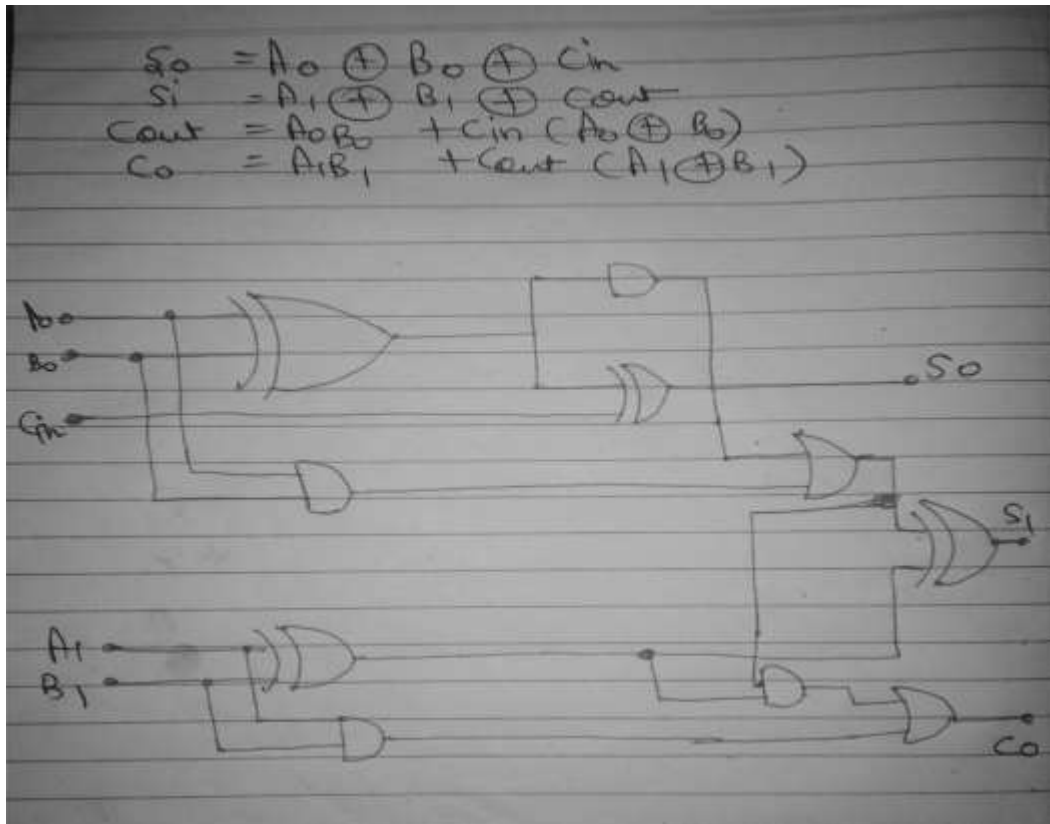


Ques 1-.Using only logic gates, design a 2-bit full adder with carry. Here is a partial truth table for the circuit.

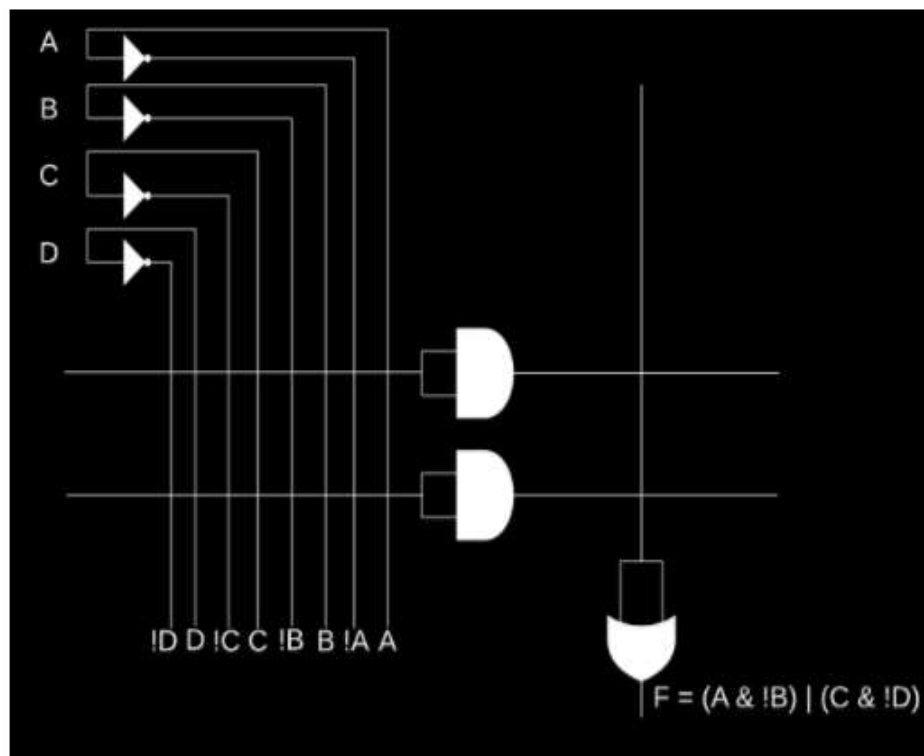
INPUTS					OUTPUTS		
A0	A1	B0	B1	Ci	S0	S1	Co
0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0
0	1	0	0	0	0	1	0
1	0	1	0	0	0	1	0
0	1	0	1	0	0	0	1
0	1	0	0	1	1	1	0
1	0	1	0	1	1	1	0
1	1	1	1	1	1	1	1

Where A and B are inputs, Ci is carry in, Si is output and Co is carry out. Draw a schematic showing the gate interconnections. Include either a boolean equation or an explanation of your design that matches the schematic you submit.

Ans-1:-



2. Show how the logic equation $(A \text{ AND NOT}(B)) \text{ OR } (C \text{ AND NOT}(D))$ can be implemented using the following:



Ans-2

RAM CONTENTS				
ADDRESS				OUTPUT Data
A	B	C	D	F
0	0	0	0	0
0	0	0	1	0
0	0	1	0	1
0	0	1	1	0
0	1	0	0	0
0	1	0	1	0
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	0
1	1	0	1	0
1	1	1	0	1
1	1	1	1	0

The Above Table is the Possible Solution for The Given Equation.

