8/31/2022
Signature of Faculty


HOD, E&TC


Academic Coordinator


Principal