

PART A Practical-05

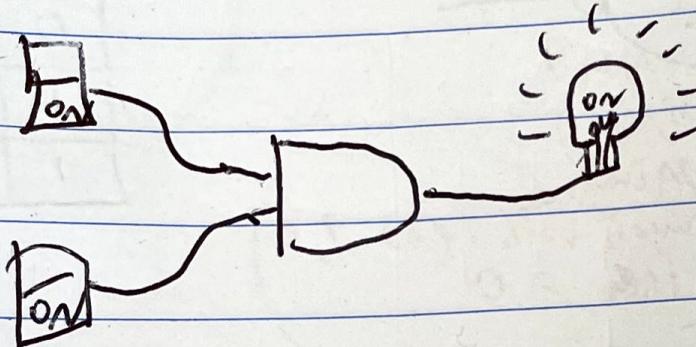
2.

Input &

A	B	And	OR	XOR	NAND	NOR
0	0	0	0	0	1	1
0	1	0	1	1	1	0
1	0	0	1	1	1	0
1	1	1	1	0	0	0

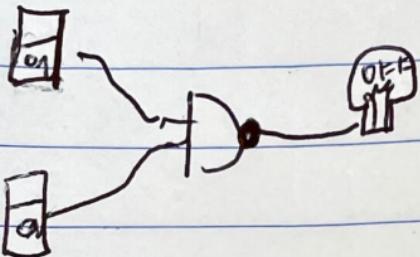
gate symbol	\Rightarrow	\Rightarrow	\oplus	\Rightarrow	\Rightarrow
FUNCTIONAL NOTATION	\wedge	\vee	\oplus	\uparrow	\downarrow

2



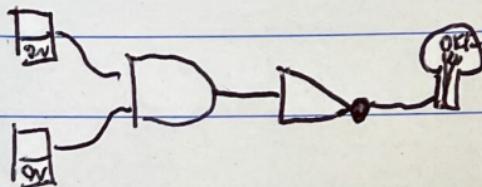
A	B	$x(\text{output})$
0	0	0
1	0	0
0	1	0
1	1	1

Part B
1.



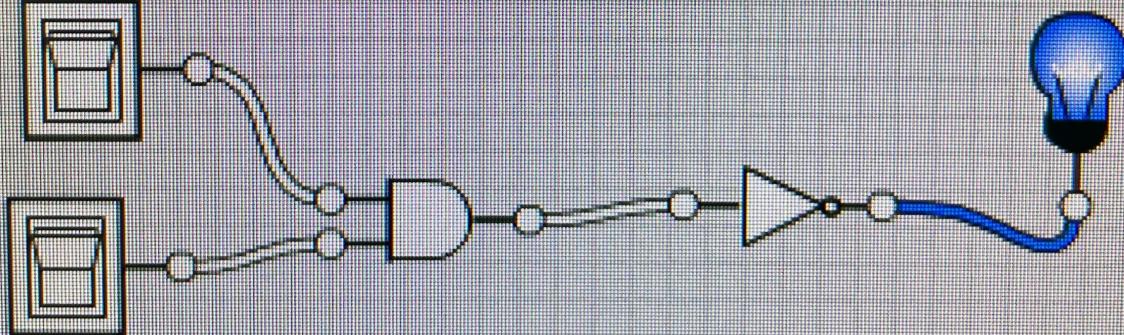
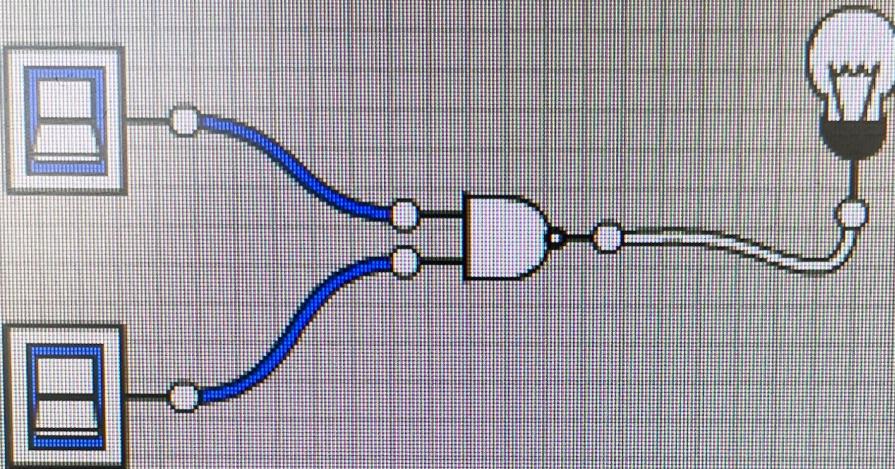
NAND

A	B	X
0	0	1
1	0	1
0	1	1
0	0	0

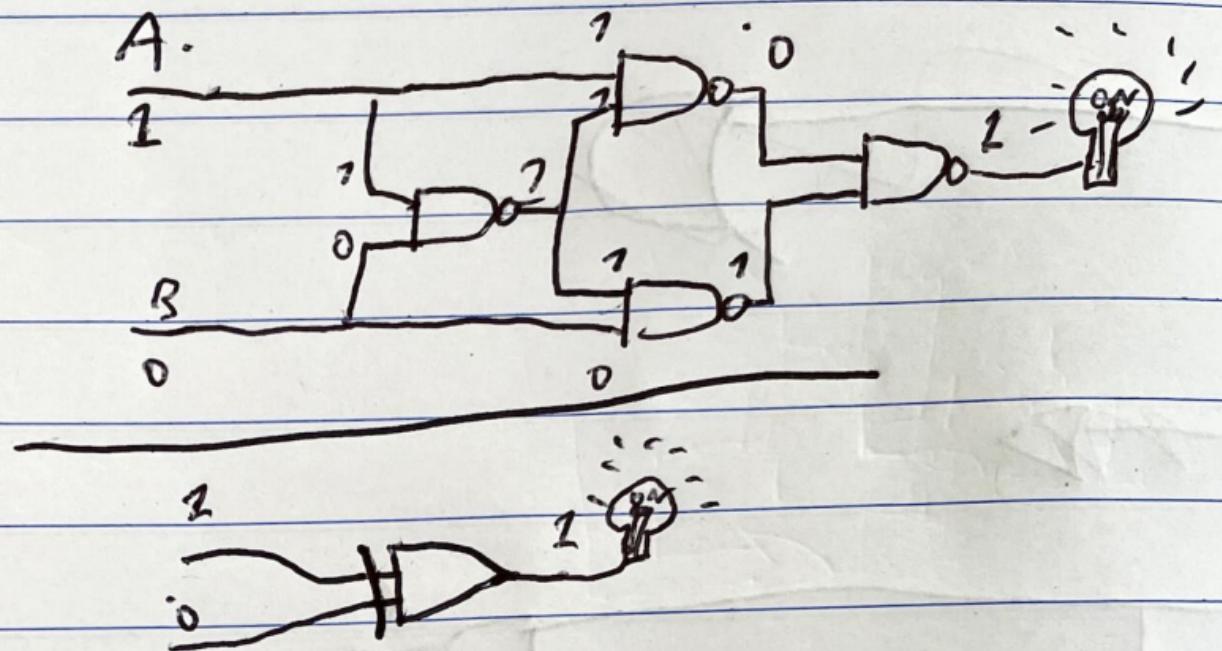


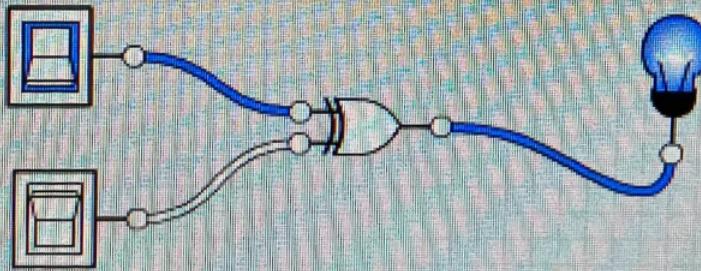
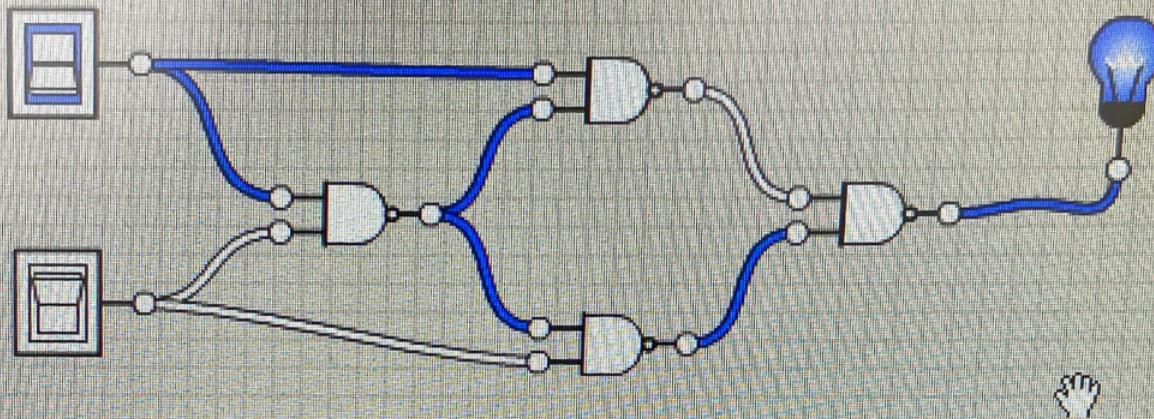
AND and NOT

A	B	X
0	0	1
1	0	1
0	1	1
0	0	0

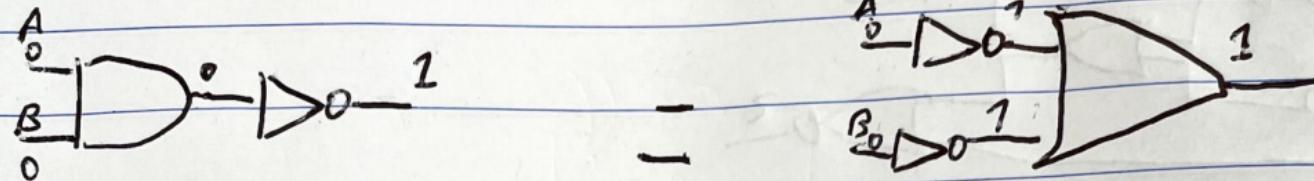


2.	A	B	X
	0	0	0
	0	1	1
	1	0	1
	1	1	0





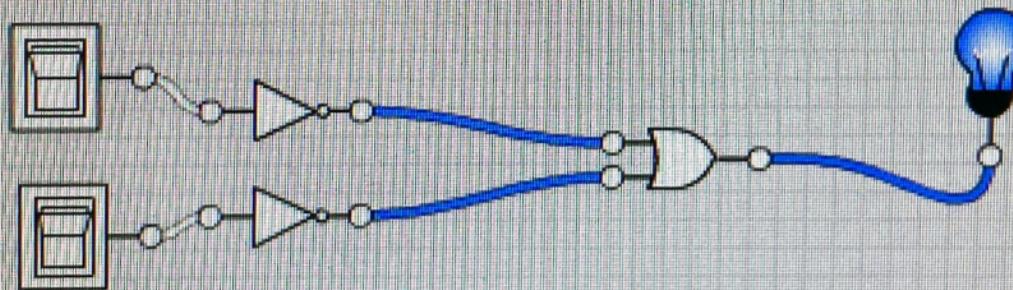
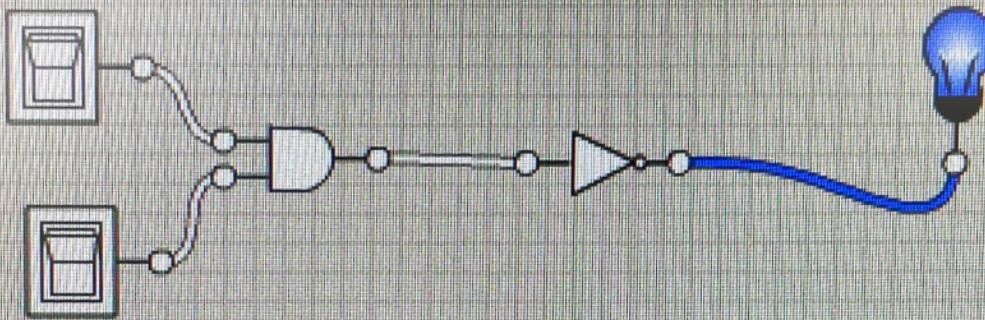
$$3. \quad \neg(A \wedge B) = \neg A \vee \neg B.$$


 $\neg(A \wedge B)$

A	B	X
0	0	1
0	1	1
1	0	1
1	1	0

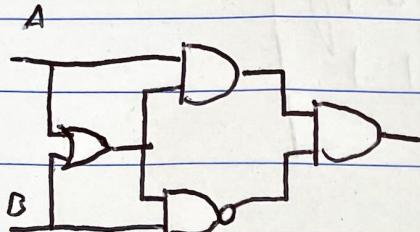
 $\neg A \vee \neg B$

A	B	X
0	0	1
0	1	1
1	0	1
1	1	0



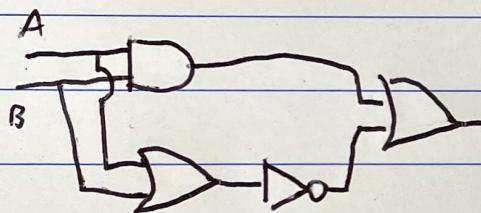
Part C

1.

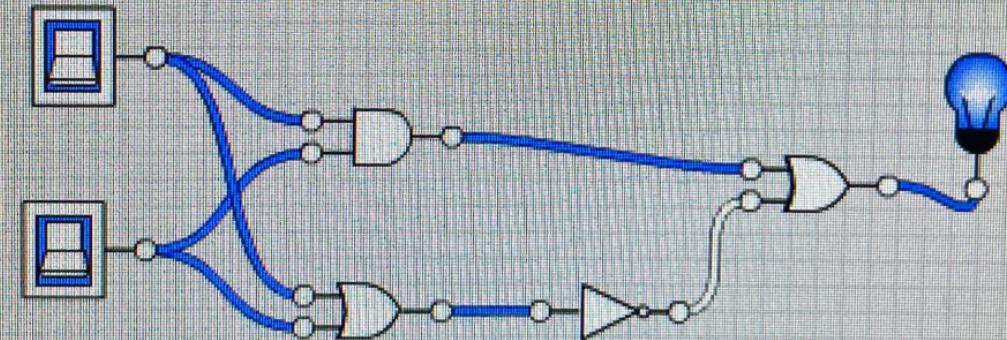
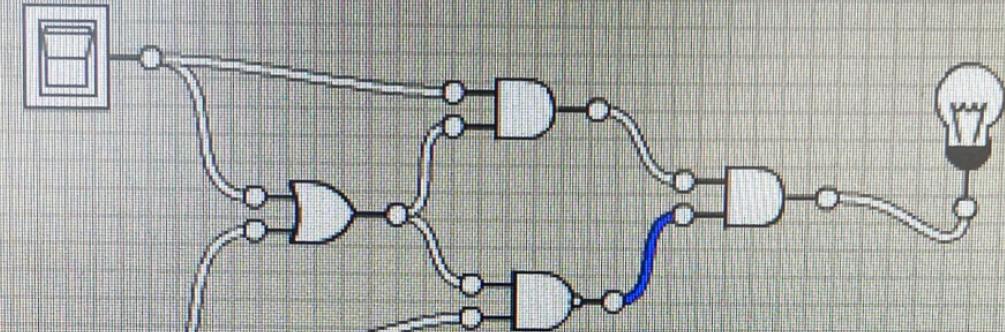


A	B	X
0	0	0
1	0	1
0	1	0
1	1	0

2.



A	B	X
0	0	1
1	0	0
0	1	0
1	1	1



	A	B	C	Y	X	X	Z
3.	0	0	0	0	1	1	0
	0	0	0	1	1	1	0
	0	0	1	0	0	0	1
	0	0	1	1	0	0	0
	0	1	0	0	0	0	1
	0	1	0	1	0	0	0
	0	1	1	0	0	0	1
	0	1	1	1	0	0	0
	1	0	0	0	1	1	0
	1	0	0	1	1	1	0
	1	0	1	0	1	0	1
	1	0	1	1	1	0	0
	1	1	0	0	1	0	1
	1	1	0	1	1	0	0
	1	1	1	0	1	0	1
	1	1	1	1	1	0	0

