

Name:

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COE 464, Term 042
Testing of Digital Circuits
Quiz# 1 (Practice)

Date: Tuesday, Feb. 22, 2005

Q1. Consider the two-input XOR gate $C=A \oplus B$.

- i. Determine all the **single stuck-at faults** in this gate. Are there equivalent faults?
- ii. Find all the possible test vectors that detect the fault **A stuck-at-0**.
- iii. Find a minimum complete detection test set for all the faults in this gate.
- iv. Find a minimum complete location test set for all the faults in this gate. Show the **fault dictionary**.