1.What is LAN?

SA - the source lan

LA - The routing procedure for an incoming frame depends on the LAN it arrives on (the source

LAN) and the LAN its destination is on (the destination LAN), as follows:

2. What are characteristics of LAN?

SA - bandwidth characteristics of magnetic tape are excellent , the delay

LA - Although the bandwidth characteristics of magnetic tape are excellent, the delay characteristics are poor. Transmission time is measured in minutes or hours, not milliseconds. For many applications an on-line

connection is needed.

3. what is the speed of LAN?

SA - 200

LA - Assume the line is initially in the low state. 19. A 1-km-long, 10-Mbps CSMA/CD LAN (not 802.3) has a propagation speed of 200

4. Describe principle of a packet-switched WAN?

SA - each router has an antenna through which it can send and receive

LA - Not all WANs are packet switched. A second possibility for a WAN is a satellite system. Each router has an

antenna through which it can send and receive.

5. Into how many categories the wireless networks are divided?

SA - three

LA - To a first approximation, wireless networks can be divided into three main categories:

1 System interconnection 2 Wireless LANs 3 Wireless WANs.

6. why are protocol hierarchies required?

SA - each layer providing services to the layers above it and insulating them from the details of the protocols used in the lower layers

LA - Network software consists of protocols, which are rules by which processes communicate. Protocols are either

connectionless or connection-oriented. Most networks support protocol hierarchies, with each layer providing

services to the layers above it and insulating them from the details of the protocols used in the lower layers.

7. Explain design issues for the layers.

SA - multiplexing , flow control , error control

LA - Protocol stacks are typically based either on the OSI model or on the TCP/IP model. Both have network,

transport, and application layers, but they differ on the other layers. Design issues include multiplexing, flow

control, error control, and others.

8. Contrast between Connection-Oriented and Connectionless Services

SA – connection

LA - Networks provide services to their users. These services can be connection-oriented or connectionless. In some

networks, connectionless service is provided in one layer and connection-oriented service is provided in the

layer above it.

9. List out reference models

SA - in this section we will focus on the key differences between the two reference models

LA - Despite these fundamental similarities, the two models also have many differences. In this section we will focus

on the key differences between the two reference models. It is important to note that we are comparing the

reference models here, not the corresponding protocol stacks.

10. Briefly explain data link layer

SA – switching

LA - 4.7 Data Link Layer Switching

11. Wrtie a short note on Internet layer of TCP/IP model

SA - the only real services offered by the internet layer are send ip packet and receive ip packet

LA - The TCP/IP model did not originally clearly distinguish between service, interface, and protocol, although people

have tried to retrofit it after the fact to make it more OSI-like. For example, the only real services offered by the

internet layer are SEND IP PACKET and RECEIVE IP PACKET.