

## CSE 234 LOGIC CIRCUITS AND DESIGN LAB 1 REPORT

Student No: 161044119

### TRUTH TABLE

A	B	C	D	F
1	1	1	1	1
1	1	1	0	0
1	1	0	1	0
1	1	0	0	1
1	0	1	1	0
1	0	1	0	1
1	0	0	1	1
1	0	0	0	0
0	1	1	1	0
0	1	1	0	1
0	1	0	1	1
0	1	0	0	0
0	0	1	1	1
0	0	1	0	0
0	0	0	1	0
0	0	0	0	1

### SUM OF MINTERMS

$$F = ABCD + AB + AC + AD + BC + BD + CD + A'B'C'D'$$

$$= ABCD + AB(C+C')(D+D') + A(B+B')C(D+D') + A(B+B')(C+C')D + (A+A')BC(D+D') + (A+A')B(C+C')D + (A+A')(B+B')CD + A'B'C'D'$$

$$= \sum (0,3,5,6,9,10,12,15)$$

### SCREENSHOTS

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