

Name:

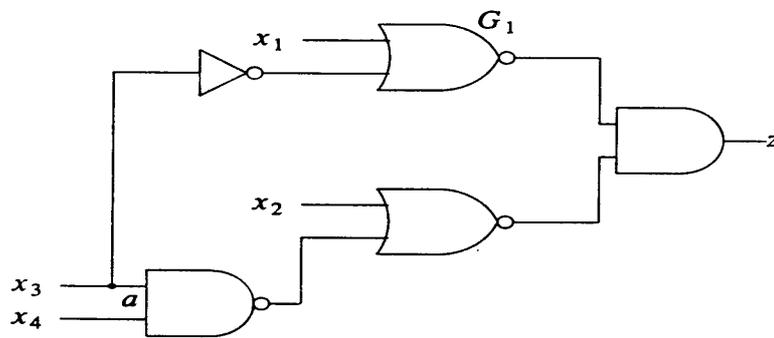
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COE 464, Term 042
Testing of Digital Circuits

Quiz# 1

Date: Sunday, Feb. 27, 2005

Q1. Consider the circuit given below:



- i. Find a Boolean expression for the set of all tests that detect the fault x_3 s-a-0.
- ii. Mark on the circuit all the possible **single stuck-at faults** using the symbol **s0** for stuck-at-0 faults and the symbol **s1** for stuck-at-1 faults.
- iii. Mark on the circuit all the single stuck-at faults that can be eliminated due to **Fault Equivalence** relation by drawing a circuit around them.
- iv. Mark on the circuit all the single stuck-at faults that can be eliminated due to **Fault Dominance** relation by drawing a square around them.