COE 344 – Quiz#1

Name: _____

Q1. Compare and contrast between Connection-Oriented communication service and Connectionless communication service? ***State three principle characteristics for each***

Some of the principle characteristics of the connection-oriented service are:
- Two end-systems first "handshake" before either starts to send application data to the other.
- Provides reliable data transfer, i.e., all application data sent by one side of the connection arrives at the other side of the connection in order and without any gaps.
- Provides flow control, i.e., it makes sure that neither end of a connection overwhelms the buffers in the other end of the connection by sending to many packets to fast.
- Provides congestion control, i.e., regulates the amount of data that an application can send into the network, helping to prevent the Internet from entering a state of grid lock.

The principle characteristics of connectionless service are:

- No handshaking
- No guarantees of reliable data transfer
- No flow control or congestion control

Q2. The Internet is a network of networks. A major component is the "Access Network." **What is it? And explain why ADSL is better that HFC?**

- Access Network is the physical medium and network access technologies such as dial-up, ADSL, HFC that facilitate the interconnection between the network edge and access router.
- ADSL is better than HFC because ADSL supports higher data rate on the downlink. More, in ADSL, the channel between the end user and the telephone exchange is a dedicated channel while it is shared for HFC.

Q3. One of the features of the Internet is the "distributed application". What is it and give one real example.

- Distributed application is an application that runs on the Internet end systems to exchange data with each other. There many real examples such as web surfing, internet telephony, instant messaging, etc.