| Discipline :-<br><br>**ELECTRICAL ENGG.** | Semester:-<br><br>**5th** | Name of the Teaching Faculty: -<br>**UDAYA MEHER** |
|---|---|---|
| Subject:-<br><br>**DIGITAL ELECTRONICS & MICROPROCESSOR LAB** | No of Days/per Week Class Allotted :-<br><br>**01** | Semester From:- **15.09.2022** To Date:**22.12.2022**<br><br>**No. of Weeks-12** |
| **Week** | **Class Day** | **LABORATORY** |
| 1st | 1st (19/09/2022) | Verify truth tables of AND, OR, NOT, NOR, NAND, XOR, XNOR gates. Implement various gates by using universal properties of NAND & NOR gates and verify truth table. |
| 2nd | 1st (26/09/2022) | Implement half adder and Full adder using logic gates. Implement half subtractor and Full subtractor using logic gates. |
| 3rd | 1st (10/10/2022) | Implement a 4-bit Binary to Gray code converter. Implement a Single bit digital comparator. |
| 4th | 1st (17/10/2022) | Study Multiplexer and de-multiplexer |
| 5th | 1st(31/10/2022) | Study of flip-flops. i) S-R flip flop ii) J-K flip flop iii) flip flop iv) T flip flop |
| 6th | 1st(07/11/2022) | Realize a 4-bit asynchronous UP/Down counter with a control for up/down counting.. |
| 7th | 1st(14/11/2022) | Realize a 4-bit synchronous UP/Down counter with a control for up/down counting. |
| 8th | 1st(21/11/2022) | Implement Mode-10 asynchronous counters |
| 9th | 1st(28/11/2022) | Study shift registers. |
| 10th | 1st(05/12/2022) | **General Programming using 8085A development board**<br>1'S Complement, 2'S Complement |
| 11th | 1st(12/12/2022) | Addition of 8-bit number<br>Subtraction of 8-bit number Compare between two numbers |
| 12th | 1st(19/12/2022) | Decimal Addition 8-bit number<br>Decimal Subtraction 8-bit number. Find the largest in an Array, Block Transfer, Traffic light control using 8255, Generation of square wave using 8255 |

Udaya Mehar
**Teaching Faculty** 19/9/2022

**HOD , ELE**

**Academic Co-ordinator**

**Principal**

**Government Polytechnic, Nuapada**