



# Computer Architecture

## Tutorial - 04

Answer all questions.

01. Complete the following Karnaugh map, according to the values found in the given truth table:

A	B	C	D	Out
0	0	0	0	0
0	0	0	1	1
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	1
0	1	1	0	0
0	1	1	1	0
1	0	0	0	0
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	0
1	1	0	1	1
1	1	1	0	0
1	1	1	1	1

CD \ AB	00	01	11	10
00				
01				
11				
10				

02. Minimize the given Boolean Expression by using the four-variable K-Map.  $F(A, B, C, D) = \sum m(1, 5, 6, 12, 13, 14) + d(2, 4)$

