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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 SOP  F (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