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Course - MCA

Section - D

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Ques 1. Discuss the working of NAND gate with the help of circuit diagram and truth table.

Working of NAND Gate

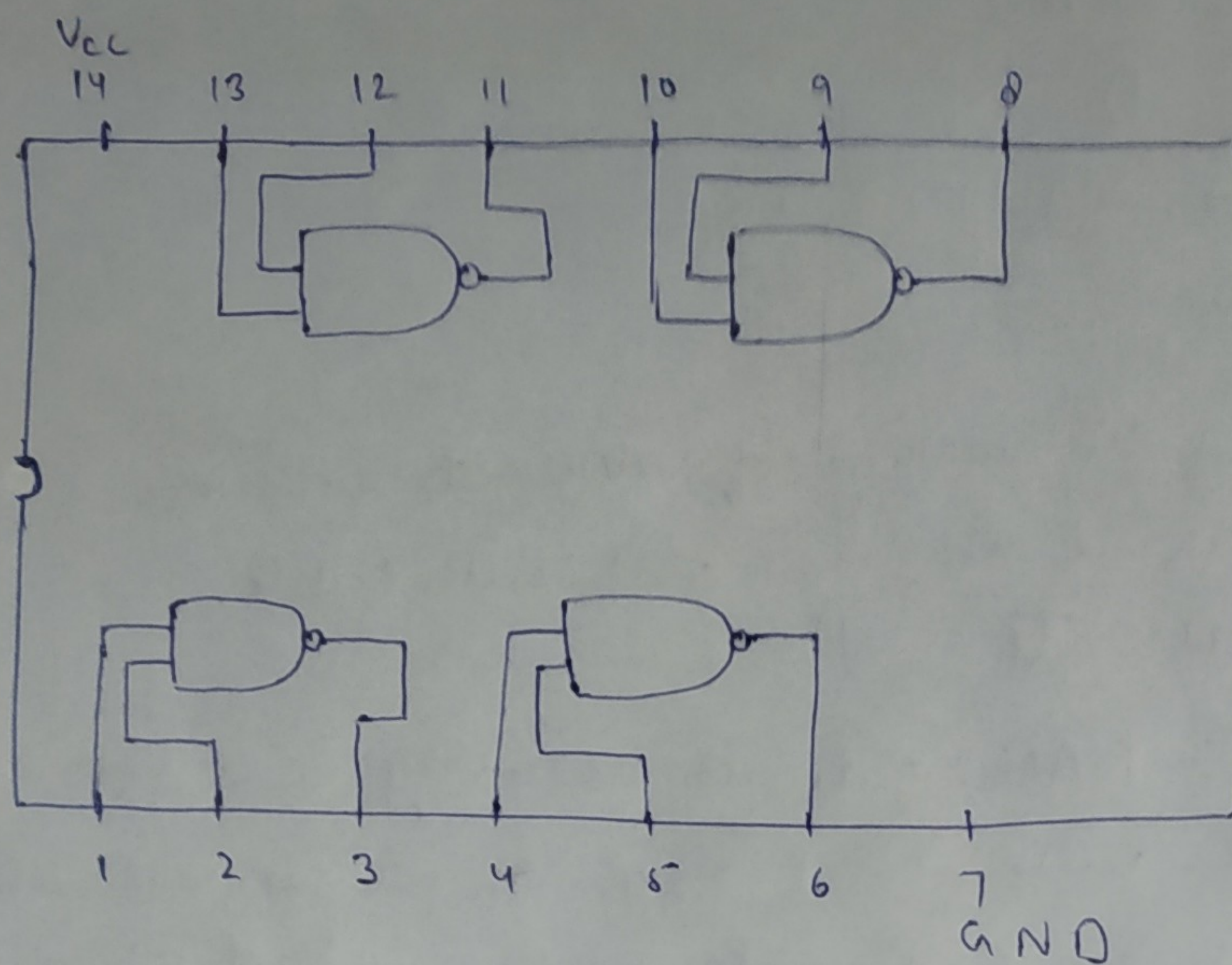
~~NAND Gate~~ :- NAND gate is actually a series of AND gate with NOT gate. If we connect the output of an AND gate to the input of a NOT gate, this combination will work as NOT-AND or NAND gate. Its output is 1 when any or all inputs are 0, otherwise output is 1.

Truth Table

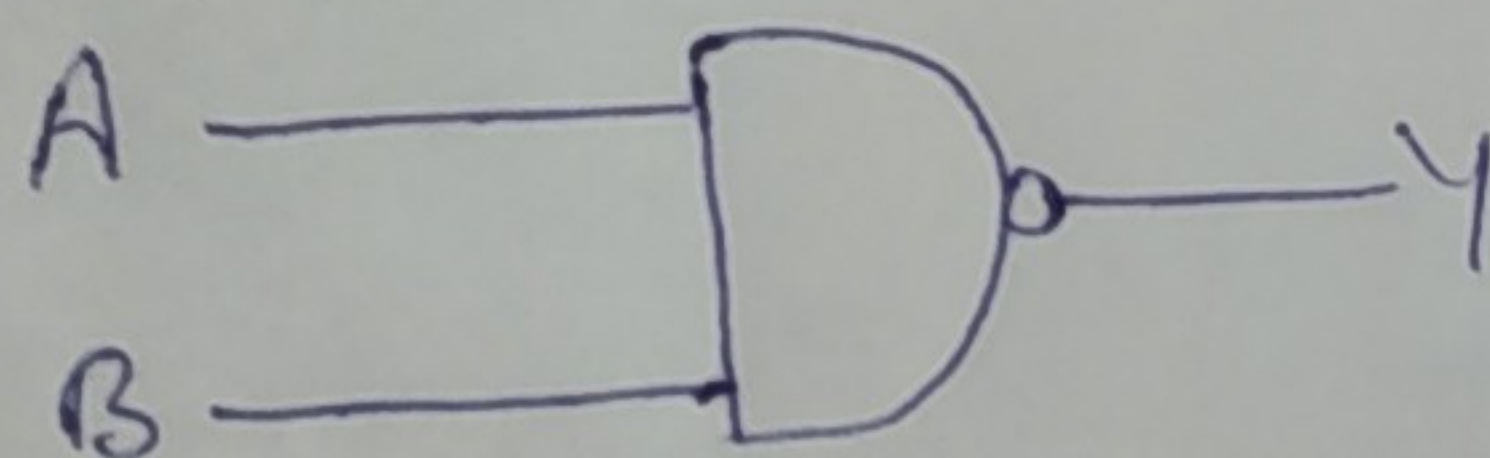
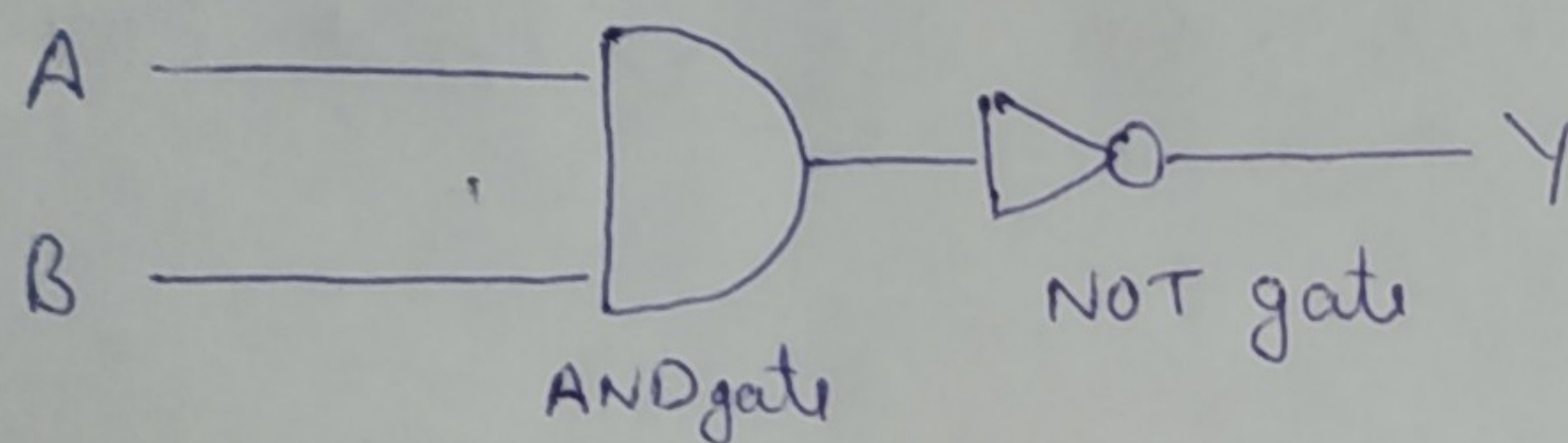
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

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

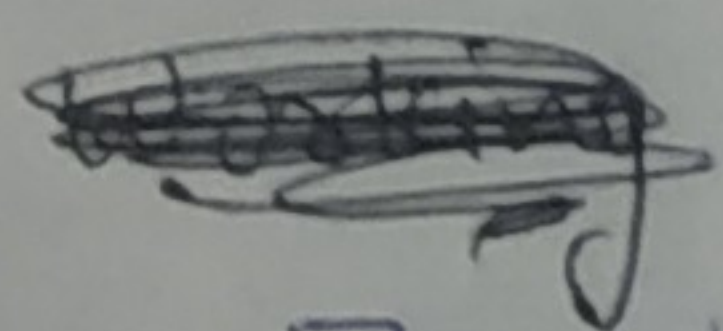
circuit diagram



IC 7400



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



The NAND gate performs the logical NAND operation.
It is also known as universal gate.