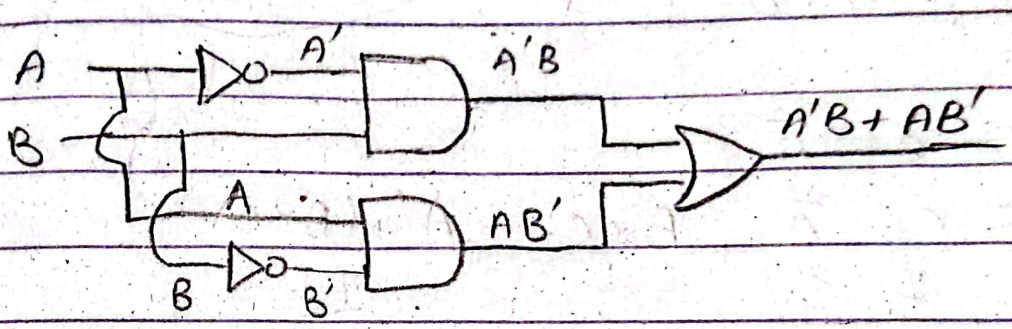
(class fourth) only quiz, no notes

QUIZ NO: 02

Q1 Implement the Boolean function $F = A'B + AB'$ using only NAND gates.

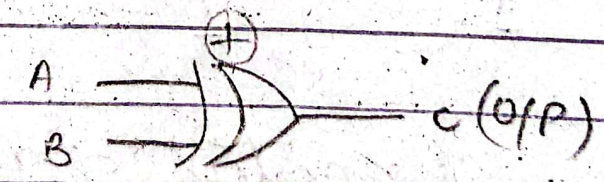
$F = A' \cdot B + A \cdot B'$



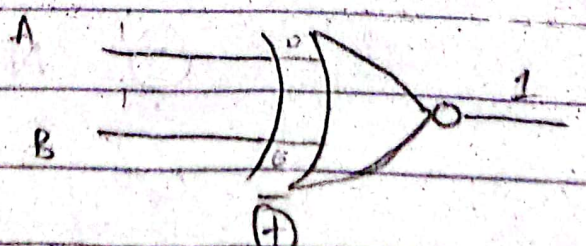
Q2 Implemend the Boolean function $F = A \text{ XOR } B$ using only NOR gate

$F = A \text{ XOR } B$

By using NOR Gate



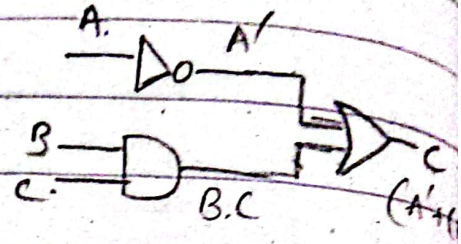
Convert X-NOR



Ans

Qs Draw the truth table for the following Boolean Expression $A' + (B \times C)$

$$F = A' + (B \times C)$$



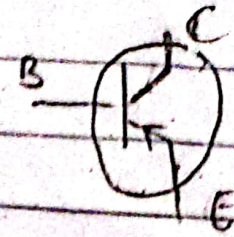
TRUTH TABLE

~~A B C $\bar{A}$~~

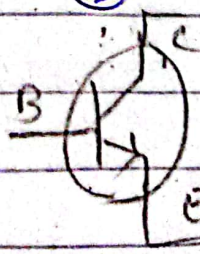
A	B	C	$\bar{A}$	B×C	$A' + (B \times C)$
0	0	0	1	0	1
0	0	1	1	0	1
0	1	0	1	0	1
0	1	1	1	1	1
1	0	0	0	0	0
1	0	1	0	0	0
1	1	0	0	0	0
1	1	1	0	1	1

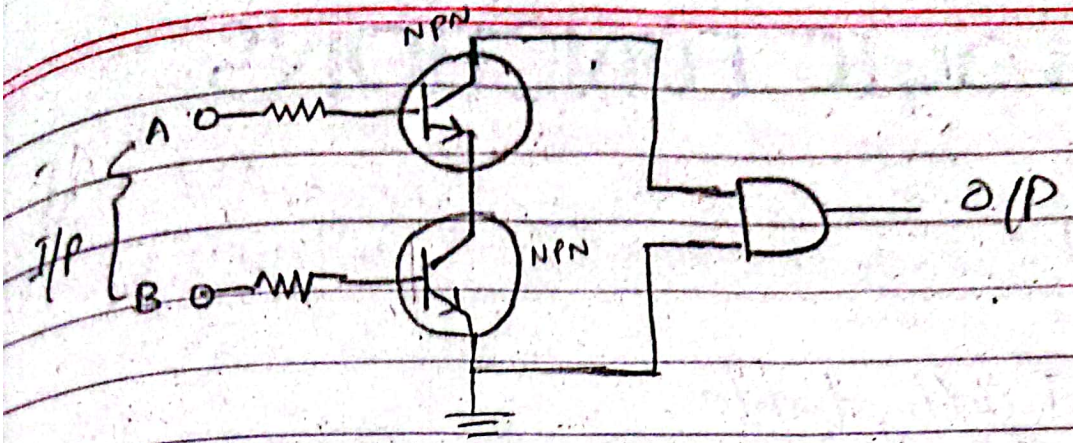
Qs Draw the schematic figures for a two input AND gate using transi

① PNP



② NPN





Q4 Implement the Boolean function F = AB+C using multiplexer.

میں نے اس میں صرف logic gates بنائے ہیں۔