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| **P.V.P Siddhartha Institute of Technology(Autonomous)** | **Signature of Invigilator with date:** | **Marks Obtained:** |
| **Department of Computer Science and Engineering** |
| **Course: B.Tech** | **Year: II** | **Semester: I** | **Objective: I** |
| **Regulation:PVP23** | **Maximum Marks:10Marks** | **Session: F.N** |
| **A.Y:2024-25** | **Date:18-9-2024** | **Duration: 20 min** |
| **Subject Code: 23ES1304** | **Subject Name: Digital Logic & Computer Organization** |
| **Registered Number:** | **Name:** |
| **Answer all the Questions. Each Question carries 2 Mark 5\*2M=10M** |
|  |
| **Q.No** | **Question** | **Marks** | **CO** | **Level** |
| **1.** | a) Find the 1’s complement of 1100110011.b) Find the 2’s complement of 0011010101.c) Find the 9’s complement of 123456.d) Find the 10’s complement of 875643. | **2M** | **CO1** | **L2** |
| **2.** | Convert the following expression into canonical SOPF (X,Y,Z)= XY+YZ+XZ | **2M** | **CO1** | **L2** |
| **3.** | Define Decoder. With a neat sketch draw 2X4 decoder. | **2M** | **CO1** | **L2** |
| **4.** | Write the differences between combinational and sequential circuits. | **2M** | **CO1** | **L2** |
| **5.** | Draw the logic diagram of D Flip-flop and derive its characteristic equation. | **2M** | **CO1** | **L2** |

Course Coordinator

Module Coordinator Program Coordinator