Application Protocols

Application Protocols Questions

1. How does the Application level of the TCP/IP model map to the ISO/OSI model?

   The Application level of the TCP/IP model accounts for the Application layer, presentation layer, and session layer in the ISO/OSI model.

2. The primary difference between FTP and TFTP is user authentication. What is meant by the term "user authentication?"

   FTP uses user authentication, identifying a user with a user name and password or similar method. TFTP allows read/ write access without authentication.

3. Which protocol is used most often for sending mail between mail servers?

   SMTP

4. Which mail protocol would you use for receiving mail?

   POP3 and IMAP4

5. If you are using a conventional browser to surf the Internet, what protocol(s) are you most likely using?

   HTTP- Hyper Text Transfer Protocol

6. If you are buying a product on Amazon or checking your bank balance online, what protocol should you be using?

   HTTPS- Hyper Text Transfer Protocol Secure

7. Who created SSL?

   Netscape

8. What is TLS? Who created it?

   TLS(Transport Layer Security) is the updated version of SSL (Secure Sockets Layer) and was created by the IETF (Internet Engineering Task Force)

9. Name common Voice over IP (VoIP) protocols.

SIP (Session Initiation Protocol), which sets up and disconnects calls, and RTP (Real- time Transport Protocol), which controls the actual media stream during a call

10. Which protocol actually sends your voice across the network?

    RTP- Real- time Transport Protocol

Domain Name System

DNS Protocol Questions

1. What is the difference between a routable and a non-routable protocol?

   A routable protocol is communications protocol that uses both a network address and a device address; a non- routable protocol only uses a device address.

2. To connect separate routable networks, what hardware device would be appropriate?

   A router

3. In TCP/IP, what physical device is called the default gateway?

   Router

4. What is DNS?

   DNS (Domain Name System) is a service that maps domain names to IP addresses.

5. Briefly describe the DNS query/response process.

   A computer request access to a domain name through a switch to contact the local Name Serer. If the Name Server has a record for the requested domain name in its tables it will transmit this information back to the computer and the computer will use the IP address to get to the domain through the switch, If not it will query other DNS servers for the appropriate record and will send the back to computer.

6. What is DHCP (Dynamic Host Configuration Protocol)?

   DHCP is Dynamic Host Configuration Protocol and essentially assigns IP addresses to computers

7. Briefly describe the DHCP process.

1. DHCPDISCOVER- client requests an IP address from the DHCP server when connected to a network
2. DHCPOFFER- DHCP server responds with an offer of an IP address
3. DHCPREQUEST- client requests to accept the offer
4. DHCPACK- DHCP server responds acknowledgement