CSE 473 – Introduction to Computer Networks

Jon Turner

Review Questions 16

Your Name:

Please print out this form (two-sided, if you can) and write your answers *legibly* in the spaces provided. If you can't write legibly, type.

1. Consider the figure on page 4 of the notes. Suppose that the routing tables at the switches are empty, and then a host connected to switch *C* sends a packet to a host connected to switch *F*. Assuming that the switches use the highlighted spanning tree, which switches would receive a copy of the packet sent by the host at *C*? If the host at *F* sends a reply, which switches would receive a copy of this packet?

2. Refer to the figure on page 5 of the notes. Suppose a host with MAC address bb:bb:bb:bb:bb:bb:bb at switch *B* wants to send an IP packet to a host with MAC address dd:dd:dd:dd:dd:dd:dd at switch *D*. Assume both hosts are in the VLAN with *id*=7. Show the complete contents of the Ethernet packet header, including the VLAN header.

3. Amazon offers a cloud-computing service, in which they effectively lease compute servers to multiple companies. Each such customer is sometimes referred to as a "tenant". Explain why it's important for the network traffic associated with different tenants to be isolated from one another. What do you think "isolation" means in this context? What do you think it "should" mean?