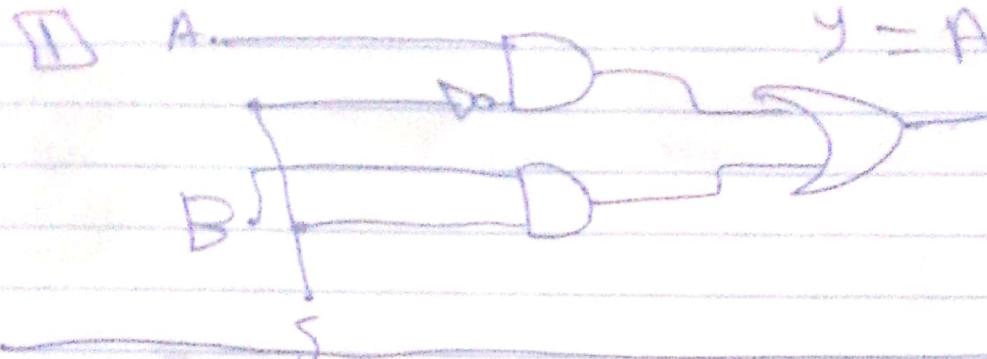


Page: Assignment 5 Digital logic

Q1

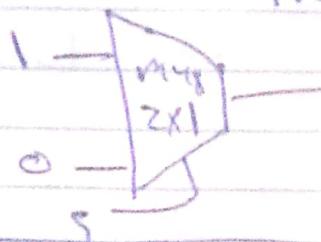
A.

$$Y = A\bar{S} + \bar{B}S$$

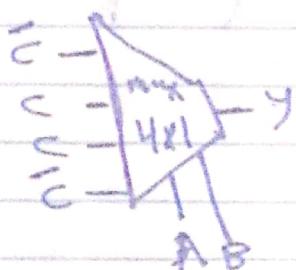


Q2

Not gate



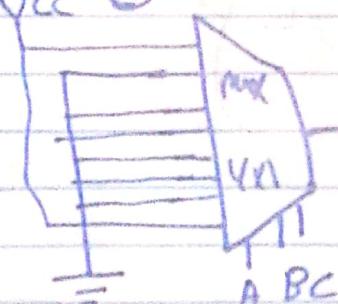
Q3



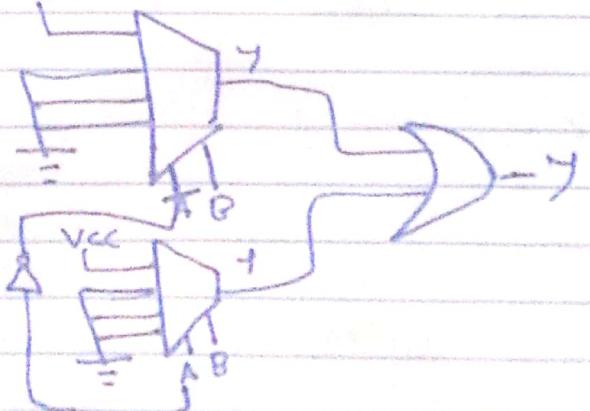
XOR gate

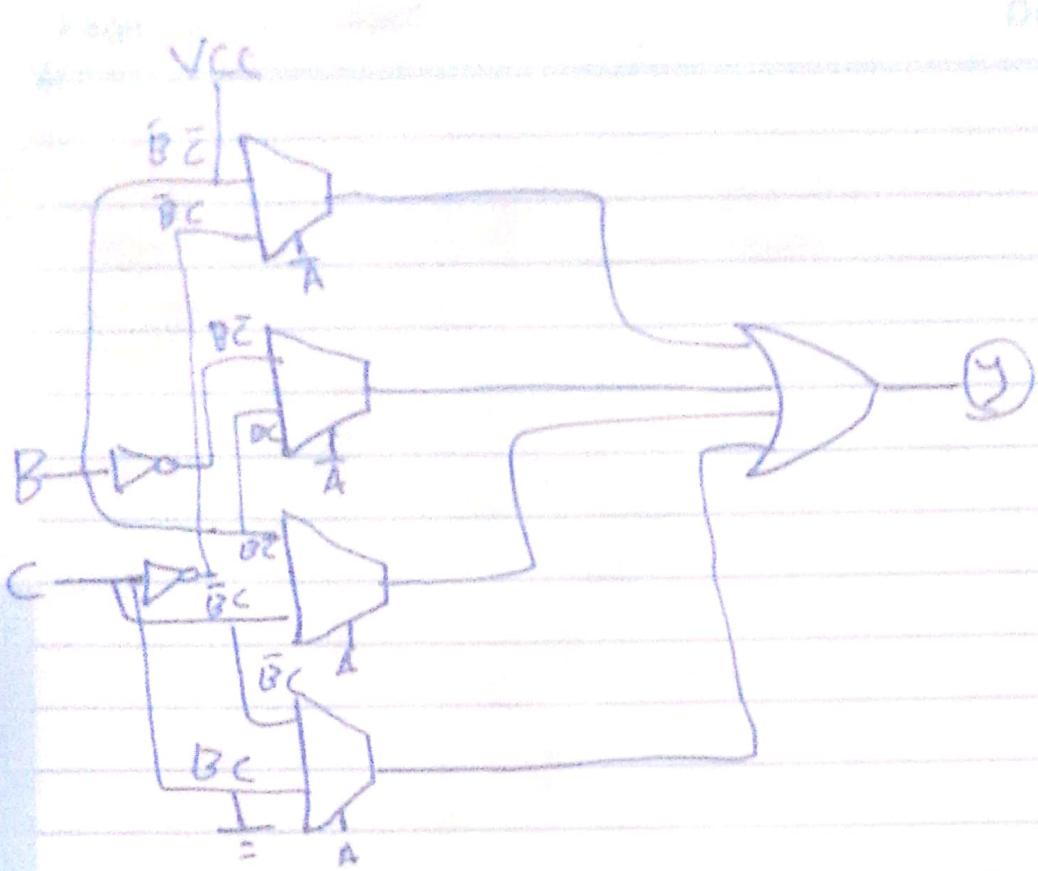
A	B	C	Y
0	0	0	0
0	0	1	1
0	1	0	1
0	1	1	0
1	0	0	0
1	0	1	1
1	1	0	1
1	1	1	0

Q4



$$Y = \bar{A}\bar{B}\bar{C} + \bar{A}\bar{B}C$$





5 ① $C'D + \bar{C}\bar{D} = \bar{C} \oplus \bar{D}$, ② $F = A + (\bar{C} \oplus \bar{D})$

6 ① $Y = \bar{C}\bar{D}$, ② $F = \bar{C}\bar{D}(A \oplus B) + \bar{A}\bar{B}$

7

