

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF
ENGINEERING & TECHNOLOGY, BARGARH



LESSON PLAN
Session-2023-2024

Discipline: Comp. Sc. and Engg. Engg. Semester: 3rd

Subject: Computer System Architecture (CSA)

Name of the Teaching Faculty: Sunita Mahapatra

Subject: CSA No. of Days/per week class allotted 04

Semester From Date: 01.08.2023 To Date: 30.11.2023 No. of Weeks: 15

Week	Class Day	Theory /Practical Topics
<u>1st</u>	1	Basic Structure of computer Hardware
	2	I/O units
	3	Functional units
	4	∴ computer components
<u>2nd</u>	1	performance Measures
	2	Memory Addressing and operations
	3	Concept of instructions
	4	operands
<u>3rd</u>	1	∴ op-codes
	2	Types of instructions
	3	instruction format
	4	Concept of Addressing Modes

Runita Mahapatra
Signature of the Faculty

Subject: CSA No. of Days/per week class allotted 04

Semester From Date : 01.08.2023 To Date : 30.11.2023 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
<u>4th</u>	1	: Types of Addressing Modes
	2	Concept of processor
	3	Register Transfer
	4	performing ALU operations
<u>5th</u>	1	control signals
	2	: control unit
	3	instruction execution fetch
	4	Decode
<u>6th</u>	1	Execution
	2	Hardwired control
	3	: Microprogrammed control
	4	memory characteristics

Smriti Mahapatra
Signature of the Faculty

Subject: CSA No. of Days/per week class allotted 04

Semester From Date: 01.08.2023 To Date: 30.11.2023 No. of Weeks: 15

Week	Class Day	Theory /Practical Topics
<u>7th</u>	1	Memory Hierarchy
	2	Types of primary Memory
	3	Random Access Memory
	4	Read only Memory
<u>8th</u>	1	cache memory
	2	Comparison of Memories
	3	RAM and ROM organization
	4	interleaved memory
<u>9th</u>	1	Virtual memory
	2	I/O organization
	3	I/O interface
	4	Type of I/O Mapping

Sunita Mahapatra
Signature of the Faculty

Subject: CSA No. of Days/per week class allotted 04

Semester From Date: 01.08.2023 To Date: 30.11.2023 No. of Weeks: 15

Week	Class Day	Theory /Practical Topics
<u>10th</u>	1	Type of I/O device
	2	Modes of data Transfer
	3	Methods of input output
	4	programmed I/O Transfer
<u>11th</u>	1	interrupt driven I/O
	2	DMA
	3	I/O processor
	4	concept OF bus Architecture
<u>12th</u>	1	Single Bus organization
	2	Bus and System Bus
	3	Data Bus
	4	Address Bus

Sunita Mahapatra
Signature of the Faculty

Subject: CSA No. of Days/per week class allotted 04
 Semester From Date: 01.08.2023 To Date: 30.11.2023 No. of Weeks: 15

Week	Class Day	Theory / Practical Topics
<u>13th</u>	1	control Bus
	2	Bus Structure
	3	Basic parameter and Bus design
	4	SCSI
<u>14th</u>	1	USB
	2	Serial processing
	3	parallel processing
	4	concept of pipeline
<u>15th</u>	1	Linear pipeline
	2	Multiprocessor
	3	Applications of parallel processing
	4	Flynn's classification

Sanita Mahapatra
 Signature of the Faculty