

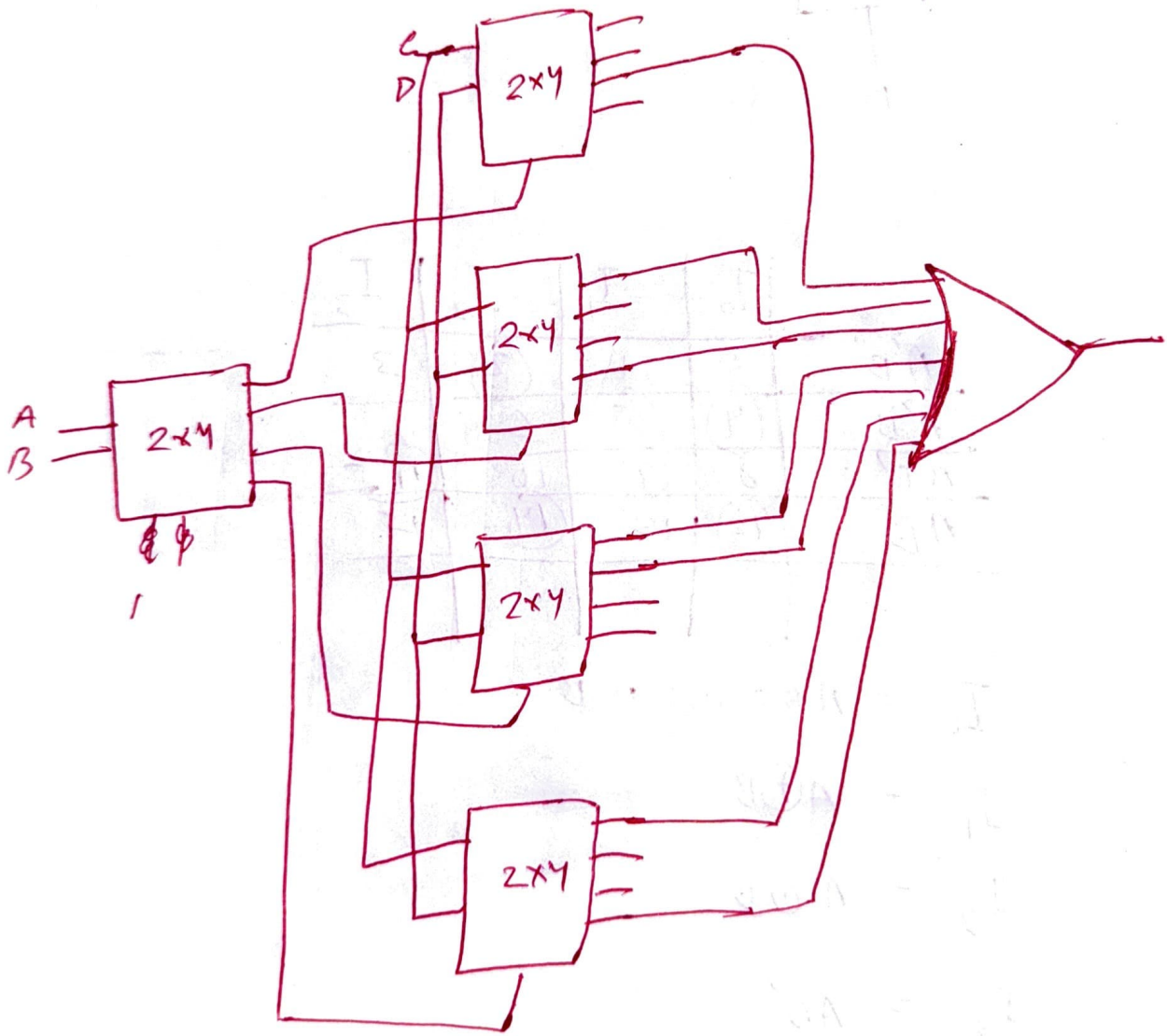


CSE260: Digital Logic Design
Summer 2025
Quiz - 03
Duration: 25 minutes

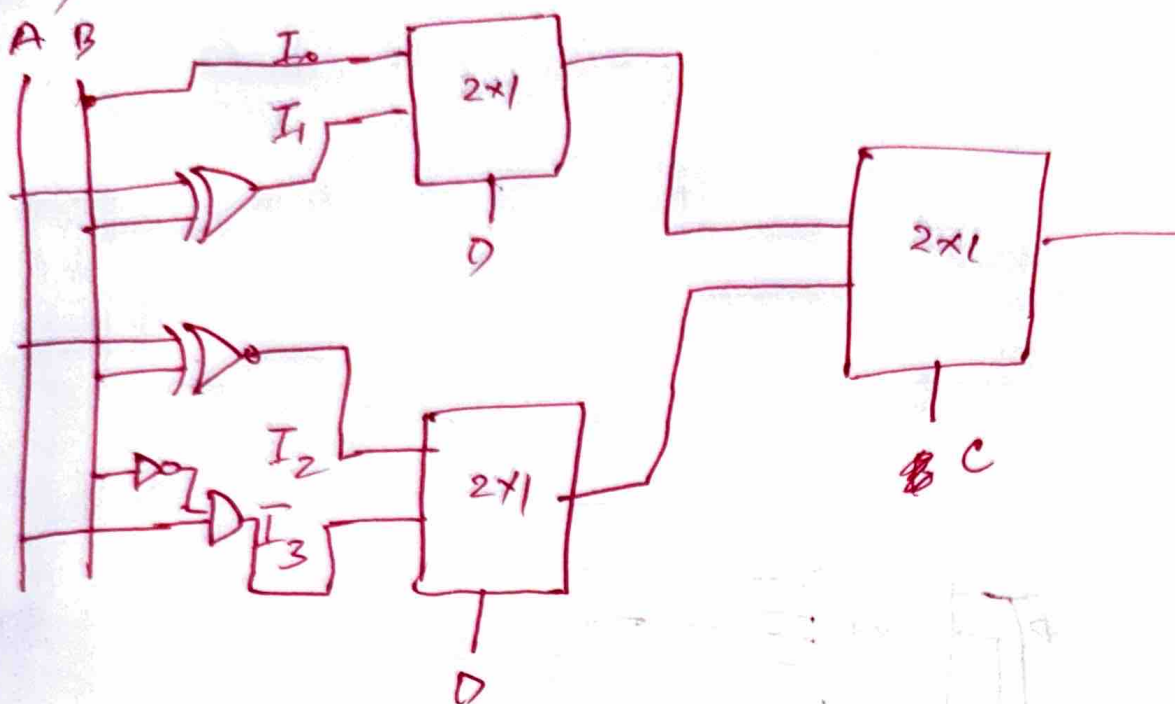
A

Name:	ID:	Section:
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1.CO3	Implement the following function using only 2:4 Decoders. Use external gates if required. $F(A,B,C,D) = \Sigma (2,4,7,8,9,12,15)$	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



2)



	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

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

$$I_1 = A \oplus B$$

$$I_2 = A \oplus B$$

$$I_3 = AB'$$