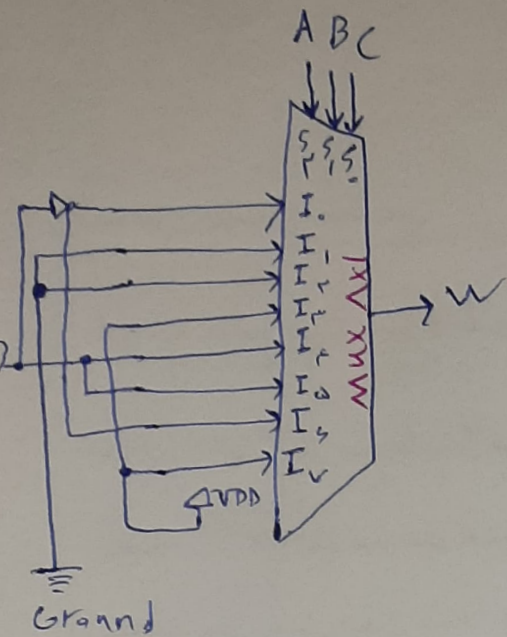


عمر خان محمودی
۹۹۴۶۳۱۴۹
کوئٹہ سٹوڈنٹس سوسائٹی

۱- الف



ABCD	W
0000	$D' = 1$
0001	$D' = 0$
0010	0
0011	0
0100	0
0101	0
0110	1
0111	1
1000	$D = 0$
1001	$D = 1$
1010	$D = 0$
1011	$D = 1$
1100	$D' = 1$
1101	$D' = 0$
1110	1
1111	1

$$W = \sum m(0, 4, 7, 9, 11, 12, 14, 15)$$

AB \ CD	00	01	11	10
00	1			
01			1	1
11	1		1	1
10		1	1	

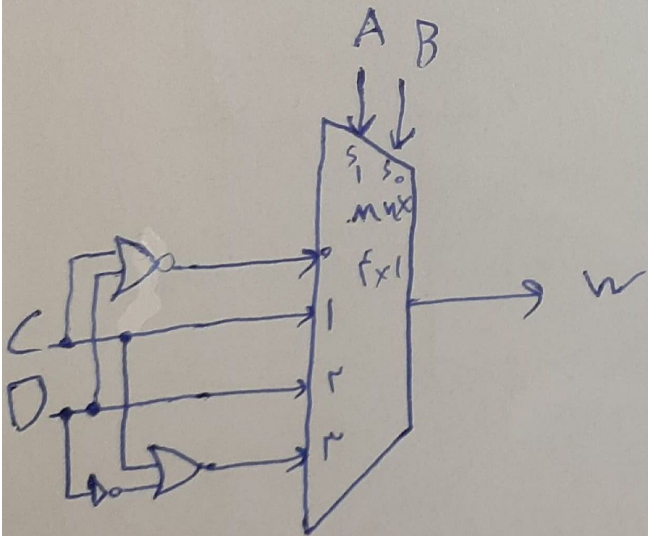
$$W = \bar{A}\bar{B}\bar{C}\bar{D} + AB\bar{D} + A\bar{B}D + BC$$

الف

$$w = \overline{A}\overline{B}\overline{C}\overline{D} + AB\overline{D} + A\overline{B}D + BC$$

1. 4 Maxterms (1, 2, 3, 4)

AB \ CD	00	01	10	11	
00	0	1	1	1	$\rightarrow \overline{(C+D)}$
01	1	0	1	1	$\rightarrow C$
10	1	1	0	1	$\rightarrow D$
11	1	1	1	0	$\rightarrow C + \overline{D}$



+10

$$W = \bar{A}\bar{B}\bar{C}\bar{D} + AB\bar{D} + BC + A\bar{B}D$$

Decoder 2×1
glue Logic

