

# CSE 556 Internetworking Fall Semester 2002

## Quiz No. 3

October 28, 2002

Time Allowed: 10 Minutes

Name: **SOLUTION**

Total: 40 Points (10 Points each)

**Question 1:** Which type of a switch is better in a noisy environment with many transmission errors per unit time, Store and Forward or Cut Through?

In a noisy environment with many transmission errors per unit time, a Store and Forward switch would be better than a Cut Through switch because the store and forward switch does not propagate errors occurring on one of its ports to the other ports.

**Question 2:** What parameter in a Spanning Tree Algorithm decides which bridge will be the Root Bridge?

The Bridge ID is used to decide which bridge will be the Root bridge. A priority value is first checked though. The bridge with the lowest priority value can become the Root bridge. However, because bridges are mostly used as plug-and-play devices so all the bridges on a network might have the same priority value (the default priority value set by the bridge manufacturer). For this reason the Bridge ID which is unique is used to decide which bridge will be the Root bridge of the spanning tree. Actually the priority value is a two-octet value just preceding the six-octet Bridge ID value in all configuration messages.

**Question 3:** When a bridge/switch starts the Spanning Tree Algorithm who does it consider to be the Root Bridge?

When a bridge/switch starts the spanning tree algorithm, it considers itself to be the Root bridge.

**Question 4:** Draw a picture showing the difference between “Collision Domain” and “Broadcast Domain”?

### LEGEND

- ..... Same collision domain
- - - - - Same broadcast domain

