ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY::CHIRALA
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
LESSION PLAN

Subject:COMPUETR ORGANIZATION **Academic Year: 2017 – 18**
Name:Y.CHITTI BABU **Year &Sem/Section: II-II 'A'**

Unit	Topics Planned to be Covered	No. of Periods Required
I	**Basic Structure Of Computers:** Functional unit, Basic Operational concepts, Bus structures, System Software, Performance, The history of computer development.	7
II	**Machine Instruction and Programs:** Instruction and Instruction Sequencing: Register Transfer Notation, Assembly Language Notation, Basic Instruction Types, Addressing Modes, Basic Input/output Operations, The role of Stacks and Queues in computer programming equation. Component of Instructions: Logic Instructions, shift and Rotate Instructions	10
III	Type of Instructions: Arithmetic and Logic Instructions, Branch Instructions, Addressing Modes, Input/output Operations	9
IV	INPUT/OUTPUT ORGANIZATION: Accessing I/O Devices, Interrupts: Interrupt Hardware,Enabling and Disabling Interrupts, Handling Multiple Devices, Direct Memory Access,Buses: Synchronous Bus, Asynchronous Bus, Interface Circuits, Standard I/O Interface:Peripheral Component Interconnect (PCI) Bus, Universal Serial Bus (USB)	8
V	The MEMORY SYSTEMS: Basic memory circuits, Memory System Consideration, Read-Only Memory: ROM, PROM, EPROM, EEPROM, Flash Memory,Cache Memories: Mapping Functions, INTERLEAVING Secondary Storage: Magnetic Hard Disks, Optical Disks	6
VI	Processing Unit: Fundamental Concepts: Register Transfers, Performing An Arithmetic OrLogic Operation, Fetching A Word From Memory,Execution of Complete Instruction, Hardwired Control, Micro programmed Control: Microinstructions, Micro program Sequencing, Wide Branch Addressing Microinstructions with next –Address Field	5
	Total No.of Class	45

TEXT BOOKS:

1. Computer Organization, Carl Hamacher, Zvonks Vranesic, Safea Zaky, 5th Edition, McGraw Hill.
2. Computer Architecture and Organization, John P. Hayes, 3rd Edition, McGraw Hill.

REFERENCE BOOKS:

1. Computer Organization and Architecture – William Stallings Sixth Edition, Pearson/PHI
2. Structured Computer Organization – Andrew S. Tanenbaum, 4th Edition PHI/Pearson
3. Fundamentals or Computer Organization and Design, - Sivaraama Dandamudi Springer Int.Edition.
4. "Computer Organization and Design: The Hardware/Software Interface" by David A. Patterson and John L. Hennessy.
5. J .P. Hayes, "Computer Architecture and Organization", McGraw-Hill, 1998.

FACULTY **HEAD OF THE DEPARTMENT**

ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY::CHIRALA
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
LESSION PLAN

Subject:COMPUETR ORGANIZATION **Academic Year: 2017 – 18**
Name:Y.CHITTI BABU **Year &Sem/Section: II-II 'B'**

Unit	Topics Planned to be Covered	No. of Periods Required
I	**Basic Structure Of Computers:** Functional unit, Basic Operational concepts, Bus structures, System Software, Performance, The history of computer development.	7
II	**Machine Instruction and Programs:** Instruction and Instruction Sequencing: Register Transfer Notation, Assembly Language Notation, Basic Instruction Types, Addressing Modes, Basic Input/output Operations, The role of Stacks and Queues in computer programming equation. Component of Instructions: Logic Instructions, shift and Rotate Instructions	10
III	Type of Instructions: Arithmetic and Logic Instructions, Branch Instructions, Addressing Modes, Input/output Operations	9
IV	INPUT/OUTPUT ORGANIZATION: Accessing I/O Devices, Interrupts: Interrupt Hardware,Enabling and Disabling Interrupts, Handling Multiple Devices, Direct Memory Access,Buses: Synchronous Bus, Asynchronous Bus, Interface Circuits, Standard I/O Interface:Peripheral Component Interconnect (PCI) Bus, Universal Serial Bus (USB)	8
V	The MEMORY SYSTEMS: Basic memory circuits, Memory System Consideration, Read-Only Memory: ROM, PROM, EPROM, EEPROM, Flash Memory,Cache Memories: Mapping Functions, INTERLEAVING Secondary Storage: Magnetic Hard Disks, Optical Disks	6
VI	Processing Unit: Fundamental Concepts: Register Transfers, Performing An Arithmetic OrLogic Operation, Fetching A Word From Memory,Execution of Complete Instruction, Hardwired Control, Micro programmed Control: Microinstructions, Micro program Sequencing, Wide Branch Addressing Microinstructions with next –Address Field	5
	Total No.of Class	45

TEXT BOOKS:

1. Computer Organization, Carl Hamacher, Zvonks Vranesic, Safea Zaky, 5th Edition, McGraw Hill.
2. Computer Architecture and Organization, John P. Hayes, 3rd Edition, McGraw Hill.

REFERENCE BOOKS:

1. Computer Organization and Architecture – William Stallings Sixth Edition, Pearson/PHI
2. Structured Computer Organization – Andrew S. Tanenbaum, 4th Edition PHI/Pearson
3. Fundamentals or Computer Organization and Design, - Sivaraama Dandamudi Springer Int.Edition.
4. "Computer Organization and Design: The Hardware/Software Interface" by David A. Patterson and John L. Hennessy.
5. J .P. Hayes, "Computer Architecture and Organization", McGraw-Hill, 1998.

FACULTY **HEAD OF THE DEPARTMENT**

ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY::CHIRALA
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
LESSION PLAN

Subject:COMPUETR ORGANIZATION **Academic Year: 2017 – 18**
Name:Y.CHITTI BABU **Year &Sem/Section: II-II 'C'**

Unit	Topics Planned to be Covered	No. of Periods Required
I	**Basic Structure Of Computers:** Functional unit, Basic Operational concepts, Bus structures, System Software, Performance, The history of computer development.	8
II	**Machine Instruction and Programs:** Instruction and Instruction Sequencing: Register Transfer Notation, Assembly Language Notation, Basic Instruction Types, Addressing Modes, Basic Input/output Operations, The role of Stacks and Queues in computer programming equation. Component of Instructions: Logic Instructions, shift and Rotate Instructions	11
III	Type of Instructions: Arithmetic and Logic Instructions, Branch Instructions, Addressing Modes, Input/output Operations	9
IV	INPUT/OUTPUT ORGANIZATION: Accessing I/O Devices, Interrupts: Interrupt Hardware,Enabling and Disabling Interrupts, Handling Multiple Devices, Direct Memory Access,Buses: Synchronous Bus, Asynchronous Bus, Interface Circuits, Standard I/O Interface:Peripheral Component Interconnect (PCI) Bus, Universal Serial Bus (USB)	9
V	The MEMORY SYSTEMS: Basic memory circuits, Memory System Consideration, Read-Only Memory: ROM, PROM, EPROM, EEPROM, Flash Memory,Cache Memories: Mapping Functions, INTERLEAVING Secondary Storage: Magnetic Hard Disks, Optical Disks	6
VI	Processing Unit: Fundamental Concepts: Register Transfers, Performing An Arithmetic OrLogic Operation, Fetching A Word From Memory,Execution of Complete Instruction, Hardwired Control, Micro programmed Control: Microinstructions, Micro program Sequencing, Wide Branch Addressing Microinstructions with next –Address Field	5
	Total No.of Class	48

TEXT BOOKS:

1. Computer Organization, Carl Hamacher, Zvonks Vranesic, Safea Zaky, 5th Edition, McGraw Hill.
2. Computer Architecture and Organization, John P. Hayes, 3rd Edition, McGraw Hill.

REFERENCE BOOKS:

1. Computer Organization and Architecture – William Stallings Sixth Edition, Pearson/PHI
2. Structured Computer Organization – Andrew S. Tanenbaum, 4th Edition PHI/Pearson
3. Fundamentals or Computer Organization and Design, - Sivaraama Dandamudi Springer Int.Edition.
4. "Computer Organization and Design: The Hardware/Software Interface" by David A. Patterson and John L. Hennessy.
5. J .P. Hayes, "Computer Architecture and Organization", McGraw-Hill, 1998.

FACULTY **HEAD OF THE DEPARTMENT**