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Course  $\Rightarrow$  MCA

Semester  $\Rightarrow$  First semester

Subject Name  $\Rightarrow$  Computer organization and Architecture

Subject code  $\Rightarrow$  TMC (102)

Ques 1  $\Rightarrow$

NAND gate is actually series of AND gate with NOT gate. If we connect the output of an AND gate to the input of a NOT gate, this combination will work as NOT-AND or NAND gate.

Its output is 1 when any or all inputs are 0, otherwise output is 0.

The logic NAND gate is generally called as a "UNIVERSAL GATE" because it is one of the most used logic gate types.

Procedure  $\Rightarrow$

- Connect the VCC and ground to the pins specified by the data sheet.
- Do all the connections as per the IC diagram switch on the power supply.

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- After completing the connections, properly observe the output and match in it with the given truth table.

Precautions:

- All the connections should be proper according to the circuit diagram.
- Handle the IC's carefully
- In case of any fault or burning smell switch off the power supply immediately.

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### Truth Table

Input		Output
A	B	$C = \overline{A \cdot B}$
0	0	1
0	1	1
1	0	1
1	1	0

### Logic Diagram

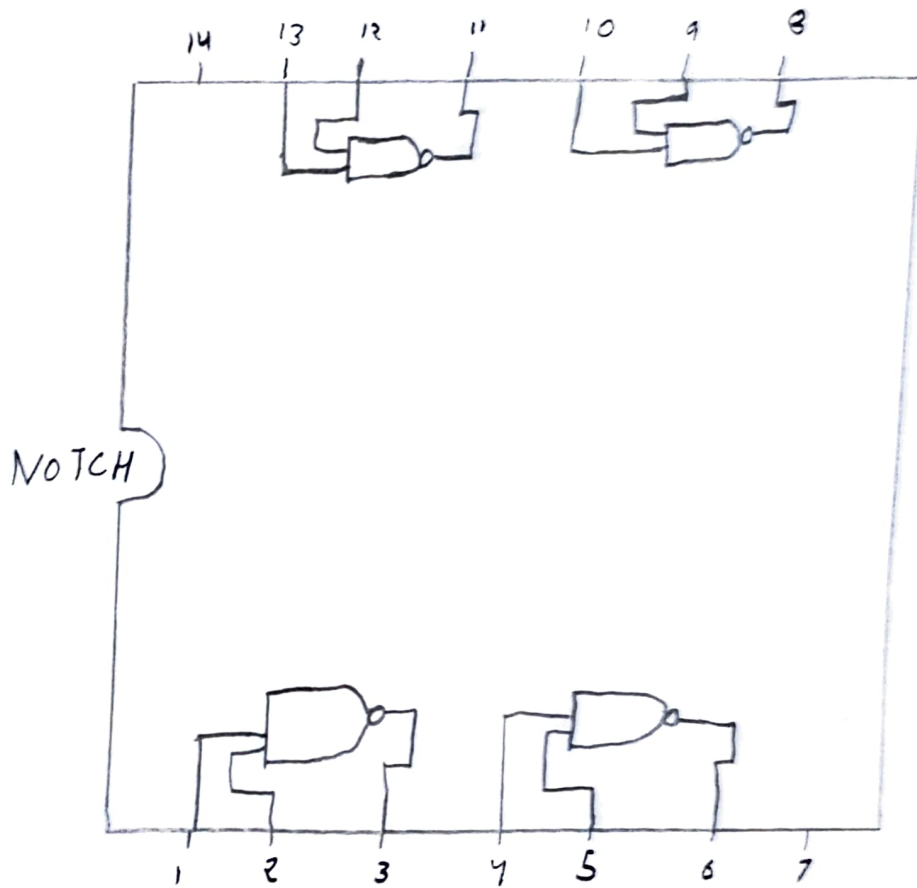


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IC - Diagram =>



IC - 7400

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