Name: **Id#**
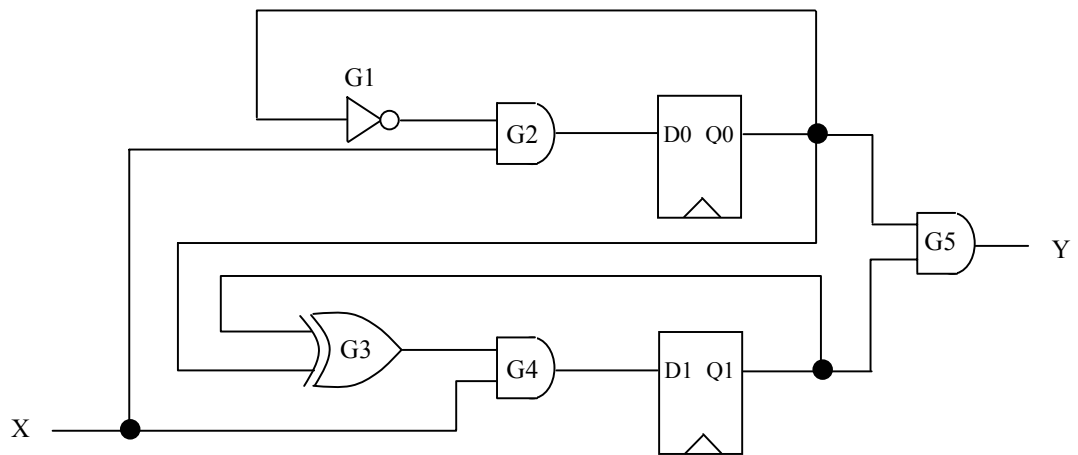
COE 464, Term 042

Testing of Digital Circuits

Quiz# 2

Date: Tuesday, March 15, 2005

Q1. Consider the sequential circuit shown below, where Y is a primary output and X is a primary input:

i.   Show an iterative array model of **two time frames** for this circuit.

ii. Derive a test sequence for detecting the fault **Y s-a-0**.

iii. Consider the fault **X s-a-0.** Show the state tables of the fault-free and faulty machines. Is the fault detectable, strongly detectable, partially testable or redundant? Justify your answer.