LESSON PLAN

NAME OF FACULTY: DR. MEENU NAIN

DISCIPLINE: COMPUTER ENGINEERING

SEMESTER: 4TH

SUBJECT: COMPUTER ORGANIZATION

LESSON PLAN DURATION: 16 WEEKS

WORK LOAD (LECTURE/ PRACTICAL): LECTURES-3

WEEK	THEORY	
1st	LECTURE DAY	TOPIC
	1	**UNIT 1 HARDWARE ORGANIZATION OF COMPUTER SYSTEM** CPU organization: general register organization
	2	stack organization
	3	instruction formats(three address,
2nd	1	two address,one address,
	2	zero address and RISC instruction)
	3	Addressing modes: Immediate
3rd	1	Register Addressing modes, Direct Addressing modes
	2	Indirect Addressing modes
	3	Relative Addressing modes, Indexed Addressing modes
4th	3	CPU Design : Micro programmed vs. hard wired control
	1	Reduced instruction set computers: CISC characteristics
	2	RISC characteristics, and their comparison
5th	1	**UNIT 2 MEMORY ORGANIZATION** Memory Hierarchy
	2	RAM chips
	3	ROM chips
6th	1	Memory address map
	2	Memory connections to CPU
	3	Auxillary memory : Magnetic disks
7th	1	Magnetic tapes
	2	Associative memory
	3	Cache memory
8th	1	Virtual memory
	2	Memory management hardware
	3	Read and Write operation
9th	1	**UNIT 3 I/O ORGANIZATION** Basis Input output system(BIOS)
	2	Function of BIOS
	3	Testing
10th	1	Initialization
	2	Configuring the system
	3	Modes of Data Transfer: Programmed I/O
11th	1	Synchronous Data Transfer
	2	Asynchronous Data Transfer
	3	Interrupt initiated Data Transfer
12th	1	DMA data transfer

	2	**UNIT 4 ARCHITECTURE OF MULTIPROCESSOR SYSTEMS** Forms of parallel processing
	3	Parallel processing
13th	**1**	Pipelines
	2	Basic characteristics of multiprocessor
	3	General purpose multiprocessors
14th	**1**	Interconnection networks : time shared common bus
	2	Multi port memory
	3	Cross bar switch
15th	**1**	multi stage switching networks
	2	Hyper cube structures
	3	**REVISION**
16th	**1**	**TEST**
	2	**REVISION**
	3	**REVISION**