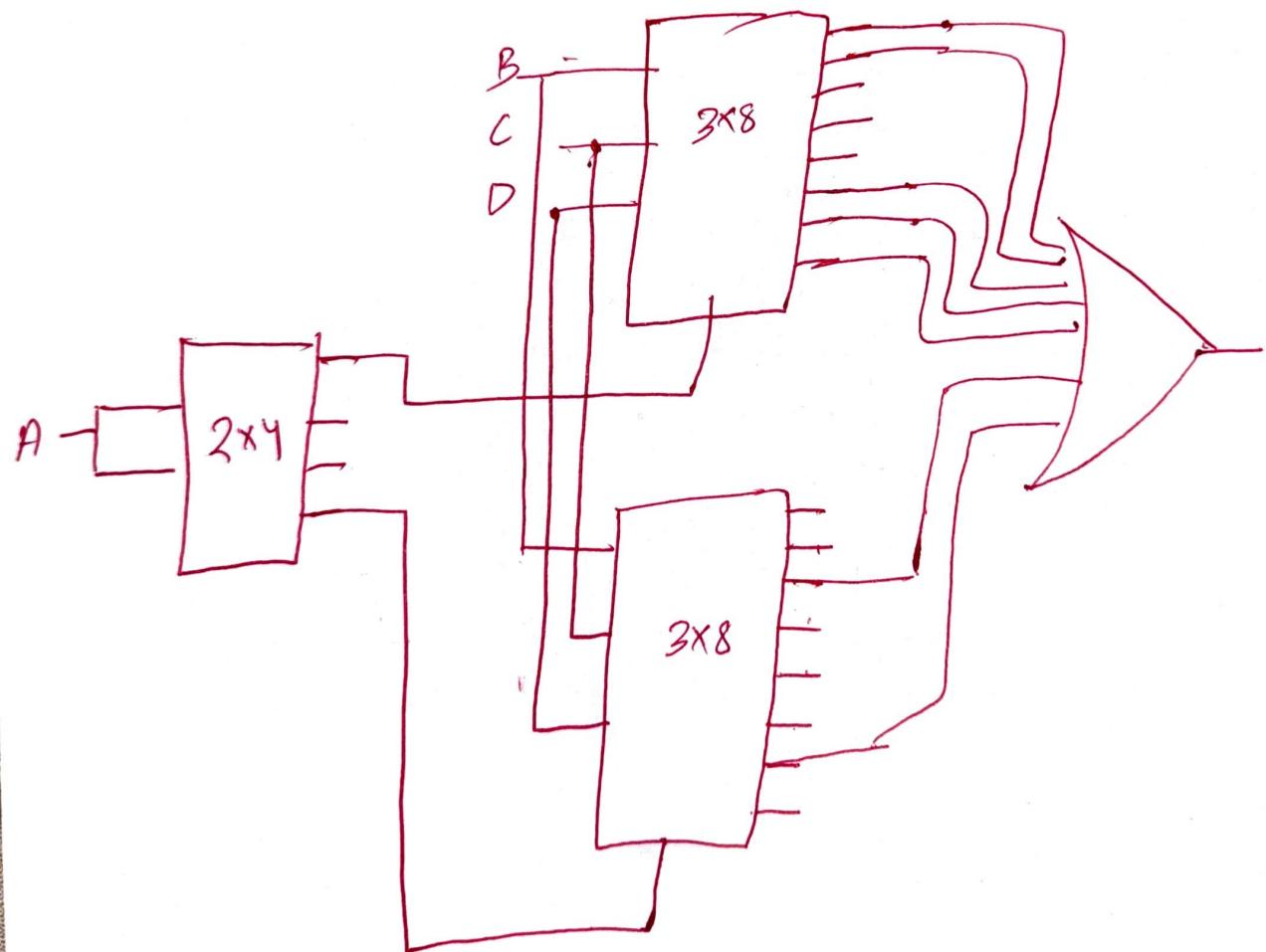


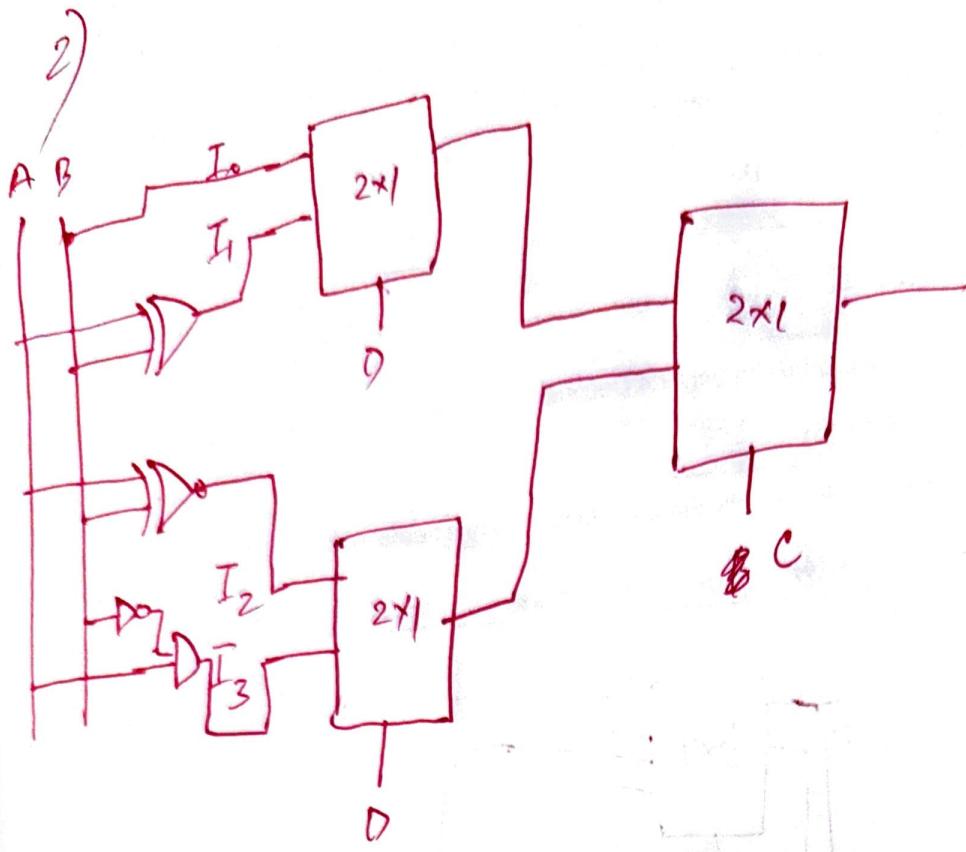
Name:

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Section:

1.CO3	Implement the following function using both 3:8 Decoder(s) and 2:4 Decoder(s). Use external gates if required. $F(A,B,C,D) = \Sigma (0,1,5,6,7,10,14)$	6
2.CO3	Build the following function using exactly three 2:1 Mux(s). Use external gates if required. $F(A,B,C,D) = \Sigma (2,4,5,9,11,12,14)$	9





	I_0	I_1	I_2	I_3
$A'B'$	0	1	(2)	3
$A'B$	4	(5)	6	(7)
AB'	8	(9)	10	(11)
AB	(12)	13	(14)	15

$$I_0 = A'B + AB = B$$

$$I_1 = A \oplus B$$

$$I_2 = A \odot B$$

$$I_3 = AB'$$