Elec 6861 – Higher Layer Telecommunication Protocols

Quiz #2

Note: Please answer each question to the best of your understanding. No additional information will be provided during the quiz. If you are caught copying or talking to another student during the quiz you will get nil for the whole quiz.

Ouestion 1

Give an example of transport protocols other UDP and TCP and for the protocol given as example, give an example of difference with UDP and an example of difference with TCP.

Question 2

Give two examples of design decisions made for DNS and give an example of requirement / design goal that is met by each design decision.

Question 3

How is data stored in an unstructured peer to peer overlay? Give an example of the advantages and an example of the disadvantages.

Question 4

What are the two key features IMAP offers and POP does not offer?

Question 5

Let us assume John and Mary have established a call. During the conversation Mary decides to transfer the call to Alice at Alice office number. When the call reaches Alice office number, it is answered by the Interactive Voice Response (IVR) of the office. The IVR then ask John to enter Alice extension. When the extension is entered the call finally goes to Alice who answers. Draw a sequence diagram with SIP messages starting from when Mary transfers the call to Alice office number to when a call is finally established between John and Alice. The following entities should appear on the diagram: John, Mary, IVR and Alice.

Ouestion 6

Give two examples of techniques that can be used to enhance the performance of Web servers.