**INDEX**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SN | Title | Page No. | Date | Signature |
| 1. | Familiarizing with the syntax, data types, and operators of VHDL. | 1-2 | 2081/01/08 |  |
| 2. | Design of Basic Logic Gates using VHDL | 3-6 | 2081/01/08 |  |
| 3. | Design of Half Adder and Full Adder using VHDL | 7-9 | 2081/01/08 |  |
| 4. | Design of Multiplexer and De multiplexer using VHDL | 10-13 | 2081/01/08 |  |
| 5. | Design 4-bit binary-to-gray and gray-to-binary code converters using VHDL | 14-17 | 2081/01/09 |  |
| 6. | Design 8-bit parity generator and checker circuits using VHDL | 18-22 | 2081/01/09 |  |
| 7. | Design Encoder and Decoder using VHDL | 23-27 | 2081/01/09 |  |
| 8. | Design 2’s Complement Adder-Subtractor using VHDL | 28-30 | 2081/01/09 |  |
| 9. | Design of Registers using VHDL (SR flip-flop or JK flip-flop or D flip-flop or T flip-flop) | 31-33 | 2081/01/10 |  |
| 10. | Design 4-bit ALU using VHDL | 34-36 | 2081/01/10 |  |
| 12. | Simulation of 5 stage or 4 stage or 3 stage pipelining | 37-41 | 2081/01/11 |  |
| 13. | Simulation of Booth addition and subtraction of signed 2’s complement data. ( Implement using VHDL or C ) | 42-45 | 2081/01/11 |  |
| 14. | Simulation of Boot multiplication and division algorithm. (Implement using VHDL or C program) | 46-55 | 2081/01/11 |  |