

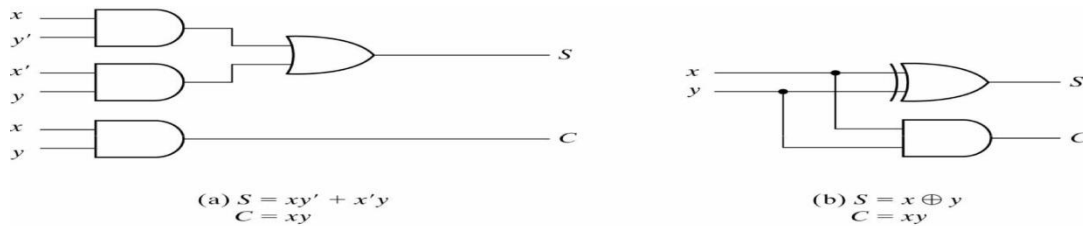
Experiment -6

Aim of the Experiment: To Construct A Half Adder Circuit And Logic Gates And Verify Its Truth Table.

Equipments and Components Required: Trainer kit, IC 7486, XOR gate, IC 7408, AND gate

Theory: Adder & Subtractor are the most important part of digital circuit & play an important role in different circuit in digital Electronics.

HALF ADDER: A digital circuit which adds two bits & gives o/p as sum & carry .



Implementation of Half-Adder

CIRCUIT DIAGRAM OF HALF ADDER:

Procedure:

1. Connect the circuit as shown in circuit DIA. Using ICS.
2. Make connection with source (5v) for high level i/p & for low level i/p.
3. For different i/p condition observe the o/p level & form observation table

Calculations: Truth Table of Half Adder

INPUT		OUTPUT	
A	B	SUM	CARRY
0	0	0	0
0	1	1	0
1	0	1	0
1	1	0	1

Result: Hence the half adder is performed successfully

