Quiz 9: November 24 2015

Left Neighbor:	Right Neighbor:
This is a closed book quiz	
vspace.1in	

CE80N TA	Name:
CECOIT III	Traine:

1. (2 points) What are the steps to establish a TCP connection? You don't have to use the correct acronym if you explain colloquially what is up. A picture might help here.

Open Connection Close Connection

PC1 to PC2: SYN
PC2 to PC1: SYN+ACK
PC2 to PC1: FIN+ACK

PC1 to PC2: ACK PC1 to PC2: ACK

2. (2 points) Explain very briefly why it is that UDP can't perform congestion control and TCP can.

UDP does not have any handshaking protocols, while TCP does. TCP 3-way handshaking protocol aids congestion control, because it gets feedback from the recipient.

3. (2 points) Explain very briefly how TCP window size affects how many messages a server is willing to send before it receives an acknowledgement.

TCP has a set window size which allows only a certain amount of bits to be sent before requiring an acknowledgement. The window size can change in depending on capacity of network and recipient.

4. (4 points) Describe briefly what a NIC does when it gets an Ethernet packet that ultimately contains a UDP datagram. Make sure you use these words in your response: payload, Ethernet frame (or packet), IP address, port, application, ICMP. Use the other side of this page if you need more space.

NIC will decapsulate the Ethernet packet and look at layer 3 headers in its payload. NIC using the ICMP will look for error messages in the packet. Then it will decapsulate the IP datagram and look at its layer 4 headers in the payload. In the layer 4 headers will be the destination port for the data and the NIC will send the data to the CPU that will then send that data to the destination application.