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| **LESSON PLAN** |
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| **Discipline** | **Computer Engineering** |
| **Semester** | **4th** |
| **Subject** | **Computer Organisation** |
| **Duration** | **16 WEEKS(March 2022 -June 2022)** |
| **Work Load** | **Lecture** | **3 Lecture per week (I hour /day)** |
| **Week** | **Theory** |
| **Day** | **Topic** |
| 1st |  |
| 1st | A brief over view of the subject “Computer organization “ and relevance of the studying the subject in Diploma level Program. |
| 2nd | CPU Organization : Concept of Registers and General Register Organization |
| 3rd | Concept of Stack Organization |
| 2nd | 4th | Concept of Instruction Format and types of instructions, Three, Two, One , Zero Address instruction |
| 5th | Addressing modes: Immediate, register, direct, in direct, |
| 6th | Addressing modes: relative, indexed. |
| 3rd | 7th | Concept of CPU Design |
| 8th | Concept of Micro programmed controlled |
| 9th | Concept of Hard wired controlled |
| 4th | 10th | Class Test of CPU Design |
| 11th | Concept of Reduced instruction Set Computer |
| 12th | Concept of Complex instruction Set Computer |
| 5th | 13th | CISC Characteristics, RICS Characteristics |
| 14th | Comparision of RISC & CISC |
| 15th | Seminar on Topics , Instruction formats and Addressing modes , CICS, RICS |
| 6th | 16th | Concept of Memory Organization, Memory types |
| 17th | Memory Hierarchy |
| 18th | ROM and RAM Chips,Concept of Memory Address Map |
| 7th | 19th | Connections of Memory Chips with the CPU |
| 20th | Concept and usage of Auxiliary Memories and types |
| 21st | Study of Magnetic Disks |
| 8th | 22nd | Study of Magnetic Tapes. |
| 23rd | Associative and Cache memory |
| 24th | Concept of Virtual Memory |
| 9th | 25th | Concept of Memory Management |
| 26th | Memory Management Hardware. |
| 27th | Revision of Associative, Cache , Virtual memory |

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| 10th | 28th | Read and Write operation of memory |
| 29th | Concept of Input/output Organization |
| 30th | Basic Input out put System BIOS and its Function |
| 11th | 31st | Testing and Initialization by BIOS, Configuring the System |
| 32nd | Concept of Data transfer in Computer System |
| 33rd | Different modes of Data Transfer : Programmed and DMA |
| 12th | 34th | Programmed I/O : Synchronous, asynchronous |
| 35th | Interrupt initiated I/O |
| 36th | DMA data transfer |
| 13th | 37th | **Class Test od I/O Organisation** |
| 38th | Concept of Multi Processor Systems |
| 39th | Different forms of Parallel Processing |
| 14th | 40th | Different forms of Parallel Processing …continued |
| 41st | Concept of Parallel processing and Pipe Lines |
| 42nd | Basic Characteristics of Multiprocessor, General purpose multiprocessors. |
| 15th | 43rd | Concept of Interconnection Networks |
| 44th | , Concept of Time Shared Common Bus |
| 45th | Concept of Multiport Memory, Cross Bar Switch |
| 16th | 46th | Multistage Switching networks and hyper cube structures |
| 47th | Revision of Previous lectures |
| 48th | **Class Test of unit 4** |