**Chirgakumar solnaki**

**15035**

Answer:

Answer P3:

1. A circuit-switched network would be well suited to the application, because the application involves long sessions with predictable smooth bandwidth requirements. Since the transmission rate is known and not burst, bandwidth can be reserved for each application session without significant waste , also the overhead costs of setting up and tearing down connections are amortized over the lengthy duration of a typical application session.
2. No congestion control needed, since the sum of the application data rates is less than the capacities of each and every link. For the worst case, the bandwidth is still enough for all applications transmitting data in the same time over one or more network links, thus congestion is not needed.

Answer P5

1. The propagation speed is 100km/hr. and the travelling distance is 150 km also each tollbooth services a car at a rate of one car per 12 seconds.

There are 10 cares.

So the time taken by a car to travel 150km is

150km/100km/hr. = 1.5 hr. = 90 min

The overall tollbooths service time for 10 cars is 12\*3\*10 = 360 seconds = 6 min

Finally, the end to end time delay for 10 cars is 90 min + 6 min = 96 min.

1. For 8 cars, tollbooths service time should be 12\*3\*8= 288 seconds = 4.8 min

So the end to end time delay 8 cars is 90 min + 4.8 min = 94.8min

Answer p7

* In this is a packet switched network, the data will be transmitted packet by packet.
* So A packet is 56 byte and the analog to digital conversation rate is 64 kbps,
* Preparing time Tp for a packet is (56\*8)/(64\*1000)= 0.007 s =  7 ms.
* Transition time Dtrans for a packet is (56\*8)/(2\*1000\*1000) =0.000224 s = 0.224ms. Tprop = 10ms
* total time elapses from the time a bit is create until the bit is decoded is Tp +Dtrans +Tprop = 7+0.224+10 = 17.224 ms

Chapter 2

Answer R5

So The IP address of the destination host and the port number of the destination socket.

Answer R10

Handshaking is an automated process that sets parameters for communication between two different devices before normal communication begins. Much like the way a human handshake sets the stage for the communication to follow, the computing handshake provides both devices with the basic rules for the way data is to be shared between them. These rules can include transfer rate, coding alphabet, parity, interrupt procedure and more.

Answer R13

Web caching can bring the desired content “closer” to the user, perhaps to the same LAN to which the user’s host is connected. Web caching can reduce the delay for all objects, even objects that are not cached, since caching reduces the traffic on links.

Answer R21

It is not necessary that bob will always provide chunks to Alice has to be in the top 4 neighbors of bob for bob to send our chunks to her , this might not occur even if Alice provides chunks to bob throughout 30 second interval .

EASSY

First we know that what is peer to peer. In a p2p2 network, the peers are computer systems which are connected to each other via the internet . Files can be shared directly between systems on the network without the need of a central server. So each computer on a P2P network becomes a file server as well as a client.

The only requirements for a compute to join a peer-to-peer network are an internet connection and P2P software. Once connected to the network, P2P software allows you to search for files on other people

Network. So where other users on the network can search for files on your computer, but typically only within a single folder that you have for design share

Yes, I would recommend for convert YELP.com over to a Peer ­to ­Peer (P2P) model because with P2P network this network is safe and easy to search so when we do search for anything we get result with all node network .Where yelp.com is using for finding the places and place data like hotel, restaurant so by using P2P network we get the perfect rated place. Also we have connect with other data base for information like MAP and data and rating so it’s going connect with other nodes for this kind of searching P2P network is perfect .

In conclusion, I can say that because of P2P network is making this website more perfect and secure so I recommended for concert it to peer to peer model.