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Roll # 2929.

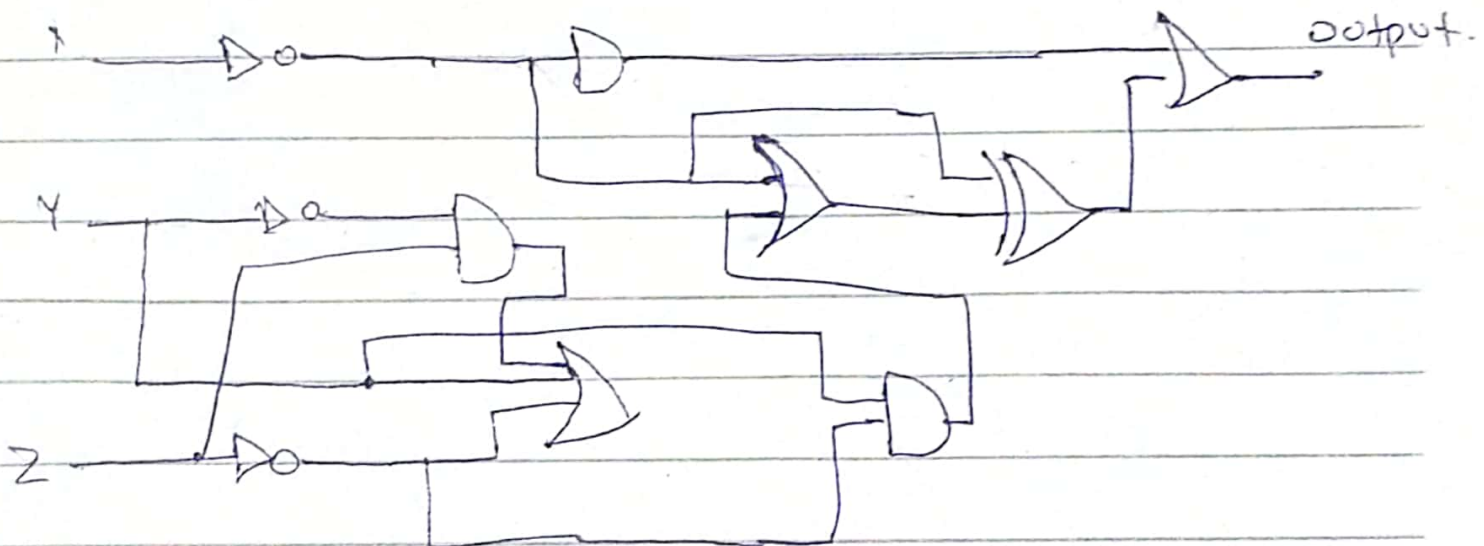
Reg # 2019-GC0F-D10403

QUESTION NO :- 01

$$F = x'y'z + x'y + x'z' + (x' + yz') \oplus x'$$

$$\bar{F} = x'(y'z + y + z') + (x' + yz') \oplus x'$$

(a)



x	y ₂			
	00	01	11	10
0		1		1
1	1		1	1

$$T_1 = x'y'z + xz' + xy + yz'$$

Q

x	y ₂			
	00	01	11	10
0	1		1	1
1		1	1	1

$$T_2 = x'z' + y + xz$$

QUESTION NO:- 02

(a)

X	Y	Z	T ₁	T ₂
0	0	0	0	1
0	0	1	1	0
0	1	0	1	1
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	1	1
1	1	1	1	1

(b)

Boolean Function

$$T_1 = m_1 + m_2 + m_4 + m_6 + m_7$$

$$= x'y'z + x'yz' + xy'z' + y'yz' + xyz$$

$$T_2 = m_0 + m_2 + m_3 + m_5 + m_6 + m_7$$

$$= x'y'z' + x'yz' + x'yz + xy'z + xy'z' + xyz$$

X	Y	Z	$XY'Z$	$X'YZ$	$X'Y'Z$	$XY'Z'$	$X'YZ'$	F
0	0	0	0	0	1	1	0	1
0	0	1	1	0	0	1	0	1
0	1	0	0	1	1	1	0	1
0	1	1	0	1	0	1	0	1
1	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0
1	1	0	0	0	0	0	1	1
1	1	1	0	0	0	0	0	0