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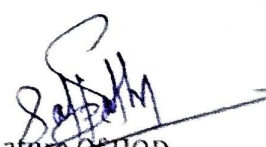
LESSON PLAN

Session (2025-2026)

Discipline: Computer Science & Engineering	Semester:4th Semester, Summer/2026	Name of the Faculty: Sabyasachi Patra, Asst. Prof. Email ID: sabyasachi.patra@cvrp.edu.in
Subject: MICROPROCESSORS & MICROCONTROLLER (CSEPE 202A/TH4A)	No. Of Days/Week:03	Start Date:22/12/2025 End Date:18/04/2026

Wee	Class	Theory Topics
1st	1st	Evolution of Microprocessors.
	2nd	Specific features of Microprocessors,
	3rd	Application in our daily life (a few examples)
2nd	1st	Explanation of each block in brief,
	2nd	Concept of bus structure,
	3rd	Register-to-register transfer,
3rd	1st	Communication with I/O and memory (This part can be explained using the specific microprocessors like 8085 or 8086/8088).
	2nd	Pin details of 8085 and 8086/8088 CPU and their functions in brief
	3rd	Instruction cycles,
4th	1st	Instruction set,
	2nd	timing diagram (may be limited to 8085 and 8086/8088 CPU). Concept of assemblers and compilers
	3rd	Class Test
5th	1st	Concept of address space, address/data bus demultiplexing,
	2nd	Address and data bus buffering, address decoding,
	3rd	I/O concepts
6th	1st	Memory interfacing concept of I/O mapped I/O and memory mapped I/O.
	2nd	Interrupts - Types of interrupts, Hardware and software data transfer schemes - Synchronous, asynchronous and interrupt driven.
	3rd	Interrupts - Types of interrupts, Hardware and software data transfer schemes - Synchronous, asynchronous and interrupt driven.

7th	1st	Example for register to register, register to memory, memory to register, block of data movement from one area of memory to another, merging of two blocks of data, data block exchange.
	2nd	Examples of arithmetic addition, subtraction, multiplication and division
	3rd	Examples of searching and sorting (simple)
8th	1st	Examples using of look up tables
	2nd	Use subroutines and delay programme
	3rd	Functional description of 8255, 8253, 8251, 8257, 8237 and 8259.
9th	1st	Interfacing of these chips with some standard CPU
	2nd	Simple assembly language programme to explain the function of these chips.
	3rd	Doubt Clearing Class
10th	1st	Revision Of Unit-1
	2nd	Revision Of Unit-2
	3rd	Revision Of Unit-3
11th	1st	Revision Of Unit-4
	2nd	Revision Of Unit-5
	3rd	Revision Of Unit-6
12th	1st	Class Test
	2nd	Keyboard interfacing,
	3rd	7 segment and dot matrix display interfacing,
13th	1st	A/D and D/A interfacing
	2nd	Stepper motor interfacing
	3rd	Introduction to 8051 Microcontroller
14th	1st	8051 Instruction Set and Programming
	2nd	Hardware features of 8051
	3rd	Example of 8051 Interface
15th	1st	Previous Year Question Discussion.
	2nd	Previous Year Question Discussion.
	3rd	Previous Year Question Discussion.

Signature Of Faculty

Signature Of HOD