AKSHAY PANDEY   ROLL NO:-02'DI   UNIVERSITY → 2101018
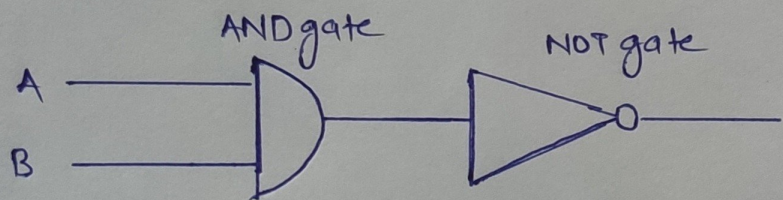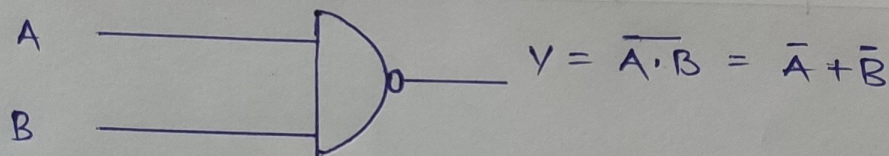   ROLL NO

Ans:- <u>Working of NAND GATE</u> :- A NAND gate is a logic gate which produces an output which is false only if all it's input are true; thus its output is complement to that of an AND gate.

A low (0) output results only if all the inputs to the gate are high (1). If any input is low (0), a high (1) output results.

<u>CIRCUIT DIAGRAM</u> :-

A ———|
      |)o——— $Y = \overline{A \cdot B} = \overline{A} + \overline{B}$
B ———|

AND gate   NOT gate

A ———|
      |)——|>o———
B ———|

NOT gate works as an invertor

by using AND gate And NOT gate we can implement NAND gate.

<u>TRUTH TABLE OF NAND GATE</u> :-

P.T.O

TROTH TABLE OF NAND GATE

A	B	$\bar{A}$	$\bar{B}$	Y
0	0	1	1	1
0	1	1	0	1
1	0	0	1	1
1	1	0	0	0