

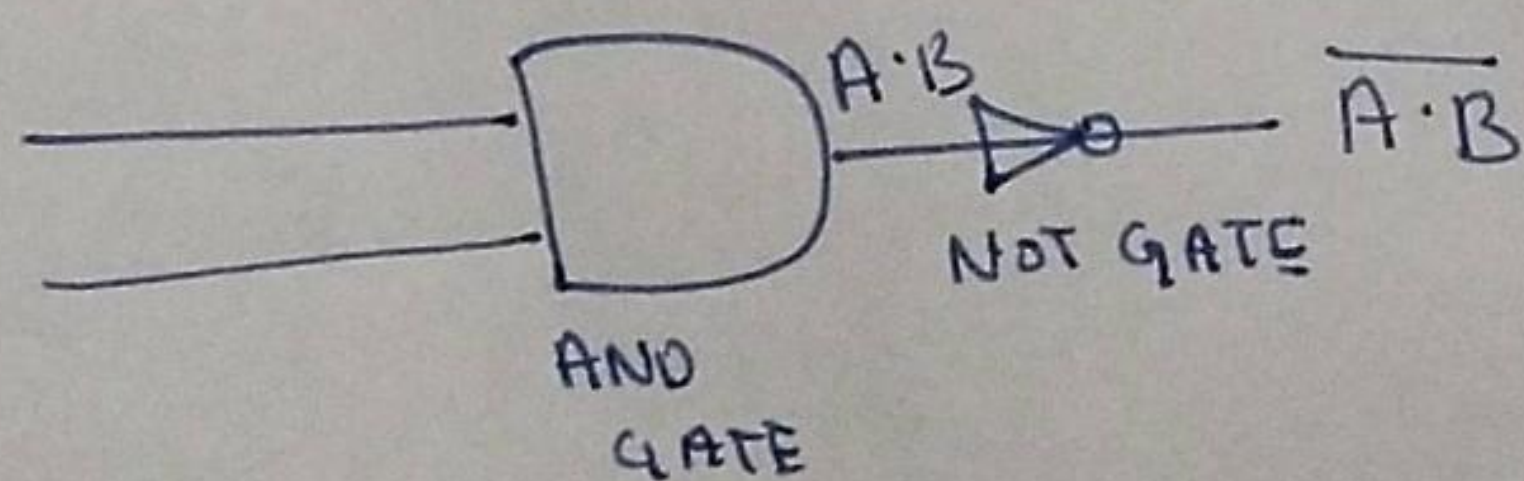
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Course - MCA 1st 'D'

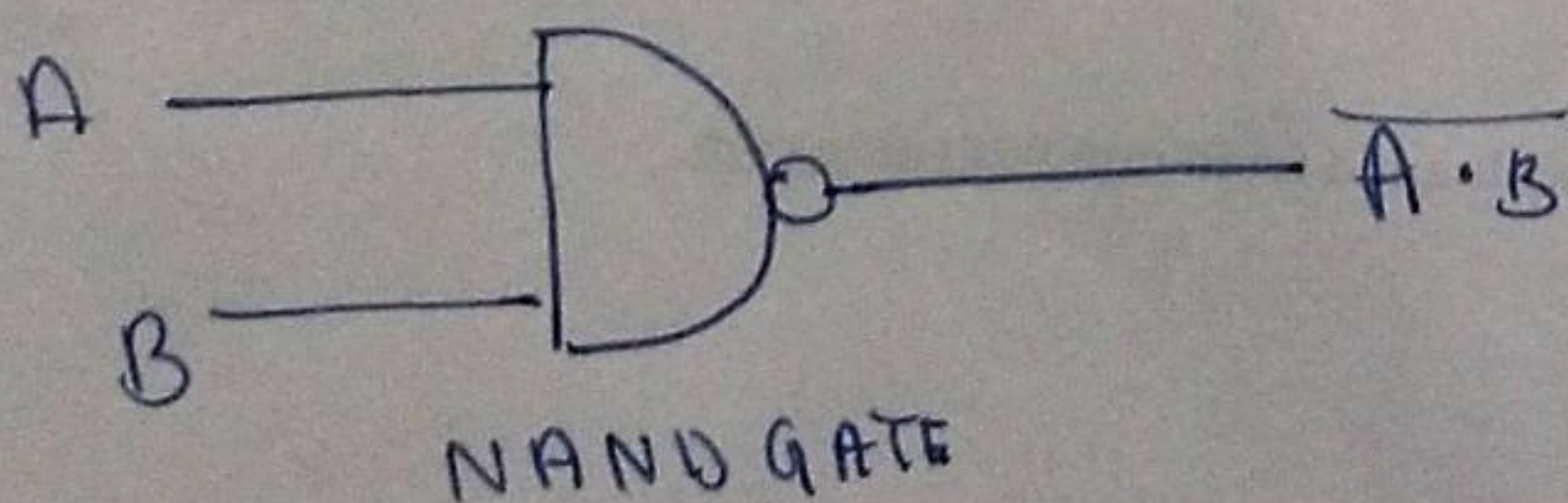
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Q1) A NAND gate ("not AND gate") is a logic gate that produces a low output (0) only if all its inputs are true, and high output (1) otherwise. Hence the NAND gate is the inverse of an AND gate, and its circuit is produced by connecting an AND gate to a NOT gate. Just like an AND gate a NAND gate may have any number of input probes but ~~not~~ only one output probe.

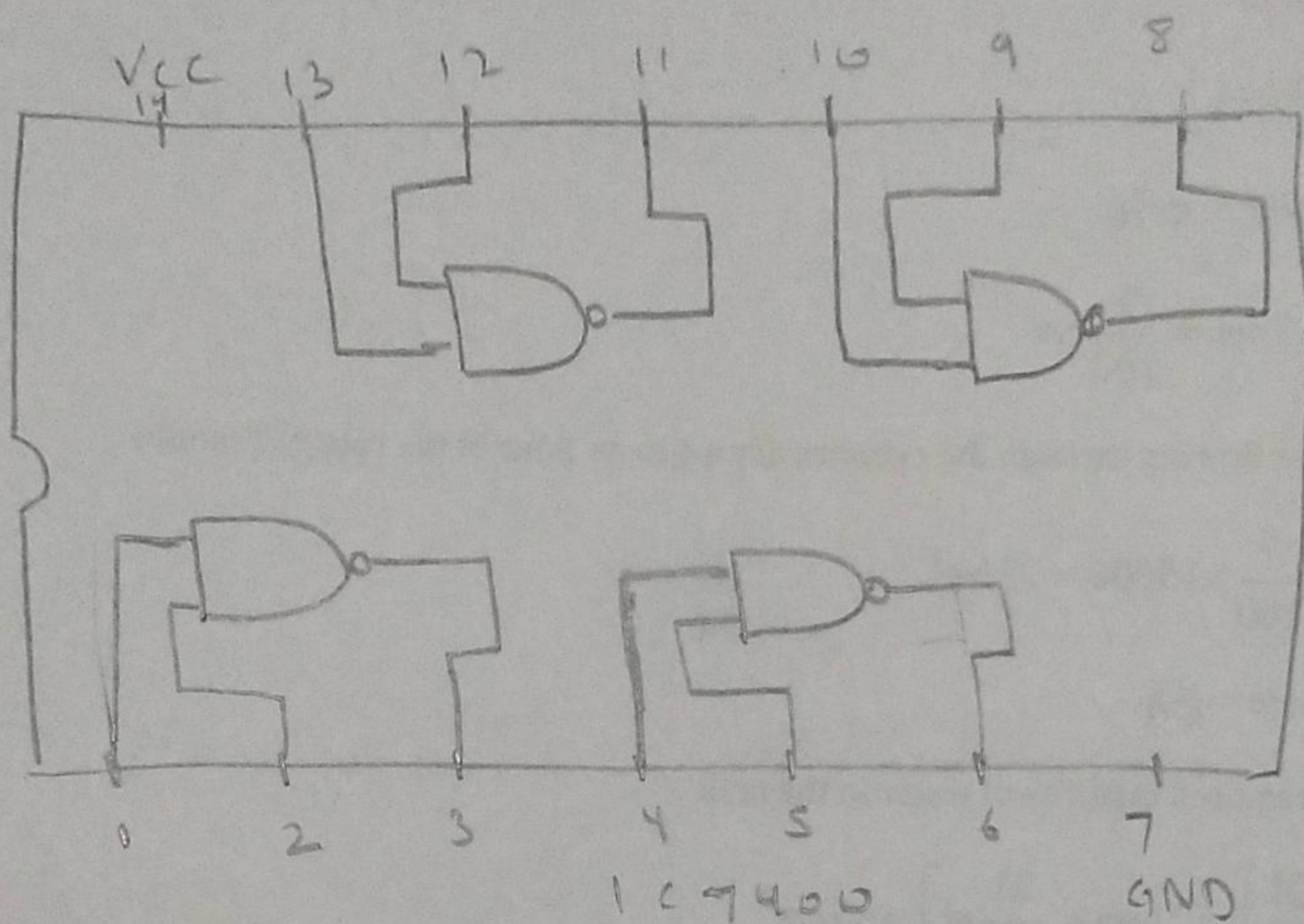
The basic logical construction of the NAND gate is shown :-



The symbol of a NAND gate is similar to the AND gate.



NAND Gate True Table : -



$$Y = \overline{A \cdot B}$$

A · B		Y
0	0	1
0	1	1
1	0	1
1	1	0