* CHAPTER 1:
* FDM and TDM are used in = circuit switching
* What is the name of the packets processed at the network layer? = Datagram (app ~ message // transport ~ segment // link layer ~ frame)
* A switch process up to which layer = Link
* (router ~ network // switch ~ link // cable ~ physical)
* An process-to-process communication up to which layer = Transport
* (pro - pro ~ layer4 // IP - IP ~ layer3 == host - host)
* What is the throughput of a link in a network = Number of bits travelling through
* In the transmission delay calculation t=L/R. What's R? = Link bandwidth of the link
* In OSI model, as data packet moves from the lower to the upper layer header are = removed (encapsulation)
* Which one is correct about Denial of Service (DoS) attack? = Attackers make network resources unavailable by overwhelming resource with bogus traffic
* Which delay mainly depends on the congestion of the network? = Queueing delay
* What is not a characteristic of User Datagram Protocol = reliable data transfer
* What statement is correct in the circuit switched networks? = All the resources needed provide communication between the end-systems are reserved for the duration ... (choose the answer that not NOT)
* Why dental of service is dangerous? = It prevents using network resources
* How do packets make their way through packet-switched networks? = When a packet arrives at a router, the router examines the packet's destination address and forwards the packet according to the routing table
* What is the reason that UDP is best effort data delivery protocol? = All of the answers
* The client's and the server's functions are used in: = Client/server model and Peer to Peer model
* What is the role of a host that can wait to receive a request and send back responses? = Server, Peer
* Which of following media have highest transmission speed? = Fiber cable
* Which of following help a host connect with others? = Protocol
* A logical path is created between two host systems at which OSI layer? = Network
* Which OSI layer provides the acknowledgement of transmissions, sequencing, and flow control across a network? = Transport Layer
* The wireless router/modem is usually referred to a device that has which function? = All of the others
* Which of the following is not a host? = router
* Which network component belongs to network edge? = Server
* Which network component belongs to network core? = Router
* Packet sniffing = is the process of capturing packets on share media
* How many layers are there in OSI model? = 7 (TCP-IP ~ 5)
* When data or a request from one layer is passed down to another layer, the data are surrounded ... = encapsulation
* Network protocols = are sets of rules or guideness ...
* 41. In circuit = dedicated end-to-end connection
* 42. What is the order of the 5 layers in the Internet model? = Application, transport, network, link, physical
* 43. Which layer in the Internet that connects directly to wire? = None of them
* 44. Vulnerability Attack, Bandwidth Flooding, and Connection ... = Internet DoS Attract
* 45. in OSI model, as data packet moves from the upper to the lower layer header are = Added
* 46. If the buffer of router memory is empty and no other packet is currently being transmitted,, then the ... of the packet ... = queueing delay
* 47. Packets coming to a switch in the Internet and are checked for error, the time delay for this checking is = Processing delay
* 48. When you consider half-duplex and full-duplex, what are unique for half-duplex network? = Half-duplex operates in a shared collision domain
* 49. Which layer or the OSI model supplies services that allow user to interact with the network? = Application
* 50. In the OSI reference model, which layers contain security considerations? = All layers ( network, transport, application)
* 51. Which of the following layer its header is referenced by routers? = network
* 52. Internet protocols are standardized in the = RFCs
* 53. Which method if networks access has the biggest difference between download and upstream speed? = ADSL (lech)
* 54. What is a big advantage to using fiber-optic cable? = Fiber is not affected by Electromagnetic interference
* 55. Which attack method can fake the source of the transmission? = IP spoofing 55
* 57. Today's Internet is a ... = packet-switched = network
* 59. Which statement is correct for "layering" in OSI model = Layering allows easy and maintain and updating the system changing the protocol of one layer does not affect the others
* 61. SMTP, POP3, and IMAP protocols run on the following layer: = none of them (transport layer, network layer, link layer) // right answer: Application
* 63. Which switching method allows more users to use network? = packet switching
* 65. ... is a guided transmission medium, while ... is an unguided transmission medium = Fiber-optic cable ... Wireless LAN channel
* 67. A packet of L bits is transmitted via the link the transmission rate of R bits/sec; the transmission delay is = L/R
* 69. Which of the following provides Internet service worldwide? = Global ISPs
* CHAPTER 2:
* 1. Which of the following is hybrid of client-server and P2P? = Skype
* 3. An HTTP request message always contains = a request line and a header
* 5. Which type of DNS record is used by mail servers to determine where to send e-mail = MX record
* 7. How does the HTTP protocol implement caching? = Using the if-modified-since header
* 9. What type of DNS Server has the IP addresses of all names in the Autonomous? = Authoritative
* 11. In the resource records of DNS, which record is also known as an alias hostname? = CNAME record
* 15. Very popular browser-based email services such as Hotmail or Yahoo! Mail use …….. to transfer email between the client and the server. = HTTP
* 17. IMAP is designed to allow users to manipulate ……, so it is more …… than POP3 = remote mailboxes … complex
* 19. The ……. That together implement the DNS distributed database, store ……. For the hostname to IP address mappings = Name servers ……. Resource Records
* 21. What is incorrect about Web cache (proxy server) = Web cache increases the performance of P2P applications significantly
* 23. A name server is ……. for a host if it always has a DNS record that translates the host’s hostname to that host’s IP address = Authoritative
* 25. The ……. is a standard for specifying any kind of information on the Internet = URL
* 27. POST method is used when: = Web page has input form for user to submit information to server
* 29. What can be used to identify the process? = Both IP address of the host running that process and the port associated with that process
* 31. Which of the application layer protocol below uses TCP at the transport layer? = HTTPs
* 33. Which service does a proxy server provide? = Cache web pages
* 35. What happen when you can connect to the FTP server by typing “telnet 112.158.25.4.21” but you cannot connect to the same FTP server by typing “telnet [ftp.example.com](ftp://ftp.example.com) 21”? = No DNS configuration
* 37.
* 39. What kind of database used in DNS? = Hierachical database (distributed)
* 41. What is the characteristic of a network application? = Run on end systems
* 43. Which port is associated to mail server process? = 25
* 45. The client-server model significantly relies on ….. infrastructure server, the Peer-to-Peer model, instead, pairs of interminably connected peers, communicates ….. with each other = always-on ….. directly
* 47. In HTTP, what does that mean by pipelining? = The requests for objects can be made back-to-back, without waiting for replies to pending requests
* 49. IMAP and POP are ….. = mail access protocols
* 51. An ISP has a DNS server that holds both names of Web servers and their IP addresses. That DNS servers is called = Authoritative
* 53. Assume the transmission delay 50ms, the transmission time of a Web object 10ms, how long does it take to download that object from a Web Server to a client is using non-persistent HTTP….. = None of them
* 55. What is the automated service that matches resource names with the required IP address? = DNS
* 57. Which protocols operate at the Application layer of the OSI model? = DNS, POP, SMTP
* 59. What statement is correct about an application-layer protocol? = An application-layer protocol defines the syntax of the various message types
* 61. Which of the following are key benefits of Web-based mail? = You can access your e-mail from anywhere in the world using a computer with a browser and an Internet connection
* 63. What does NSLOOKUP do? = Queries DNS for the IP address of the supplied host name
* 65. FTP services is presented in which layer? Layer 5 of the TCP/IP model
* 67. Assume a website has only 5 difference ….. = A single
* 69. HTTP is a ….. protocol = Stateless
* 71. The ….. that together implement the DNS distributed database store ….. for the hostname to IP address mappings = DNS servers ….. Resource Records
* 73. Which of the following statements is true about web caching? = cache acts as both client and server
* 1. UDP is called a ….. transport protocol = connectionless, un