LESSON PLAN

Name of the Faculty: Aarti Sharma

Discipline: Computer Engineering

Department: Computer Engineering

Semester: 4th

Subject: Computer Organization

Lesson Plan Duration: 15 weeks

**Work load (Lecture / Practical) per week (in hours): Lectures-03

Week	Theory	
	Lect. Day	**Topic (including assignments /tests)**
1st Week	1st	**Hardware organisation of computer system Basic Principle:** Basic about Computer System
	2nd	**CPU organization :** general register organisation
	3rd	Stack organization
	4th	Instruction formats : Introduction
Week 2	1st	Three address, two address,
	2nd	One address, zero address
	3rd	RISC instruction
	4th	Addressing modes: Immediate, register
Week 3	1st	Direct, in direct,.
	2nd	Relative, indexed
	3rd	CPU Design: Micro Programmed vs. hard wired control.
	4th	CPU Design: Micro Programmed vs hard wired control.
Week 4	1st	Reduced instruction set computers Reduced instruction set computers
	2nd	Reduced instruction set computers Reduced instruction set computers
	3rd	CISC characteristics
	4th	RISC characteristics,
Week	1st	Comparison between CISC & RISC

5	2nd	Assignment on CPU Organization
	3rd	Assignment on CPU Design
	4th	Discussion on unit 1
Week 6	1st	**Memory organization:** Basics About Memory
	2nd	Memory Hierarchy
	3rd	RAM and ROM chips
	4th	Memory address map
Week 7	1st	Memory connections to CPU
	2nd	Auxillary memory : Magnetic disks
	3rd	Auxillary memory : magnetic tapes
	4th	Associative memory
Week 8	1st	Cache memory
	2nd	Virtual memory
	3rd	Memory management hardware
	4th	Assignment on Memory Hierarchy
Week 9	1st	Assignment on Auxillary memory
	2nd	Test
	3rd	**I/O organization:** Basis Input output system(BIOS)
	4th	Function of BIOS
Week 10	1st	Testing and initialization
	2nd	Configuring the system
	3rd	Assignment on BIOS
	4th	Modes of Data Transfer
Week 11	1st	Programd I/O
	2nd	Synchronous, asynchronous and interrupt initiated
	3rd	Synchronous, asynchronous and interrupt initiated
	4th	DMA data transfer
Week	1st	Assignment on modes of Data Transfer

12	2nd	Test
	3rd	**Architecture of multiprocessor systems :** Introduction about Multi processor systems
	4th	Architecture of multiprocessor systems
Week 13	1st	Forms of parallel processing
	2nd	Parallel processing and pipelines
	3rd	Basic characteristics of multiprocessor
	4th	Assignment on multiprocessor System
Week 14	1st	General purpose multiprocessors'
	2nd	**Interconnection networks** : time shared common bus
	3rd	multi-port memory
	4th	cross bar switch
Week 15	1st	multi stage switching networks and hyper cube structures
	2nd	multi stage switching networks and hyper cube structures
	3rd	Assignment on Interconnection networks
	4th	Test