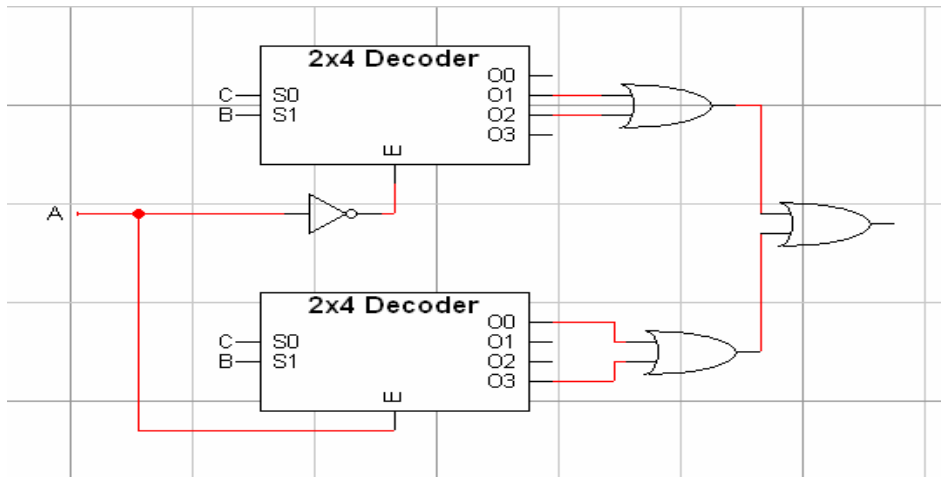**COE 202, Term 052**
Fundamentals of Computer Engineering

Quiz# 6

Date: Saturday, April 29, 2006

Q.1. Implement the following Boolean function F(A,B,C)= A B C+A B' C'+A' B C'+A' B' C
with the minimum possible gates using only:

(i) 2x4 decoders (with or without enable), 2-input OR gates and inverters.

(ii) 2x1 multiplexers and inverters.

F(A,B,C)= A [B C+ B' C'] + A' [B C'+ B' C]
Note that B C+ B' C' = [B C'+ B' C]'