

9.LOGIC DESIGN USING BASIC GATES (IC'S) AND REALIZATION OF HALF ADDER AND FULL ADDER

Date submitted : 03-04-2022 05:25:25

USN : 01FE21BEC268
Name : PRASHANTH SHIVAKUMAR ASKI
Department : Physics
Roll Number : 1736
Subject Name : Applied Physics Lab (ES)

STEP 01 : AND GATE :

2 Input AND Gate

A	B	A, B
0	0	0
0	1	0
1	0	0
1	1	1

STEP 02 : OR GATE :

2 Input OR Gate

A	B	A, B
0	0	0
0	1	1
1	0	1
1	1	1

STEP 03 : NOT GATE :

2 Input NOT Gate

A	B
0	1
1	0

9.LOGIC DESIGN USING BASIC GATES (IC'S) AND REALIZATION OF HALF ADDER AND FULL ADDER

STEP 04 : HALF ADDER :

INPUT			OUT PUT
A	B	SUM	CARRY
0	0	0	0
0	1	1	0
1	0	1	0
1	1	1	1

STEP 05 : FULL ADDER :

INPUT			OUT PUT	
A	B	CIN	SUM	CARRY
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	1	0	0	1
1	1	1	1	1

STEP 06 : CONCLUSION :

Explored the function of the basic logic gate. Implemented them on a bread board with integrated circuits and ensured the results corresponded with the truth table of