Vaibhav Bhatt
21711079
Roll No - 64
Section - B
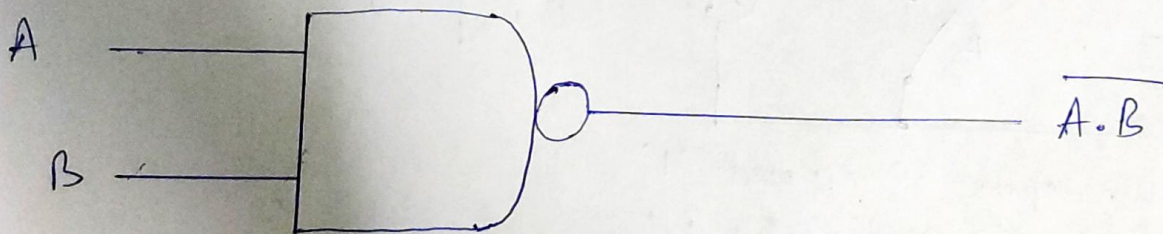PV - 21010243

Q1→

Answer→ A NAND get is a logic gate that producers 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. ~~an~~ Just like an AND gate, a NAND gate may have any number of input probes but only one output probe.

The NAND gate performs the logical NAND operation. NAND gate are known as universal gates, which means they are a type of logical gate.
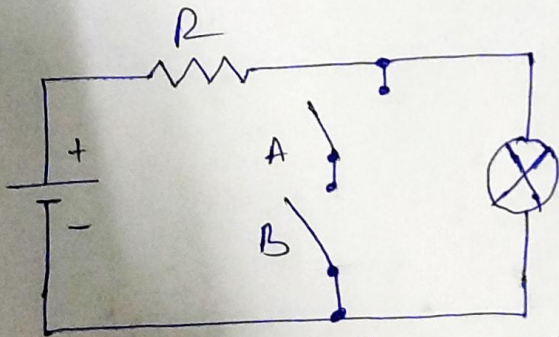
A

B

$\overline{A \cdot B}$

NAND ~~Gay~~ Gate.

Truth table

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

A NAND gate is also referred to as a universal logic gate as all the binary operations can be realized by using only NAND gates.

Lamp - ON = "1"

Lamp - OFF - "0"

Switch A - open = "0", closed = "1"

Switch B - open = "0", closed = "1"