

American University of Beirut
Department of Electrical and Computer Engineering

EECE 320 – Digital Systems Design

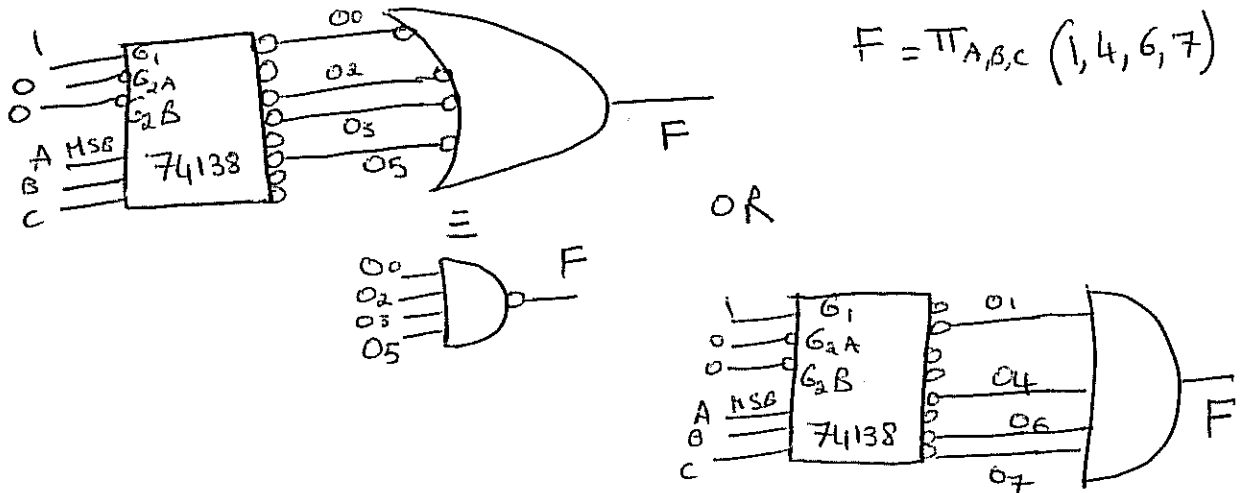
Test 4

24-11-2011

Solution

Design the following function $F = \sum_{A,B,C} (0,2,3,5)$ using

- 1) The 74138 3-to-8 decoder with active low outputs and one additional gate.



- 2) A 4-to-1 multiplexer. You may use one additional inverter.

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

