

## LESSON PLAN

Name of the Faculty: Seema Rao  
Department: Computer Engineering  
Semester: 4th  
Subject: Computer Organization

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

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

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