**Lesson Plan**

**Lesson plan duration : 15 weeks (from January, 2020 to April, 2020) Theory-4hr**

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| Week | Theory |
| Lecture Day | Topic (including assignments /tests) |
| 1st Week | 1st | **Hardware organisation of computer systemBasic 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: MicroProgramdvs hard wired control. |
| 4th | CPU Design: MicroProgramdvs 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 5 | 1st |  Comparison between CISC & RISC |
| 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 12 | 1st | Assignment on modes of Data Transfer |
| 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 |