

Task-14

~~Ques~~

3-input XOR using 6 NAND Gate

TT

A	B	Cin	Sum	Cost
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

K-map

A \ C	00	01	11	10
Sum = 0	0	1	0	1
1	1	0	1	0

$$\text{Sum} = \bar{A}\bar{B}C + \bar{A}B\bar{C} + A\bar{B}\bar{C} + ABC$$

Carry =

A \ C	00	01	11	10
0	0	0	1	0
1	0	1	1	1

$$\text{Cost} = A \cdot B + B \cdot \text{Cin} + \text{Cin} \cdot A$$

Date: ___/___/___
CTEA, Mysore

