Diego A. Méndez 19673
Sección 22

Laboratorio #02

01 $Y = (\bar{A} \cdot B) + (A \cdot \bar{B})$

A	B	$\bar{A}$	$\bar{B}$	$\bar{A} \cdot B$	$A \cdot \bar{B}$	$(\bar{A} \cdot B) + (A \cdot \bar{B})$
0	1	1	0	1	0	1
0	0	1	1	0	0	0
1	1	0	0	0	0	0
1	0	0	1	0	1	1

Y
1
0
0
1

$Y = (\bar{A} \cdot \bar{B}) + (A \cdot B)$

A	B	$\bar{A}$	$\bar{B}$	$\bar{A} \cdot \bar{B}$	$A \cdot B$	$(\bar{A} \cdot \bar{B}) + (A \cdot B)$
0	1	1	0	0	0	0
0	0	1	1	1	0	1
1	1	0	0	0	1	1
1	0	0	1	0	0	0

Y
0
1
1
0

02 Foto

03 Es una compuerta NOT debido a que cuando entra LOW sale High y viceversa

(0, 2.7)V
(3, 5)V

(0, 1.5)V
(4, 5)V

V_{IL} 2.7V V_{OL} = 1.5V
V_{IH} 3V V_{OH} = 4V

NMH = 1V
NML = 1.2V

NMH = 1V
NML = 1.2V

Q4.

$(A \cdot B) + \overline{(C+D)} = Y_1$ $\quad Y_1 = (A \cdot B) + \overline{(C+D)}$

$\overline{(C+D)} \oplus \overline{(E \cdot F)} = Y_2$ $\quad Y_2 = \overline{(C+D)} \oplus \overline{(E \cdot F)}$

Q5 $(A \cdot C \cdot D)$

$(A \cdot C \cdot D) \oplus \bar{B}$

$\bar{B}$

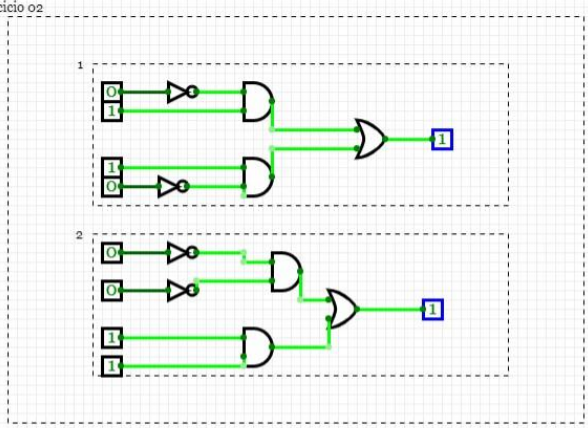
$Y_1 = \Big(\overline{[(A \cdot C \cdot D) \oplus \bar{B}]} \oplus \overline{[(A+C) + \bar{B} + (A \cdot C \cdot D \oplus \bar{B})]} \Big)$

$[(A \cdot C \cdot D) \oplus \bar{B}] \oplus [(A+C) + \bar{B} + (A \cdot C \cdot D \oplus \bar{B})]$

$(A+C)$ $\quad (A+C) + \bar{B} + (A \cdot C \cdot D \oplus \bar{B})$

A	B	C	D	$\bar{B}$	$(AC \cdot D)$	$(A'+C)$	$(A \cdot C \cdot D \oplus \bar{B})$	$(A+C)+\bar{B}+(A \cdot C \cdot D \oplus \bar{B})'$	$[(AC \cdot D \oplus \bar{B}] \oplus [(A+C)+\bar{B}$
1	1	1	1	0	1	1	1	1	1
1	1	1	0	0	0	1	0	1	0
1	1	0	1	0	0	1	0	1	0
1	1	0	0	0	0	1	0	1	0
1	0	1	1	1	1	1	0	1	0
1	0	1	0	1	0	1	1	1	1
1	0	0	1	1	0	1	1	1	1
1	0	0	0	1	0	1	1	1	1
0	1	1	1	0	0	1	0	1	0
0	1	1	0	0	0	1	0	1	0
0	1	0	1	0	0	0	0	0	1
0	1	0	0	0	0	0	0	0	1
0	0	1	1	1	0	1	1	1	1
0	0	1	0	1	0	1	1	1	1
0	0	0	1	1	0	0	1	1	1
0	0	0	0	1	0	0	1	1	1

Ejercicio 02



Ejercicio 6