

LAB TASKSName Mohammad Yehya HayatiStudent ID 21K-3309Section PCS - 2G**LAB TASK # 01**

Implement the following Basic Logic AND logic – OR Logic and Inverter Circuit on logic trainer

LAB TASK# 02

Implement the following logic circuit on logic trainer, and write truth table in the space provided below:

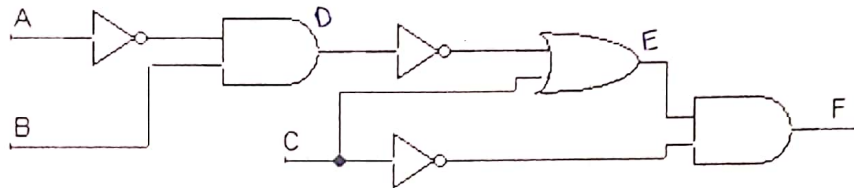


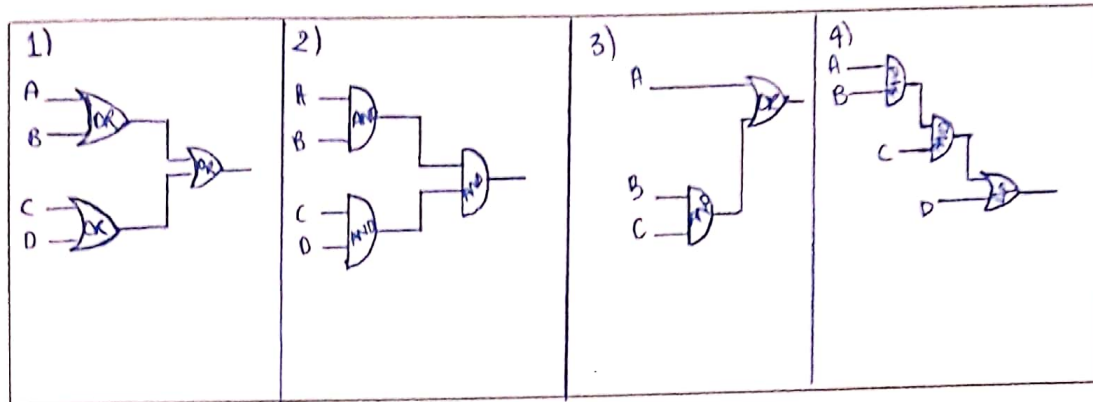
Figure 1: Combinational Circuit

A	B	C	\bar{A}	D	\bar{D}	E	\bar{C}		F
0	0	0	1	0	1	1	1		1
0	0	1	1	0	1	1	0		0
0	1	0	1	1	0	0	1		0
0	1	1	1	1	0	1	0		0
1	0	0	0	0	1	1	1		0
1	0	1	0	0	1	1	0		0
1	1	0	0	0	1	1	1		0
1	1	1	0	0	1	1	0		0

LAB TASK#3

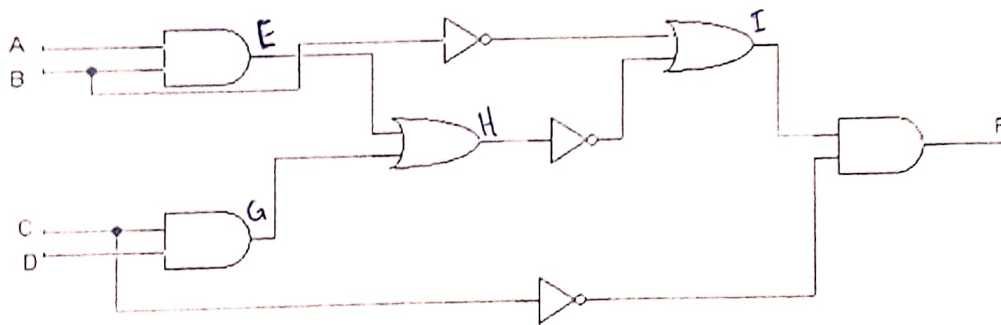
Draw the logic circuit represented by each of the following expression:

1. $A+B+C+D$
2. $ABCD$
3. $A+BC$
4. $ABC+D$



Exercise # 04

Implement the following logic circuit on logic trainer, and write truth table in the space provided below:



A	B	C	D	E	G	H	\bar{B}	\bar{C}	\bar{H}	\bar{I}		F
0	0	0	0	0	0	0	1	1	1	1		0
0	0	0	1	0	0	0	1	0	1	0		0
0	0	1	0	0	0	0	1	1	0	1		0
0	0	1	1	0	0	0	1	0	0	0		0
0	1	0	0	0	0	0	0	1	1	1		0
0	1	0	1	0	0	0	0	0	1	0		0
0	1	1	0	0	0	0	0	1	0	1		0
0	1	1	1	0	0	0	0	0	0	0		0
1	0	0	0	0	0	1	1	1	0	0		0
1	0	0	1	0	0	1	1	0	0	1		0
1	0	1	0	0	0	1	0	1	1	0		0
1	0	1	1	0	0	1	0	0	0	1		0
1	1	0	0	0	0	0	0	1	1	1		0
1	1	0	1	0	0	0	0	0	1	0		0
1	1	1	0	0	0	0	0	1	0	1		0
1	1	1	1	0	0	0	0	0	0	0		0