

**Indian Institute of Technology, Delhi**  
**EEP 201: Digital Electronic Circuits Laboratory**  
**Experiment 2, July-Dec 2008**  
**Combinational Logic Circuits**

**Design problems:**

- Connect the circuit as shown below. Connect all the  $V_{CC}$  pins to +5 Volts.
- This circuit has three inputs, A, B, and C, and two outputs, D, and E. Apply all possible inputs to the circuit to make a truth-table.
- From the truth table, evaluate the logic function realized by the circuit. Identify the function of the circuit.

**Post-lab question:**

- Is it possible to implement the two functions using two 4-1 multiplexers? Show a detailed diagram.

