

Name - Dheeraj Singh Father's Name :- Brodhan Singh Roll No - 2101063

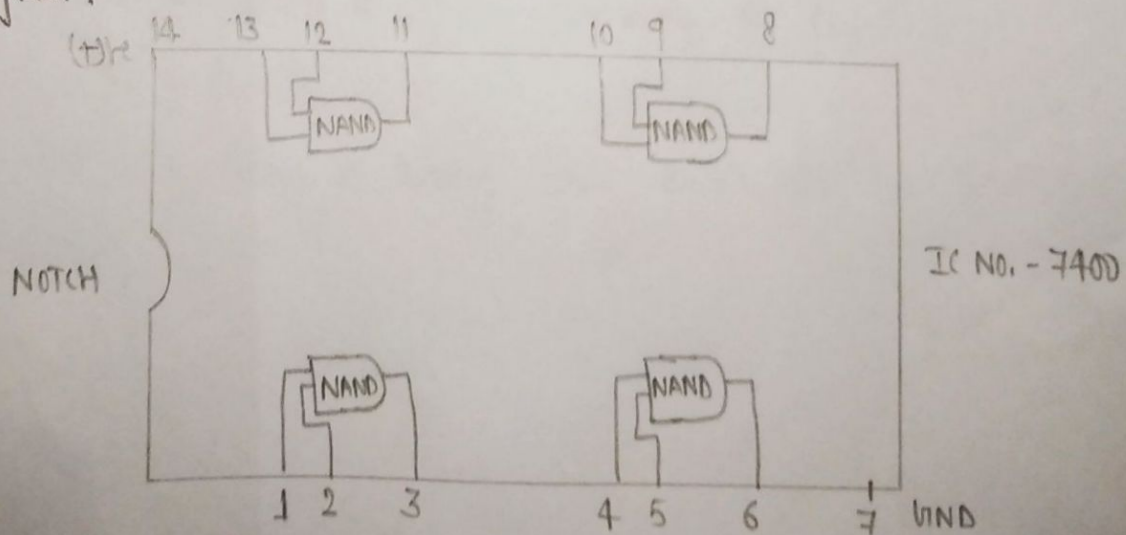
Subject - Computer organization & Architecture.



① Object :- To verify the Truth-Table of NAND gate (IC 7400).

\* Apparatus Used :- NAND gate IC, Power Supply, Connection wires and bread board etc.

\* Theory :- The logic NAND gate is generally called as a "UNIVERSAL GATE" because it is one of the most used logic gate type all gate can be implemented by NAND gate. Boolean expression  $Q = \overline{A \cdot B}$ .  
The NAND gate has an output low (0) only when all inputs are high (1).  
It is inverse of AND gate.

\* IC Diagram :-



 - NAND Gate - 

2022/3/22 20:21

\* Truth-Table :-

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

\* Result :- The result of the experiment has been verified successfully.

\* Precautions :-

- ① All the connection should be proper accordingly the circuit diagram.
- ② Handle the IC's carefully.
- ③ In case of any fusion or burning smell switch off the power supply immediately.

2022/3/22 20:21