

Computer Networks Interview Questions And Answers Guide.



Global Guideline.

<http://www.globalguideline.com/>



Computer Networks Job Interview Preparation Guide.

Question # 1

Tell me what is SLIP (Serial Line Interface Protocol)?

Answer:-

The need for a data link layer protocol to let IP operate over serial links was identified very early on in the development of TCP/IP. Engineers working on the Internet Protocol needed a way to send IP datagrams over serial connections linking computers together. To solve the problem they created a very simple protocol that would frame IP datagrams for transmission across the serial line. This protocol is called the Serial Line Internet Protocol, or SLIP for short. SLIP performs only one function: framing of data for transmission. It does nothing else

[Read More Answers.](#)

Question # 2

External Data Representation is a method of encoding data within an RPC message, used to ensure that the data is not system-dependent?

Answer:-

External Data Representation is Encoding of data in upper layer of network.

[Read More Answers.](#)

Question # 3

Tell me, you can ping servers on the subnet your workstation is on, but not other subnets. What is wrong?

Answer:-

That is a TCP ip rule you can't ping to another subnet why because of if you try to communicate to another machine the machine's TCP/IP protocol suite will check by using AND ing the destination IP. If it doesn't match the subnet it will send that request to the gateway so the responsibility goes to gateway to reach the other network may be the gateway is not configured correctly

[Read More Answers.](#)

Question # 4

How to Recover The crashed files in outlook? What is the Limitation(users) of outlook?

Answer:-

How can retrieve a crashed outlook file with a SCANPST.EXE file. You can find this scanpst executable file in all windows(98,2000,xp) platforms. So you search this file in ur c:\programfiles\common folder. So don't worry when ur outlook file crashed and don't try for third party utilities to retrieve ur pst file. vizaghari@gmail.com

[Read More Answers.](#)

Question # 5

Explain the Pros and Cons of layer design?

Answer:-

I know only the advantages of Layered design. We can treat each layer as a problem area. Say for example, data link layer, people can concentrate only on the device driver only, they don't need to worry about the network related meaning how the packet can be routed etc. The only responsibility of the device driver layer is to grab the packet destined to the local MAC and pass the frame to the network layer. Similarly the network layer doesn't need to worry about how the packet is reached to the local machine. Its only responsibility is to check whether the packet belongs to the local machine or to be forwarded. Also build the routing table to forward the packet. This way, each forum can precisely concentrate on one problem/layer.

[Read More Answers.](#)

Question # 6

Explain what is Ipsec tunneling, how it works?

Answer:-

IP tunneling (IP encapsulation) is a technique to encapsulate IP datagram within IP datagrams, which allows datagrams destined for one IP address to be wrapped and redirected to another IP address. IP encapsulation is now commonly used in Extranet, Mobile-IP, IP-Multicast, tunneled host or network.

[Read More Answers.](#)



Question # 7

Suppose a resource record is an entry in a name servers database. There are several types of resource records used, including name-to-address resolution information. Resource records are maintained as ASCII files?

Answer:-

DNS Resource Record is Entry in database.Ex. user name

[Read More Answers.](#)

Question # 8

Tell me why should we care about the OSI Reference Model?

Answer:-

It is very important model for networking:

The main aim to design the OSI model is that actually they want to set a standard for the communication and want to standardize the network equipment so that they would not be any brand constraints

[Read More Answers.](#)

Question # 9

What is ERD(Emergency Repair Disk)?

Answer:-

Emergency Repair Disk, an ERD is a diskette that creates backups of important system files and settings and is used to help troubleshoot and fix issues for Microsoft Windows NT and Windows 2000. The ERD is used in conjunction with the Windows repair option and you will be prompted for the diskette when needed. Note: The ERD is not to be confused with a standard boot diskette as it cannot be used alone. The ERD is capable of performing such checks as: 1. Verifying the boot sector is not corrupt. 2. Repairing any startup files. 3. Locate any missing or damaged system files.

[Read More Answers.](#)

Question # 10

Explain what is the main purpose for creating this OSI Reference Model? Why it is a layered model?

Answer:-

OSI reference model consisting of 7 layers helps the data to be moved in more optimal form from source to the destination. And here the protocols are better hidden so that further enhancement can be done easily. This reference model can be used for both connection-oriented and connectionless service.

[Read More Answers.](#)

Question # 11

Explain what is Bandwidth?

Answer:-

Every line has an upper limit and a lower limit on the frequency of signals it can carry. This limited range is called the bandwidth.

[Read More Answers.](#)

Question # 12

Explain what is the HELLO protocol used for?

Answer:-

The HELLO protocol uses time instead of distance to determine optimal routing. It is an alternative to the Routing Information Protocol.

[Read More Answers.](#)

Question # 13

Do you know what is SAP?

Answer:-

Session Announcement Protocol, a computer protocol for broadcasting multicast session information. Service Advertising Protocol, an IPX network protocol that makes the process of adding and removing services on an IPX internetwork dynamic. Service Access Point, an identifying label for network endpoints used in OSI networking

[Read More Answers.](#)

Question # 14

Explain what is the VLAN and how it works?

Answer:-

VLAN also refers to a LAN port grouping within a single switch. VLANs improve security by isolating groups. A VLAN is a bridging domain and all broadcast and multicast traffic is contained within it.

[Read More Answers.](#)

Question # 15

Explain what is fragmentation of a packet?

Answer:-

Frames Packet data unit (PDU) is called-----segment at transport layer packet at a network layer frame at data link and bit/bytes at physical layer



[Read More Answers.](#)

Question # 16

Tell us what is wide-mouth frog?

Answer:-

it is used in cryptography, a key distribution center (KDC) is part of a cryptosystem intended to reduce the risks inherent in exchanging keys.

[Read More Answers.](#)

Question # 17

Explain what is the difference between TFTP and FTP application layer protocols?

Answer:-

The Trivial File Transfer Protocol (TFTP) allows a local host to obtain files from a remote host but does not provide reliability or security. It uses the fundamental packet delivery services offered by UDP. The File Transfer Protocol (FTP) is the standard mechanism provided by TCP / IP for copying a file from one host to another. It uses the services offered by TCP and so is reliable and secure. It establishes two connections (virtual circuits) between the hosts, one for data transfer and another for control information.

[Read More Answers.](#)

Question # 18

What is MTU of a link?

Answer:-

Maximum Transmission Unit is the largest physical packet size, measured in bytes, that a network can transmit. Any messages larger than the MTU are divided into smaller packets before being sent. Every network has a different MTU, which is set by the network administrator. On Windows 95, you can also set the MTU of your machine. This defines the maximum size of the packets sent from your computer onto the network. Ideally, you want the MTU to be the same as the smallest MTU of all the networks between your machine and a message's final destination. Otherwise, if your messages are larger than one of the intervening MTUs, they will get broken up (fragmented), which slows down transmission speeds. Trial and error is the only sure way of finding the optimal MTU, but there are some guidelines that can help. For example, the MTU of many PPP connections is 576, so if you connect to the Internet via PPP, you might want to set your machine's MTU to 576 too. Most Ethernet networks, on the other hand, have an MTU of 1500, which is the default MTU setting for Windows 95. That's all friends

[Read More Answers.](#)

Question # 19

Explain what is PING utility?

Answer:-

PING stands Packet Internet Gopher. This is a utility for ensuring connectivity between computers. ICMP protocol works behind this utility. Under it, sending node sends packets to destination node and reply is received if there is proper communication between two.

[Read More Answers.](#)

Question # 20

What are the possible ways of data exchange?

- (i) Simplex
- (ii) Half-duplex
- (iii) Full-duplex

Answer:-

There are three possible ways of data exchange. These are: 1. Simplex: in this, data is transmitted in one direction only. this means one end will always be a transmitter and the other end will always be a receiver. 2. Half-Duplex: in this, data is permitted to flow in either direction, but not simultaneously. At a given time, the transmission can take place only in one direction. 3. Full-duplex: A transmission system in which data can be transmitted in both directions simultaneously.

[Read More Answers.](#)

Question # 21

Explain how to find real IP address of the client that is connecting with a server, if the client is using Proxy (Transparent, Anonymous, and Private Proxy)?

Answer:-

To find the IP address of a PC, just follow as stated below... Start--> Run--> type 'cmd' to open the command prompt--> In the command prompt, type: >cd then type: >ipconfig & press enter Your system IP address will be displayed.

[Read More Answers.](#)

Question # 22

How to configure Proxy Server in Windows?

Answer:-

To configure proxy server in windows first install the 2 lan cards one for internet connection and another one for sharing internet connection to clients pc. now first configure Internet connection and then give the IP to 2nd lan card for ex. 192.168.0.1 to 2nd lan card now Now attach the cat 5 cable to the 2nd lan card to switch to give connectivity to ur network and do this configuration on client computers now right click on internet explorer then go to properties and then go to connections and click there lan settings buttons and then in proxy server give the ip of 2nd lan card of proxy server

[Read More Answers.](#)

Question # 23

How to share Internet using a proxy server?



Answer:-

U can share internet through proxy also but there is less no. of pc..as u told and u r using devices i recomened ...u can do without using proxy server...by the ICS ..option after enabling ICS..u will get by-default IP address u can set that IP address to all pc in Default Gateway & Preferred DNS..after that u can use easily...and speed performance is too good....

[Read More Answers.](#)

Question # 24

What is an operational database server and a non operational database server? Mention its function?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 25

What is MUX and explain how mux works?

Answer:-

It selects one of many analog or digital data sources and outputs that source into a single channel.

An electronic multiplexer functions as multiple input, single output switch. A multiplexer has multiple inputs and a selector that connects a specific input to the single output.

In telecommunications, a multiplexor is a device that performs multiplexing, i.e. that combines multiple analog message signals or digital data streams into one signal.

[Read More Answers.](#)

Question # 26

Explain what is a Multi-homed Host?

Answer:-

If more than one NICs (Network Interface Card/ Network Adapter) are installed having different IP Addresses onto it, The Pc Becomes a Multihomed Host.

[Read More Answers.](#)

Question # 27

Explain how to trouble shoot DNS in Big environment, Explain Briefly about ADS and its services?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 28

Explain how to change in domain name?

Answer:-

This article describes how to change a computer's Domain Name System (DNS) server or servers from the command line, either locally or remotely. This operation requires you to use the Regfind.exe tool from either the Microsoft Windows NT Server Resource Kit or the Microsoft Windows 2000 Server Resource Kit. MORE INFORMATIONWARNING: If you use Registry Editor incorrectly, you may cause serious problems that may require you to reinstall your operating system. Microsoft cannot guarantee that you can solve problems that result from using Registry Editor incorrectly. Use Registry Editor at your own risk.To change a computer's Domain Name System (DNS) server or servers from the command line, type: regfind -p HKEY_LOCAL_MACHINESYSTEMCurrentControlSetServicesTcpipparameters "old DNS value" -r "new DNS value(s)"Where old DNS value is the value the server currently has, and new DNS value(s) is the new value you want to use. The format is dotted decimal notation.You can also perform the same operation to a computer remotely by typing the following command: regfind -m computer name -p HKEY_LOCAL_MACHINESYSTEMCurrentControlSetServicesTcpipparameters "old DNS value" -r "new DNS value(s)" Where computer name is the NetBIOS name or the Internet Protocol (IP) address of the remote computer.Note You do not have to restart the computer for the DNS changes to take effect.For more information about the Regfind tool and its capabilities, at a command prompt, type: regfind /?

[Read More Answers.](#)

Question # 29

Consider a system where a program can be separated into two parts: code and data. The CPU knows whether it wants an instruction (instruction fetch) or data (data fetch or store). Therefore, two base-limit register pairs are provided: one for instructions and one for data. The instruction base limit register pair is automatically set to read only, so programs can be shared among different users. Discuss the advantages and disadvantages of this scheme?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 30

Do you know what is SSI?

Answer:-

It's a secure sokat layer.the HTTPs setting



[Read More Answers.](#)

Question # 31

Suppose If you have 3 pcs with static IPs and there is one PC workstation that has FTP going through a router, how would you FTP to that workstation and only that one from the outside in?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 32

You have a laptop and wireless unit and you want to use infrared capability to access the Internet, how can this be done and what problems would you look at if it was not working?

What is the biggest problem with laptops and wireless units?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 33

Tell me what is OSPF?

Answer:-

It is an Internet routing protocol that scales well, can route traffic along multiple paths, and uses knowledge of an Internet's topology to make accurate routing decisions.

[Read More Answers.](#)

Question # 34

Explain why WINS server is required?

Answer:-

Windows Internet Naming Service (WINS) is an older network service (a protocol) that takes computer names as input and returns the numeric IP address of the computer with that name or vice versa. WINS was designed to replace the LMHOSTS file functionality that was used previously on computers and networks utilizing NetBIOS and NetBIOS names. WINS is considered to be a dynamic protocol because it allows hosts, services and users to be registered in the WINS database on the WINS server automatically when they connect to the network. This saved Network Administrators a great deal of time over having to update and maintain separate LMHOSTS files all over the network.

[Read More Answers.](#)

Question # 35

Explain what is Kerberos?

Answer:-

Hey folks, Kerberos is an authentication service, it has really robust architecture built in it. The basic components in Kerberos include the Key Distribution Service from which the client communicates to get a token to reach a server, this enables the way to keep the passwords secure from not being transferred a lot of times across the network. Once you get a key to interact with the servers you use that session key with an encryption on it, so it's really a cool authentication service. By the way, it's not only developed at MIT; it is also by our Proff Clifford Neuman at University of Southern California, where I am..chaitanya

[Read More Answers.](#)

Question # 36

What is the difference between simplex and half-duplex transmission?

Answer:-

Both are the modes of communication but the difference is that, in simplex communication is done in uni-direction where as in half-duplex communication is done in bidirectional but not simultaneously

[Read More Answers.](#)

Question # 37

Explain, you need to connect a Token Ring segment to an Ethernet segment. Would you use a router, a brouter, or a bridge?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 38

What is a TCP connection table?

Answer:-

The TCP connection table contains information about the entity's existing TCP connections.

[Read More Answers.](#)

Question # 39



What is the difference between duplex raid & mirror raid? Explain about full raid levels?

Answer:-

Please share your experience.

[Read More Answers.](#)

Question # 40

What is frame relay, in which layer it comes?

Answer:-

Frame relay is a high-performance WAN protocol that operates at the physical and data link layers of the OSI reference model. Frame Relay originally was designed for use across Integrated Services Digital Network (ISDN) interfaces. Today, it is used over a variety of other network interfaces as well. This chapter focuses on Frame Relay's specifications and applications in the context of WAN services. Frame Relay is an example of a packet-switched technology.

Packet-switched networks enable end stations to dynamically share the network medium and the available bandwidth.

The following two techniques are used in packet-switching technology:

- Variable-length packets

- Statistical multiplexing Variable-length packets are used for more efficient and flexible data transfers. These packets are switched between the various segments in the network until the destination is reached.

[Read More Answers.](#)

Question # 41

Explain what is frame relay, in which layer it comes?

Answer:-

Frame relay is a high-performance WAN protocol that operates at the physical and data link layers of the OSI reference model. Frame Relay originally was designed for use across Integrated Services Digital Network (ISDN) interfaces. Today, it is used over a variety of other network interfaces as well. This chapter focuses on Frame Relay's specifications and applications in the context of WAN services. Frame Relay is an example of a packet-switched technology.

Packet-switched networks enable end stations to dynamically share the network medium and the available bandwidth.

The following two techniques are used in packet-switching technology:

- Variable-length packets

- Statistical multiplexing Variable-length packets are used for more efficient and flexible data transfers. These packets are switched between the various segments in the network until the destination is reached.

[Read More Answers.](#)

Question # 42

What is the difference between POP3 and IMAP Mail Server?

Answer:-

Post Office Protocol 3 POP3 works by reviewing the inbox on the mail server, and downloading the new messages to your computer. IMAP(Internet Message Access Protocol) downloads the headers of the new messages on the server, then retrieves the message you want to read when you click on it. When using POP3, your mail is stored on your PC. When using IMAP, the mail is stored on the mail server. Unless you copy a message to a "Local Folder" the messages are never copied to your PC. works by reviewing the inbox on the mail server, and downloading the new messages to your computer. IMAP downloads the headers of the new messages on the server, then retrieves the message you want to read when you click on it

[Read More Answers.](#)

Question # 43

Tell me what is subnetting? why is it used?

Answer:-

A portion of a network that shares a common address component. On TCP/IP networks, subnets are defined as all devices whose IP Address have the same prefix. For example, all devices with IP addresses that start with 100.100.100. would be part of the same subnet. Dividing a network into subnets is useful for both security and performance reasons. IP networks are divided using a subnet mask

[Read More Answers.](#)

Question # 44

What are the types of protocols and what are its functions and for what purpose this protocol is used give me a brief explanation?

Answer:-

There are so many types of protocol which supports a different layers of TCP/IP protocol.

1. internet layer -IP, IGMP, ICMP, ARP,RARP

2. Transport Layer - TCP, UDP

3. Application Layer -FTP, SNMP, SMTP, Telnet, TFTP, DNS, HTTP.

Here TCP is a Connection oriented protocol and UDP is a connection less protocol.

The Full form of the above protocol are given below.

1. IP - Internet Protocol

2. IGMP - Internet Groups Message Protocol

3. ICMP - Internet Control Message Protocol

4. ARP - Address Resolution Protocol

5. RARP - Reverse Address Resolution Protocol.

6. FTP -File Transfer Protocol.

[Read More Answers.](#)

Question # 45

What are the different type of networking / internet working devices?



Answer:-

Different type of networking / internetworking devices Repeater:

Also called a regenerator, it is an electronic device that operates only at physical layer. It receives the signal in the network before it becomes weak, regenerates the original bit pattern and puts the refreshed copy back in to the link.

Bridges:

These operate both in the physical and data link layers of LANs of same type. They divide a larger network in to smaller segments. They contain logic that allow them to keep the traffic for each segment separate and thus are repeaters that relay a frame only the side of the segment containing the intended recipient and control congestion. Routers: They relay packets among multiple interconnected networks (i.e. LANs of different type). They operate in the physical, data link and network layers. They contain software that enable them to determine which of the several possible paths is the best for a particular transmission. Gateways: They relay packets among networks that have different protocols (e.g. between a LAN and a WAN). They accept a packet formatted for one protocol and convert it to a packet formatted for another protocol before forwarding it. They operate in all seven layers of the OSI model.

[Read More Answers.](#)

Question # 46

What is difference between switch & hub?

Answer:-

Hub is a Physical layer devices that are really just multiple port repeaters. When an electronic digital signal is received on a port, the signal is reamplified or regenerated and forwarded out all segments except the segment from which the signal was received. switch

(1) In networking, a device responsible for multiple functions such as filtering, flooding, and sending frames. It works using the destination address of individual frames. Switches operate at the Data Link layer of the OSI model.

(2) Broadly, any electronic/mechanical device allowing connections to be established as needed and terminated if no longer necessary.

[Read More Answers.](#)

Question # 47

Explain what protocol is used by DNS name servers?

Answer:-

DNS uses UDP for communication between servers. It is a better choice than TCP because of the improved speed a connectionless protocol offers. Of course, transmission reliability suffers with UDP.

[Read More Answers.](#)

Question # 48

Explain what is router?

Answer:-

A router is a device that forwards data packets along networks. A router is connected to at least two networks, commonly two LANs or WANs or a LAN and its ISP's network. Routers are located at gateways, the places where two or more networks connect, and are the critical device that keeps data flowing between networks and keeps the networks connected to the Internet. When data is sent between locations on one network or from one network to a second network the data is always sent and directed to the correct location by the router. They accomplish this by using headers and forwarding tables to determine the best path for forwarding the data packets, and they use protocols such as ICMP to communicate with each other and configure the best route between any two hosts. The Internet itself is a global network connecting millions of computers and smaller networks - so you can see how crucial the role of a router is to our way of communicating and computing.

[Read More Answers.](#)

Question # 49

Explain what is the difference between domain & workgroup?

Answer:-

Domain:

- 1) Centralized Administration.
- 2) Security of Data, User & Groups
- 3) Server & Clients Based
- 4) Windows 2000 & 2003 Server or Advance Support For Server Configuration
- 5) File, Folder & User & Group Permission we can assign.

WORKGROUP:

- 1) No Centralized Administration.
- 2) Not much security for Data, User & Groups. (Depends on Configuration)
- 3) No Server & Client Matter. Each pc reacts like a Client as well as Server.
- 4) Basically Windows 98 & XP is going to be used in Clients side.
- 5) We can assign permission to drives & folder & files but much security than Domain

[Read More Answers.](#)

Question # 50

What is DORA process?

Answer:-

DORA stands for discover, offer, request and acknowledgement when we install a dhcp server into our network then dhcp server works on the basis of dora process first dhcp server sends a hello message in to the network to discover the clients pc and when any client pc found in the network then, dhcp server offers the IP to client pc. When client pc selects any IP from dhcp server then client pc requests for selected IP to dhcp server then dhcp server provides that IP to client pc and both send acknowledgement to each other. This process is called DORA process on the basis of this process DHCP server works to provide IP's dynamically to client pc's in network

[Read More Answers.](#)

Question # 51



Explain what is the requirement of dns?

Answer:-

DNS means Domain name Server or Domain name system.

Requirement of DNS :

DNS helps to convert the ip address into domain name.Domain name into ip address.You cannot remember many website ip address at same time.So domain name is used for remembering the website.

For example 74.125.239.17 is one ip address of Google.com.It is very difficult to remember always.So you can use domain name to view the particular website.The primary work of DNS is if you give ip address in browser ,it search for domain name of particular ip address.If you give domain name in the address bar of the browser it convert the domain name to ip address(Search for the particular ip address). If you have any queries regarding DNS records use <http://www.whois.se/>

[Read More Answers.](#)

Question # 52

Can we communicate by using only the MAC address in Same network?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 53

Your network uses both IPX and Net BEUI. Which device would provide the best connectivity if you have many (more than 10) segments?

Answer:-

Nobody uses either of those protocols anymore. If you took a time machine 20 years in the past, you would use IPX on your mulch-segment system.

[Read More Answers.](#)

Question # 54

Explain what is Gateway-to-Gateway protocol?

Answer:-

Gateway-to-Gateway Protocol is similar to the Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP).

It is a protocol used for routing datagrams between Internet gateways.Each GGP message has a field header that identifies the message type and the format of the remaining fields.

[Read More Answers.](#)

Question # 55

Default port no. for

Telnet ____?

SNMP ____?

FTP ____?

Answer:-

Default Port Number for

Telnet : 23

SNMP : 161

FTP : 21

[Read More Answers.](#)

Question # 56

Explain what is the role of network administrator?

Answer:-

Here is a very short list of basic tasks for which a network administrator may be responsible:Setting up and configuring network hardware and software Installing and configuring network media and connections Connecting user nodes and peripherals of all kinds to the network Adding users to and removing users from the network Managing user accounts, such as passwords, storage space, and file-access privileges Creating and maintaining a system for backing up data and program files Ensuring the security of the network Managing the organization's e-mail system Managing users' ability to access the Internet via the network Training users to utilize the network's resources

[Read More Answers.](#)

Question # 57

How to perform subnet addressing?

Answer:-

To create or to perform subnet addressing the local address should be divided into a number identifying the physical network and a number identifying the host on the subnet.

Then the senders route messages to the advertised network address, and the local system takes responsibility for routing messages to its subnets and their hosts. We need to consider the number of subnets and the number of hosts on the subnet at the time of deciding how to partition the local address into subnet address and host address.

[Read More Answers.](#)

Question # 58

Explain what is an email client? what is difference between email client and web mail?

Answer:-



Email Client Email clients download your emails onto your computer. Using a specialized email program such as Outlook Express or Apple Mail has the advantage of giving you complete control over your email; every email you receive is placed on your computer and you can keep as many large file attachments as you want. Webmail If you host with Needmore Designs, you have a limited amount of space available for your web mailbox. For daily use, you will want to use an email client. Nevertheless, you might find that you want to check your email while traveling. Checking your email through our webmail is similar to using Hotmail or YAHOO! Mail. You never actually copy your messages to your computer; in fact, you are looking at them through your web browser on somebody else's computer. When you are not online, you are not able to see your email.

[Read More Answers.](#)

Question # 59

Explain what is 5-4-3 rule?

Answer:-

5-4-3 rule is a guideline for Ethernet computer networks along with the number of repeaters and segments on shared-access.

The rule says that in an network there can be no more than five network segments or four repeaters, and of those five segments only three of segments can be populated between any two points in the newtwork.

[Read More Answers.](#)

Question # 60

Do you know what is virtual path?

Answer:-

A bundle of virtual channels which share the same end point is known as virtual path. Each virtual path is identified by its unique virtual path identifier (VPI). All channels within a single path must have distinct channel identifiers but may have the same channel identifier as channels in different virtual paths.

[Read More Answers.](#)

Question # 61

Explain what is Mail Gateway?

Answer:-

Mail gateway is a means which connect two or more electronic mail system and helps in transfer of message between them. During complex mapping and translation there is a store and forward scheme where the message is received from one system completely before it is transmitted to the next system, after suitable translations.

[Read More Answers.](#)

Question # 62

Explain what is multicast routing?

Answer:-

Sending one packet of message to several destinations is known as multicast routing and algorithm which defines its route is known as multicast routing algorithm.

[Read More Answers.](#)

Question # 63

Explain what is RAID?

Answer:-

Short for Redundant Array of Independent (or Inexpensive) Disks, a category of disk drives that employ two or more drives in combination for fault tolerance and performance. RAID disk drives are used frequently on servers but aren't generally necessary for personal computers.

[Read More Answers.](#)

Question # 64

Which of the following ISO level is more closely related to physical communications facilities

1. Application
2. Session
3. Network
4. Data Link

Answer:-

If we have to choose f the four options provided would the answer be the network layer? since the network layer provides for the transfer of data between end systems over a communications network.

[Read More Answers.](#)

Question # 65

What is the difference between SD RAM & DDR RAM & DDR2 RAM?

Answer:-

SD RAM: SDRAM is Single Data Rate meaning that SDRAM can accept one command and transfer one word of data per clock cycle. Typical speeds of SDRAM are 100 and 133 MHz. DDR SDRAM: DDR SDRAM transfers data twice per clock cycle hence the name double data rate. DDR clock speeds range between 200 MHz (DDR-200) and 400 MHz (DDR-400). DDR-200 transfers 1600 MB/s while DDR-400 transfers 3200 MB/s. DDR2 SDRAM: DDR2 SDRAM is twice as fast as DDR which means twice as much data is carried to the module for each clock cycle. Also consumes less power as compared to the DDR memory.

[Read More Answers.](#)

Question # 66

How to create VPN to connect to branch office of the same office. what would be the preliminary requirement



Answer:-

Please disregard the published answer to this question. This was not answer the interviewer looking for. The question is how do you use VPN to connect branch office to the other office. Not asking for explanation about VPN. Whoever who wrote the response has absolutely no knowledge about MAC address and IP address. He doesn't even know MAC addresses do not cross the segment and no knowledge about NAT (Network Address Translation) when he talks about IP address conflicts. Best way to connect branch offices via VPN is to have VPN concentrator (Cisco, Nortel or a SOHO VPN enabled routers) installed and create LAN-to-LAN VPN tunnels between the offices. There are so many ways to accomplish this at varying costs.

[Read More Answers.](#)

Question # 67

Name three network tools used to determine where a network connectivity is lost between two sites A&B?

Answer:-

PING/ICMP echo request utility. This utility is excellent for rudimentary estimation of the round-trip time and packet loss rate between hosts. TRACEROUTE (Win32 and *NIX versions differ somewhat) UDP/ICMP utility which uses TTL as a mechanism to discover gateways between networks which are being traversed from point A to point B. TELNET/TCP based application layer connectivity you can specify a port and look at banners, etc.

[Read More Answers.](#)

Question # 68

Explain what is Proxy ARP?

Answer:-

Proxy ARP is the technique in which one host, usually a router, answers ARP requests intended for another machine. By "faking" its identity, the router accepts responsibility for routing packets to the "real" destination. Proxy ARP can help machines on a subnet reach remote subnets without the need to configure routing or a default gateway.

[Read More Answers.](#)

Question # 69

Under what situations a packet can go into infinite loop in a network?

Answer:-

If the following two conditions are simultaneously true: 1. routing error leading to a loop 2. the TTL field of the IP packet is not properly decremented at each hop

[Read More Answers.](#)

Question # 70

Suppose user calls in and complains that her computer and network is running very slow. How would you go about troubleshooting it?

Answer:-

First assure customer that will do everything I can to help resolve the issue

>> Ask the following probing questions (open ended)

> Since when, any recent changes to the system/location/CPE (Customer premises equipment)?

> When does the problem occur. All the times/all websites?

> Torrent/download clients used/not used, if yes then exit and check...

> Multiple browsers tried/not tried

> If problem is only found on one browser, clear cache/cookies....

> If problem persists on multiple browsers. Check if other systems work fine

> Wired connection tried/not tried

> If problem only occurs in wireless connection change the position of antenna/ change the channel in wireless settings (6, 11 preferred)

> Check MTU (Maximum Transmission unit - Usually default numbers 1454 / 1492 used, depends on Internet Service Provider) setting in the router/modem

> If even then problem persists tell customer to shut down the computer for today and pray for a better connection tomorrow... just kidding

> If problem persists reset the modem and check/Check for bad weather/Virus, spyware and check with another system.

> If problem still persists, suspect equipment line issue, further steps depend on the process.. need for line test etc....

[Read More Answers.](#)

Question # 71

Name any field of IP header that can prevent a packet to loop infinitely?

Answer:-

Obviously it's time to live (TTL). It fixes up a time to reach, if it's not reached within that stipulated time, it is being killed by the auto timer...

[Read More Answers.](#)

Question # 72

Explain a 3-way TCP/IP Handshake?

Answer:-

To establish a connection, TCP uses a 3-way handshake. Before a client attempts to connect with a server, the server must first bind to a port to open it up for connections: this is called a passive open. Once the passive open is established then a client may initiate an active open. To establish a connection, the 3-way (or 3-step) handshake occurs: The active open is performed by sending a SYN to the server. In response, the server replies with a SYN-ACK. Finally the client sends an ACK back to the server. At this point, both the client and server have received an acknowledgement of the connection.

[Read More Answers.](#)

Question # 73

Explain what is mesh network?

**Answer:-**

A network in which there are multiple network links between computers to provide multiple paths for data to travel.

[Read More Answers.](#)

Question # 74

Explain what is Protocol Data Unit?

Answer:-

LAN uses different ways of communicating. In some ways (like ETHERNET) data link layer is divided into two parts MAC and LLC (Logical Link Control). At LLC the data is known as Protocol Data Unit. It has 4 fields DSAP, SSAP, Control, Upper data layer. Its main function is to control the flow and error.

[Read More Answers.](#)

Question # 75

What is the difference between a directory and active directory?

Answer:-

Directory:

In IT terminology Directory means a pouch where documents are kept. Like, director consists of files & Documents etc.

Active Directory:

AD is related to servers. It is a directory where all users, groups, computers, network resources, list of users, Admins and specialised users are recorded. Like AD is a centralised database where the manageable data is fed and all the database elements, objects and classes are managed.

[Read More Answers.](#)

Question # 76

What is a Bridge? When is it used? How is a bridge configured? What are the software and hardware components of a bridge?

Answer:-

A bridge is a layer 2 device - it works based on MAC address. A bridge is s/w based. It is usually used to bridge 2 networks (or even more in recent times). A bridge is configured by having the MAC address of the switches connected directly to it.

[Read More Answers.](#)

Question # 77

Tell me what does CIDR stand for?

Answer:-

Hi, Classless Internet Domain Routing (CIDR), if default routing this is very useful where we don't need to worry much about what is the subnetting about that class of IP's. Shridhar

[Read More Answers.](#)

Question # 78

Explain what is RIP (Routing Information Protocol)?

Answer:-

RIP is one of the most enduring of all routing protocols. RIP is also one of the more easily confused protocols because a variety of RIP-like routing protocols proliferated, some of which even used the same name! RIP and the myriad RIP-like protocols were based on the same set of algorithms that use distance vectors to mathematically compare routes to identify the best path to any given destination address.

[Read More Answers.](#)

Question # 79

Explain what is the Network Time Protocol?

Answer:-

The Network Time Protocol (NTP) is a protocol for synchronising the clocks of computer systems over packet-switched, variable-latency data networks. NTP uses UDP as its transport layer. It is designed particularly to resist the effects of variable latency.

[Read More Answers.](#)

Question # 80

Explain what is subnet?

Answer:-

In topology and related areas of mathematics, a subnet is a generalization of the concept of subsequence to the case of nets. The definition is not completely straightforward, but is designed to allow as many theorems about subsequences to generalize to nets. A portion of a network that shares a common address component. On TCP/IP networks, subnets are defined as all devices whose IP addresses have the same prefix. For example, all devices with IP addresses that start with 100.100.100. would be part of the same subnet.

[Read More Answers.](#)

Question # 81

Explain what is BGP (Border Gateway Protocol)?

Answer:-

BGP stands for Border Gateway Protocol. It is an inter-AS (Autonomous System Routing Protocol). BGP is the routing protocol that runs the Internet. BGP is used to interconnect network islands (ASs) together. BGP is the only IP routing protocol that runs on TCP instead of IP like the other routing protocols, OSPF, RIP,



EIGRP. Also BGP is also known as a path vector protocol as it not only tells you how to get to a network IP prefix, but it shows you an AS path of the reachable network. There are two versions of the BGP protocol. EBGp (External Border Gateway Protocol) and IBGP (Internal Border Gateway Protocol).

[Read More Answers.](#)

Question # 82

Explain what are the data units at different layers of the TCP / IP protocol suite?

Answer:-

The data unit created at the application layer is called a message, at the transport layer the data unit created is called either a segment or an user datagram, at the network layer the data unit created is called the datagram, at the data link layer the datagram is encapsulated in to a frame and finally transmitted as signals along the transmission media.

[Read More Answers.](#)

Question # 83

Explain what is the range of addresses in the classes of internet addresses?

Answer:-

Class A 0 - 126 255.0.0.0 (127 is loopback)
Class B 128 - 191. 255.255.0.0
Class C 192 - 223. 255.255.255.0
Class D Multicast
Class E Reserved

[Read More Answers.](#)

Question # 84

What is NETBIOS and NETBEUI?

Answer:-

NETBIOS is a programming interface that allows I/O requests to be sent to and received from a remote computer and it hides the networking hardware from applications. NETBEUI is NetBIOS extended user interface. A transport protocol designed by microsoft and IBM for the use on small subnets.

[Read More Answers.](#)

Question # 85

How to configure dhcp features in an switch?

Answer:-

DHCP is only available on newer IOS-based switches. For example, Catalyst 3550 and 3750 offer DHCP.

Let us take Cisco 2611 router running IOS12.2

To begin, connect the router's Ethernet port to a switch, and connect the switch to a laptop, which will serve as the DHCP client.

To configure Cisco IOS DHCP, follow these steps, which include sample commands:

Configure an IP address on the router's Ethernet port, and bring up the interface. (On an existing router, you would have already done this.)

```
Router(config)# interface ethernet0/0
```

```
Router(config-if)#ip address 1.1.1.1 255.0.0.0
```

```
Router(config-if)# no shutdown
```

Create a DHCP IP address pool for the IP addresses you want to use.

```
Router (config)# ip dhcp pool mypool
```

Specify the network and subnet for the addresses you want to use from the pool.

```
Router(dhcp-config)# network 1.1.1.0 /8
```

Specify the DNS domain name for the clients.

```
Router(dhcp-config)#domain-name mydomain.com
```

Specify the primary and secondary DNS servers.

```
Router(dhcp-config)#dns-server 1.1.1.10 1.1.1.11
```

Specify the default router (i.e., default gateway).

```
Router(dhcp-config)#default-router 1.1.1.1
```

Specify the lease duration for the addresses you're using from the pool.

```
Router(dhcp-config)#lease 7
```

Exit Pool Configuration Mode.

```
Router(dhcp-config)#exit
```

This takes you back to the global configuration prompt. Next, exclude any addresses in the pool range that you don't want to hand out.

For example, let's say that you've decided that all IP addresses up to .100 will be for static IP devices such as servers and printers. All IP addresses above .100 will be available in the pool for DHCP clients.

Next, enter the ipconfig /renew command on the laptop to receive an IP address. After you have the IP address, enter the ipconfig /all command.

[Read More Answers.](#)

Question # 86

Explain what are 10Base2, 10Base5 and 10BaseT Ethernet LANs?

Answer:-

10Base2

-An Ethernet term meaning a maximum transfer rate of 10 Megabits per second that uses baseband signaling, with a contiguous cable segment length of 100 meters and a maximum of 2 segments.

10Base5

-An Ethernet term meaning a maximum transfer rate of 10 Megabits per second that uses baseband signaling, with 5 continuous segments not exceeding 100 meters per segment.

10BaseT

-An Ethernet term meaning a maximum transfer rate of 10 Megabits per second that uses baseband signaling and twisted pair cabling.



[Read More Answers.](#)

Question # 87

Explain what is redirector?

Answer:-

Redirector is software that intercepts file or prints I/O requests and translates them into network requests. This comes under presentation layer.

[Read More Answers.](#)

Question # 88

What is "triple X" in Networks?

Answer:-

The function of PAD (Packet Assembler Disassembler) is described in a document known as X.3. The standard protocol has been defined between the terminal and the PAD, called X.28; another standard protocol exists between the PAD and the network, called X.29. Together, these three recommendations are often called "triple X"

[Read More Answers.](#)

Question # 89

Explain what are major types of networks and explain?

Answer:-

Server-based network Peer-to-peer network Peer-to-peer network, computers can act as both servers sharing resources and as clients using the resources. Server-based networks provide centralized control of network resources and rely on server computers to provide security and network administration

[Read More Answers.](#)

Question # 90

Tell me what is Project 802?

Answer:-

It is a project started by IEEE to set standards that enable intercommunication between equipment from a variety of manufacturers. It is a way for specifying functions of the physical layer, the data link layer and to some extent the network layer to allow for interconnectivity of major LAN protocols. It consists of the following: 802.1 is an internetworking standard for compatibility of different LANs and MANs across protocols. 802.2 Logical link control (LLC) is the upper sublayer of the data link layer which is non-architecture-specific, that is remains the same for all IEEE-defined LANs. Media access control (MAC) is the lower sublayer of the data link layer that contains some distinct modules each carrying proprietary information specific to the LAN product being used. The modules are Ethernet LAN (802.3), Token ring LAN (802.4), Token bus LAN (802.5). 802.6 is distributed queue dual bus (DQDB) designed to be used in MANs.

[Read More Answers.](#)

Question # 91

Explain difference between bit rate and baud rate. Bit rate is the number of bits transmitted during one second whereas baud rate refers to the number of signal units per second that are required to represent those bits. $\text{baud rate} = \text{bit rate} / N$ where N is no-of-bits represented by each signal shift?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 92

Tell us what is ICMP?

Answer:-

ICMP is Internet Control Message Protocol, a network layer protocol of the TCP/IP suite used by hosts and gateways to send notification of datagram problems back to the sender. It uses the echo test / reply to test whether a destination is reachable and responding. It also handles both control and error messages.

[Read More Answers.](#)

Question # 93

Tell me can we use static and dynamic routing in one network?

Answer:-

As Saurabh said; we can use static and Dynamic Routing in one network. However Dynamic Routing is used to have the best path no matter what the status of the physical links. All routing protocols have some sort of shortest-path or lowest-cost or best-choice algorithm to help you weigh all the options available. Static routing can be used in a small network to reduce the work of the network administrator or to use a particular route only to forward the packet; we need static routing.

[Read More Answers.](#)

Question # 94

Tell me what are the advantages and disadvantages of the three types of routing tables?

Answer:-

The three types of routing tables are fixed, dynamic, and fixed central. The fixed table must be manually modified every time there is a change. A dynamic table changes its information based on network traffic, reducing the amount of manual maintenance. A fixed central table lets a manager modify only one table, which is then read by other devices. The fixed central table reduces the need to update each machine's table, as with the fixed table. Usually a dynamic table causes the fewest problems for a network administrator, although the table's contents can change without the administrator being aware of the change.



[Read More Answers.](#)

Question # 95

What is the minimum and maximum length of the header in the TCP segment and IP datagram?

Answer:-

The header should have a minimum length of 20 bytes and can have a maximum length of 60 bytes.

[Read More Answers.](#)

Question # 96

Explain what is packet filter?

Answer:-

Packet filter is a standard router equipped with some extra functionality. The extra functionality allows every incoming or outgoing packet to be inspected. Packets meeting some criterion are forwarded normally. Those that fail the test are dropped.

[Read More Answers.](#)

Question # 97

Explain what is logical link control?

Answer:-

One of two sublayers of the data link layer of OSI reference model, as defined by the IEEE 802 standard. This sublayer is responsible for maintaining the link between computers when they are sending data across the physical network connection.

[Read More Answers.](#)

Question # 98

What is region in networking?

Answer:-

When hierarchical routing is used, the routers are divided into what we call regions, with each router knowing all the details about how to route packets to destinations within its own region, but knowing nothing about the internal structure of other regions.

[Read More Answers.](#)

Question # 99

What is traffic shaping in networking?

Answer:-

One of the main causes of congestion is that traffic is often busy. If hosts could be made to transmit at a uniform rate, congestion would be less common. Another open loop method to help manage congestion is forcing the packet to be transmitted at a more predictable rate. This is called traffic shaping.

[Read More Answers.](#)

Question # 100

Explain what are Digrams and Trigrams?

Answer:-

The most common two letter combinations are called as digrams. e.g. th, in, er, re and an. The most common three letter combinations are called as trigrams. e.g. the, ing, and, and ion.

[Read More Answers.](#)

Question # 101

Explain what is silly window syndrome in Computer Networks?

Answer:-

It is a problem that can ruin TCP performance. This problem occurs when data are passed to the sending TCP entity in large blocks, but an interactive application on the receiving side reads 1 byte at a time.

[Read More Answers.](#)

Question # 102

What is source route in Computer Networks?

Answer:-

It is a sequence of IP addresses identifying the route a datagram must follow. A source route may optionally be included in an IP datagram header.

[Read More Answers.](#)

Question # 103

What is NVT in Computer Networks?

Answer:-

It is a set of rules defining a very simple virtual terminal interaction. The NVT (Network Virtual Terminal) is used in the start of a Telnet session.

[Read More Answers.](#)



Question # 104

Explain what is the subnet mask of this network?

Answer:-

The Default subnet mask for this Ip address is 255.255.254.254 as this is class B IP address. But the the subnet mask is 255.255.254.128/23. Since, $2^7=128$ and the Frame size will be $2^1=2$ Subnet ID= 130.237.14.0 Broadcast ID= 130.237.15.255 Correct me if I am wrong.

[Read More Answers.](#)

Question # 105

Suppose you need to connect a Token Ring segment to an Ethernet segment. Would you use a router, a brouter, or a bridge?

Answer:-

Router is needed with two interfaces: one Token Ring, another Ethernet one.

[Read More Answers.](#)

Question # 106

What is the process of OSI Model, when two computer communicate with each other?

Answer:-

OSI model could be big. I will explain it in TCP/IP model, which is used in modern computers. The TCP/IP model has the following Layers: Application, Transport, Network, Data Link, Physical. Application: When 2 PCs want to communicate they often use an application to communicate. Applications are user interfacing and is in a format understandable by the user. The application layer provides a user with various application services, which a user decides upon the communication. Let's just say PC A wants to send a word document to PC B. Word is an application that a user uses at the application layer. Transport: This layer multiplexes data. The need for multiplexing, is that there could be many services that would want to communicate with different destinations. This layer in the TCP/IP model, uniquely identifies to the receiving device what application layer program the data sent is destined to. Along with this this layer also provides a user with different reliability modes depending upon the protocol used. Network: This layer is responsible for logical addressing to identify the network where the receiving station is. Data link: This layer is where the data gets another tag with the physical address of the device, to identify exactly what PC the data is destined to in the network identified by the network layer. The physical address often depends upon the technology that you are using (ethernet, token ring, frame relay, PPP etc). Also the data gets split in to series of bits of 0s and 1s and sent to the lower layer. Physical: This is the layer where the data in form of bits received from the data link layer gets transmitted in form of electrical signals to the destination.

[Read More Answers.](#)

Question # 107

When two network layers are in communication with one another, these layers are known as?

- a.) PDUs
- b.) peer entities
- c.) PRAMs
- d.) sockets

Answer:-

B.) Peer Entities

[Read More Answers.](#)

Question # 108

Explain what is the function of a WAP gateway?

Answer:-

Implementation of the WAP stack
Converting protocols
Converting markup languages
Compiling WMLScript programs
Encoding WML into a binary bitstream
Providing access control
Caching Domain name resolution services (DNS)
Security features

[Read More Answers.](#)

Question # 109

What is VLAN and INTERVLAN? Why do we use these techniques?

Answer:-

VLAN (Virtual Local Area Network) is a logical grouping of network users and resources connected to administratively defined ports on a switch. VLANs break up broadcast domains in layer 2 switch network. Virtual LANs (VLANs) divide one physical network into multiple broadcast domains. But, VLAN-enabled switches cannot by themselves, forward traffic across VLAN boundaries. So you need to have routing between these VLANs which is called interVLAN routing. You can achieve this by using either a Layer 3 switch or a router.

[Read More Answers.](#)

Question # 110

Explain Data Transmission From Server to Server?

Answer:-

State the technical steps required for data transmission from server to server via a router and switch

[Read More Answers.](#)

Question # 111

Suppose a person would like to access a file on another computer (connected via LAN) while working with safe mode. What should he do?

Answer:-

In safemode itself he can use telnet to access file on the other system in the same LAN



[Read More Answers.](#)

Question # 112

Tell me what is VPN? Is RAS and VPN one and the same? How do I determine that My computer is part of correct network and is getting a Valid IP?

Answer:-

SD RAM:SDRAM is Single Data Rate meaning that SDRAM can accept one command and transfer one word of data per clock cycle. Typical speeds of SDRAM are 100 and 133 MHz.DDR SDRAM:DDR SDRAM transfers data twice per clock cycle, hence the name double data rate. DDR clock speeds range between 200 MHz (DDR-200) and 400 MHz (DDR-400). DDR-200 transfers 1600 MB/s, while DDR-400 transfers 3200 MB/s.DDR2 SDRAM:DDR2 SDRAM is twice as fast as DDR which means twice as much data is carried to the module for each clock cycle. Also consumes less power as compared to the DDR memory.

[Read More Answers.](#)

Question # 113

What does negotiation mean when discussing network protocols?

Answer:-

The Difference Between Half and Full Duplex."Duplex" simply means you're able to send and receive data (most often the human voice) from the same device whether that be with your phone, 2-way radio, or PC.Half-duplex devices let you send and receive, but only one-way at a time. If you've ever used a walkie-talkie, then you know what half-duplex conversations sound like. You have to push the TALK button to send your message. But as long as you are holding the TALK key, you can't hear what anyone else is saying. You must release the button to receive.Full duplex actually, full duplex is nothing new. In fact, you already know exactly what it sounds like. Your corded or cordless phones are full-duplex devices letting you and your caller speak simultaneously without any dropouts in either one of your voices.Half- and Full-Duplex ModeEach switch port can operate in either half-duplex or full-duplex mode.Half Duplex = send or receive dataFull Duplex = send and receive dataAutonegotiationThe switch supports the autonegotiation of both speed and duplex mode. As a result, when the switch is connected to another network device that is capable of autonegotiation, the two devices communicate common speeds and duplex modes to each other. Then, the highest common capabilities for both devices become the operating modes. The switch has the following operating priorities:1. 100 Mbps, full-duplex mode2. 100 Mbps, half-duplex mode3. 10 Mbps, full-duplex mode4. 10 Mbps, half-duplex mode Note: Hub operates in Half Duplex Mode, whereas the switch operates in both Half and Full Duplex Mode.

[Read More Answers.](#)

Question # 114

What is attenuation in Computer Networks?

Answer:-

When we transmit any signal, the signal strength is degraded because of losses, interference, this is called attenuation of the signal. To reduce attenuation, repeaters are used to boost the signal strength.

[Read More Answers.](#)

Question # 115

TCP is reliable in communication whereas IP is Non-reliable. Why it is integrated into one and given as TCP/IP protocol?

Answer:-

Reliability not achieved at lower layers shall be implemented at the higher layers and more importantly each Layer in TCP/IP protocol suite is responsible for some network operations. IP though unreliable it implements routing of network information across the nodes upto the destination. But TCP cannot do this it implements only the end-to-communication (i.e) the source and destination without taking care of the intermediate nodes across which the network information should pass through which is done by IP layer. Therefore IP is integrated with TCP.

[Read More Answers.](#)

Question # 116

Explain what are the important topologies for networks?

Answer:-

BUS topology:

In this each computer is directly connected to primary network cable in a single line.

Advantages:

Inexpensive, easy to install, simple to understand, easy to extend.STAR topology:In this all computers are connected using a central hub.

Advantages:

Can be inexpensive, easy to install and reconfigure and easy to trouble shoot physical problems.

RING topology:

In this all computers are connected in loop.

Advantages:

All computers have equal access to network media, installation can be simple, and signal does not degrade as much as in other topologies because each computer regenerates it.

[Read More Answers.](#)

Question # 117

Tell us why do we have a minimum and maximum cable length requirement?

Answer:-

The min and max cable length is required because the signals can travel effectively without losing their strength to that extent you can increase the cable length apart from preferred by using the repeaters after the length so that the signals will be boosted again.

[Read More Answers.](#)

Question # 118

What is cladding in Computer Networks?

**Answer:-**

Material placed on the exterior of wood frame and sash components to provide ease of maintenance. Common cladding materials include vinyl and extruded or roll-formed aluminum

[Read More Answers.](#)

Question # 119

Explain what is passive topology?

Answer:-

When the computers on the network simply listen and receive the signal, they are referred to as passive because they don't amplify the signal in any way. Example for passive topology - linear bus.

[Read More Answers.](#)

Question # 120

Explain what is the difference between .pst and .ost files used in outlook?

Answer:-

.pst files are all the emails (and files attached to those emails), calendar, contacts, tasks, etc. stored locally on your machine. .pst are created when using Outlook to manage your email (Gmail, hotmail, yahoo, aol, etc.) they can also be created within an Exchange environment, however, Microsoft doesn't recommend this due to the .pst being very unstable and if your pc were to crash you would lose all of your emails. In an Exchange environment, using .pst removes the emails from the Exchange server and stores them locally. .ost files are simply a copy of your mailbox that is stored on the Exchange server. Think of this as a type of email cache file. This leaves the emails on the server, but also stores a copy of emails since your last sync on the local machine.

[Read More Answers.](#)

Question # 121

Suppose you have been given 1 printer and 1 IP Address for installing it in a Networking Environment
How will you do it?

Answer:-

Just you go to the start menu -> setting -> printers and fax -> add a printer
-> local printer attached to this pc -> create the new port -> select the standard tcp/ip protocol
-> and enter the ip address and insert the printer CD for driver and install the printer drive.
The printer is now ready to use.

[Read More Answers.](#)

Question # 122

Explain which protocol is used to communicate between client and ISP?

Answer:-

OSPF is used. Because it is considered to be the most efficient IGP (interior gateway protocol). BGP is more widely used as exterior gateway protocol (EGP).

[Read More Answers.](#)

Question # 123

How to ping from one host to another in IPv6 without ARP?

Answer:-

By using the Neighbour Discovery Protocol (NDP)

[Read More Answers.](#)

Question # 124

What is the difference between routable and non-routable protocols?

Answer:-

Routable protocols can work with a router and can be used to build large networks. Non-Routable protocols are designed to work on small, local networks and cannot be used with a router

[Read More Answers.](#)

Question # 125

Draw a constellation diagram that represents Hybrid Modulation technique with 4 levels of amplitude and 4 levels different phase (like $0^\circ, 90^\circ, 180^\circ, 270^\circ$)

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 126

How many levels of signalling is possible with such modulation, in other words what is the number of symbols?

Answer:-

Please share your views.

[Read More Answers.](#)



Question # 127

What is MAC address in Computer Networks?

Answer:-

Short for Media Access Control address, a hardware address that uniquely identifies each node of a network. In IEEE 802 networks, the Data Link Control (DLC) layer of the OSI Reference Model is divided into two sublayers: the Logical Link Control (LLC) layer and the Media Access Control (MAC) layer. The MAC layer interfaces directly with the network medium. Consequently, each different type of network medium requires a different MAC layer. On networks that do not conform to the IEEE 802 standards but do conform to the OSI Reference Model, the node address is called the Data Link Control (DLC) address. See a breakdown of the seven OSI layers in the Quick Reference section of Webopedia.

[Read More Answers.](#)

Question # 128

Tell me what would you check first at the off site before you connect database?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 129

Piggybacking Suggests

1. attaching a check bit to an outgoing data frame
2. attaching an acknowledge to an outgoing data frame
3. saving some memory space for the critical processes
4. securing the data frames before transporting

Answer:-

Piggybacking Suggests attaching an acknowledge to an outgoing data frame

[Read More Answers.](#)

Question # 130

The network address made available to the transport layer should use a uniform numbering plan

1. In a session
2. In a LAN
3. In a WAN
4. across LAN and WAN

Answer:-

The network address made available to the transport layer should use a uniform numbering plan In a session

[Read More Answers.](#)

Question # 131

What is a Management Information Base (MIB) in Computer Networks?

Answer:-

This term comes from the OSI Network management model. It is a kind of virtual database used to manage the devices in a network. It consists of record the of network entities(e.g. routers,switches) in form of objects. The database is hierarchical (tree structured) and entries are addressed through object identifiers.

[Read More Answers.](#)

Question # 132

Explain why logical address required is in OSI model? State the difference between guide media and unguide media

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 133

What is SIMM?

Answer:-

SIMM is used to store a single row of DRAM,EDo or BEDO chips where the module is soldered onto a PCB.

[Read More Answers.](#)

Question # 134

Explain what the difference between DNS and WINS?

Answer:-

DNS- Domain Name Server or Services.WINS- Windows Internet Name Service.DNS is resolve the web site name to IP address or you can say.In WINS used a file name those is LMhost, this file in the System32, and when we put the websit name and its IP address, then it resolve the particular IP address those insert in the LMhost file.

[Read More Answers.](#)

Question # 135

BOOTP helps a diskless workstation boot. How does it get a message to the network looking for its IP address and the location of its operating system boot files?

**Answer:-**

BOOTP sends a UDP message with a subnetwork broadcast address and waits for a reply from a server that gives it the IP address. The same message might contain the name of the machine that has the boot files on it. If the boot image location is not specified, the workstation sends another UDP message to query the server.

[Read More Answers.](#)

Question # 136

What MAU in Computer Networks?

Answer:-

Short for Multistation Access Unit (also abbreviated as MSAU), a token-ring network device that physically connects network computers in a star topology while retaining the logical ring structure. One of the problems with the token-ring topology is that a single non-operating node can break the ring. The MAU solves this problem because it has the ability to short out non-operating nodes and maintain the ring structure. A MAU is a special type of hub.

[Read More Answers.](#)

Question # 137

Explain what do you exactly mean by end to end delivery of packets? (i.e n/w layer and transport layer)

Answer:-

actually end to end delivery of packets is done by network layer, Network layer is responsible for the packets to be delivered with reliability for every link i.e for every routers it come across its path.so packet is delivered with reliability from source to destination. where as transport layer is responsible for process to process reliability.it gets the packets from network layer demultiplex it to send it to corresponding application (FTP,Email,...) depending upon the portnumber that is specified.

[Read More Answers.](#)

Question # 138

Do you know what is the role of Network administrator?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 139

Explain how data can be effectively communicated from the transmitter to the receiver?

Answer:-

Data can be effectively transmitted through E1 leased line.But E1 leased line is very Costly. so by using VPN (Virtual Private Network) We send data very effectively in less cost than E1 leased line.Vpn also need internet connection to send data from source to server.

[Read More Answers.](#)

Question # 140

What is EGP (Exterior Gateway Protocol) in Computer Networks?

Answer:-

It is the protocol the routers in neighboring autonomous systems use to identify the set of networks that can be reached within or via each autonomous system.

[Read More Answers.](#)

Question # 141

Explain what is the advantage and disadvantage of local area networks?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 142

Tell me what are the core differences Between TCP and UDP?

Answer:-

In transport layer two protocols are working TCP , transmission control protocol and UDP , user datagram protocol , TCP is also known as reliable protocol , means it is using handshake process , where client request to server then establish the connection and then transfer the packet then terminates it. In UDP , no reliability but packets are safe. when long RTO is there that time packets use to UDP.

[Read More Answers.](#)

Question # 143

Explain what is autonomous system?

Answer:-

Autonomous system has been assigned a number which differentiates it from other autonomous systems to communicate. there is BGP working at to communicate with other AS

[Read More Answers.](#)

Question # 144



What is Recovery Console?

Answer:-

Recovery Console for example if you install a software in existing windows and due to the software if the system have some problem you can choose Recovery console at Start -programs-accessories-system tools-Recovery console enter it and you can see the Timetable of Recovery console select the previous date of which you installed and select Restore. it can have a back up of Registry Files

[Read More Answers.](#)

Question # 145

What is the difference between TCP/IP host name and netBIOS host name?

Answer:-

NetBIOS name is system Name it is only 15 character long and resolve by NetBios protocol. TCP/IP Name is full system name. it is 65 characters long and resolved by windows socket protocol.

[Read More Answers.](#)

Question # 146

Explain difference between the communication and transmission. Transmission is a physical movement of information and concern issues like bit polarity, synchronization, clock etc. Communication means the meaning full exchange of information between two communication media?

Answer:-

Difference between the communication and transmission. Transmission is a physical movement of information and concern issues like bit polarity, synchronisation, clock etc. Communication means the meaning full exchange of information between two communication media.

[Read More Answers.](#)

Question # 147

Tell me what are the two types of transmission technology available?

(i) Broadcast and (ii) point-to-point

Answer:-

There are basically 2 types of transmission technologies. 1. Broadband : In this type .Every host sends the packet/message to all the host. the message has a source address and a destination address. destination address helps the host to identify whether the message is indeed for them or somebody else. the source address allows them to identify from whom the message has come. 2. Point to Point : In this type of technology there are multiple connections (transmission lines) between 2 hosts. so the the packet can take different routes if a particular route is congested.

[Read More Answers.](#)

Question # 148

What is layer-3 switch in Computer Networks?

Answer:-

A layer 2 switch provides connectivity but doesn't act upon the packets at all. These switches are often found in small offices, your home or on the very edge of a LAN to provide Internet or client/server communication. A layer 3 switch provides connectivity but can also provide routing, access lists, QOS and even security. These are usually much more expensive switches with IOS's installed. They are best used in video conferencing to keep video packets together through QOS. For video, your cable should run directly to the layer 3 switch and not pass through any other lesser switch to avoid tiling, delays and other issues that affect video quality.

[Read More Answers.](#)

Question # 149

Explain what is Active Directory? How does it work?

Answer:-

In windows 2000 and 2003 environment AD is a powerful service, active directory mainly used for maintaining and promotion of entire company into centralized network administration. It means domain environment.

[Read More Answers.](#)

Question # 150

Explain what is IPv6? How many octets is it?

Answer:-

IPv6 is basically the response to the fact that the world is/was running out of public IP addresses. The best example of stupidity leading to the problem is universities handing out public IP addresses to students and faculty on their networks. A corporation would be insane to hand out public IP addresses to staff members. IPv6 default subnet is 255.255.255.255.0. IPv6 has 5 octets - 255.255.255.255.0. IPv4 has 4 octets - 255.255.255.0. Personal Opinion IPv6 is not failure as such. I'm sure it's implemented somewhere, but I've not seen it. The solution to running out of IP addresses is better management of IPv4 addresses. Hardware/IOS manufacturers often use 10.0.0.0 (called a '10' network) in examples of how to configure their devices. The students then return to their networks and implement their textbook learning's in their networks. BIG MISTAKE! Then these students wonder why things are all messed up on their networks. You should Class 'C' addressing on your private, smaller networks. It'll work out much better for you.

[Read More Answers.](#)

Question # 151

Explain what is Private IP?

Answer:-

The address which can't be routed through public (internet) are private IP addresses and it is scheme of saving public addresses: in class A range is 10.0.0.0 to



10.255.255.255

[Read More Answers.](#)

Question # 152

Explain what is the difference between collision domain and broadcast domain?

Answer:-

Broadcast Domain: A set of all devices that receive broadcast frames originating from any device within the set. Broadcast domains are typically bounded by routers (or, in a switched network, by VLANs) because routers do not forward broadcast frames. Collision Domain: In Ethernet, the network area within which frames that have collided are propagated. Repeaters and Hubs propagate collisions, LAN switches and bridges do not.

[Read More Answers.](#)

Question # 153

Explain what is point-to-point protocol?

Answer:-

In networking, the Point-to-Point Protocol is commonly used to establish a direct connection between two nodes. Its primary use has been to connect computers using a phone line, though it is also occasionally used over broadband connections.

[Read More Answers.](#)

Question # 154

What is difference between layer 2 and layer 3 switch?
How much bandwidth support by V.35 and RS 232 cable?
What is difference between V.35 and RS 232 Cable?

Answer:-

Layer 2 switch forward or filter frames, layer 3 switch (router) use logical addressing and provide packet switching. Router also provide packet filtering by using access list and when connect two or more network together and use logical addressing (IP). Besides, router use routing table to make path selection and forward packet to remote network.

[Read More Answers.](#)

Question # 155

Windows crashed because NTLDR File is missing. How will you restore this file (Without using Safe Mode Option)?

Answer:-

NTLDR is missing Press CTRL+ALT+DEL to restart. This problem may occur if the basic input/output system (BIOS) on your computer is outdated, or if one or more of the following Windows boot files are missing or damaged: NtldrNtdetect.comBoot.ini To resolve this issue, verify that the BIOS on your computer is current, as appropriate to your situation, you can solve it by repair this folder in the first repair in Win XP if you know name of his folder ..if you don't know you can repair all files ...

[Read More Answers.](#)

Question # 156

How to use VPN to connect branch office to the other office?

Answer:-

By using a point-to-point protocol, that allows the branch office router act as a PPP initiator to the peer PPP router at the main office. Now, for security purpose, the PPP protocol packets can be tunneled using a tunnelling protocol like IPSec (tunnel mode) or L2TP etc.

[Read More Answers.](#)

Question # 157

How to configure two DHCP Servers using 2 switches with 1 DSL. Keep in mind we cannot use any other additional equipment?

Answer:-

You configure what is known as Network Address Translation (NAT) on the router. This then translates the IP address of the server, which is likely to be a 10.x.x.x or 192.168.x.x address, to be the IP address it gets from your service provider. It keeps track of which server, and where it is going, so it can use the same 'real' IP address on the Internet for both of them.

[Read More Answers.](#)

Question # 158

Explain how Gateway is different from Routers?

Answer:-

Gateway is nothing but the final point that the data crosses finally in a network, it is mostly used for user authentication which router cannot provide. Gateways can provide authentication to anonymous users, it is used when you have only one single network. It is less costly. Whereas router is used for routing between different networks, providing routing tables and deciding best path for the data to travel. It is used when you have more than one networks. It is more costly.

[Read More Answers.](#)

Question # 159

Explain benefits of VPN? Difference between L2TP and PPTP Protocols?

Answer:-

A Virtual Private Network (VPN) delivers private network services over a public infrastructure. An IP VPN is a partitioned private network constructed over a shared IP-based backbone that utilizes technologies to ensure privacy of data. Benefits Intranet, Cost Effectiveness, Security, Flexibility, Reliability



[Read More Answers.](#)

Question # 160

which protocol is used for retrieving mails?

Answer:-

POP3 and IMAP4 are used to retrieve mails. IMAP4 stores a copy of message on the server whereas POP3 does not.

[Read More Answers.](#)

Question # 161

There are four routers and 4 switches and 40 computers in an office. How will you connect each devices and configure those devices?

Answer:-

This is using different network build purpose, so connect first router to first switch and connect 10 nodes with first switch, this is one network ex:192.168.1.0 network and connect second router to second switch with 10 nodes this is another network ex:192.168.2.0 network the same method third router, fourth router, third switch and fourth switch ex:192.168.3.0 network and 192.168.4.0 network now u connect all networks in one segment thats all.

[Read More Answers.](#)

Question # 162

Suppose you are given only the IP address of the switch but not the port number. How will you read that switch?

Answer:-

A switch can have an Ip address for telnetting purpose. So, if you telnet to the switch, and if you have no password on Telnet you can access the switch (provided that there is no privileged mode password set) and then 'Show Run', you can read the running configuration.

[Read More Answers.](#)

Question # 163

What is piggy backing in Computer Networks?

Answer:-

Piggybacking is gaining access to restricted communication channel by using session that another user has already established. Piggybacking can be defeated by logging off before leaving a workstation or terminal or by initiating a protected mode, such as via a screensaver, that requires re-authentication before access can be resumed.

[Read More Answers.](#)

Question # 164

What advantage does REX offer other similar utilities?

Answer:-

Please share your answers.

[Read More Answers.](#)

Question # 165

Explain what does the Mount protocol do?

Answer:-

The Mount protocol returns a file handle and the name of the file system in which a requested file resides. The message is sent to the client from the server after reception of a client's request.

[Read More Answers.](#)

Question # 166

Tell me what is the difference between interior and exterior neighbor gateways?

Answer:-

Interior gateways connect LANs of one organization, whereas exterior gateways connect the organization to the outside world.

[Read More Answers.](#)

Question # 167

What is a pseudo tty in Computer Networks?

Answer:-

A pseudo tty or false terminal enables external machines to connect through Telnet or rlogin. Without a pseudo tty, no connection can take place.

[Read More Answers.](#)

Question # 168

What is the difference between an unspecified passive open and a fully specified passive open?

Answer:-

An unspecified passive open has the server waiting for a connection request from a client. A fully specified passive open has the server waiting for a connection from a specific client.



[Read More Answers.](#)

Question # 169

What is the function of Transmission Control Block?

Answer:-

A TCB is a complex data structure that contains a considerable amount of information about each connection.

[Read More Answers.](#)

Question # 170

Explain what is anonymous FTP and why would you use it?

Answer:-

Anonymous FTP enables users to connect to a host without using a valid login and password. Usually, anonymous FTP uses a login called anonymous or guest, with the password usually requesting the user's ID for tracking purposes only. Anonymous FTP is used to enable a large number of users to access files on the host without having to go to the trouble of setting up logins for them all. Anonymous FTP systems usually have strict controls over the areas an anonymous user can access.

[Read More Answers.](#)

Question # 171

Tell me what is terminal emulation, in which layer it comes?

Answer:-

Terminal emulation is the ability to make one computer terminal appear like some other terminal.

Terminal emulation is used to give the users the ability to log on and get direct access to legacy programs in a mainframe operating system. The emulation program runs like any other workstation application as a separate program task.

Terminal emulation comes in the application layer.

[Read More Answers.](#)

Question # 172

What is virtual channel in Computer Networks?

Answer:-

A virtual channel defines a single point to point connection, identified by its virtual channel identifier. An individual channel can be uniquely identified by its virtual channel and virtual path number. The insertion of VCs enables to implement policies for allocating the physical channel bandwidth, which enables to support quality of service in applications.

[Read More Answers.](#)

Question # 173

The network address made available to the transport layer should use a uniform numbering plan

1. In a session
2. In a LAN
3. In a WAN
4. across LAN and WAN

Answer:-

Across LANs and WANs.

[Read More Answers.](#)

Question # 174

What is Beaconing in Computer Networks?

Answer:-

Beaconing is a process which allows the network to render their network problems by them-self. Token ring and FDDI (Fibre Distributed Data Interface) networks make use of this process.

It is also a signalling error condition in wireless/LAN networks, during a failure the packets are transmitted as beacons, this beacon identifies the neighboring transmission which is active and helps in generation of an auto reconfiguration, hence the node which come under failure domain, automatically initiate a diagnostic measure and try to bypass the failure.

[Read More Answers.](#)

Question # 175

Explain what are headers and trailers? How are they added and removed?

Answer:-

Headers and trailers are the concepts of OSI model.

Headers are information structures which identifies the information that follows, such as a block of bytes in communication.

Trailer is the information which occupies several bytes at the end of the block of the data being transmitted. They contain error-checking data which is useful for confirming the accuracy and status of the transmission.

During communication of data the sender appends the header and passes it to the lower layer while the receiver removes header and passes it to upper layer. Headers are added at layer 6, 5, 4, 3 & 2 while Trailer is added at layer 2.

[Read More Answers.](#)

Question # 176



Explain what services does the internet layer provide?

Answer:-

The internet layer packs data into data packets known as IP datagrams, which contain source and destination address information that is used to forward the datagrams between hosts and across networks. The Internet layer is also responsible for routing of IP datagrams. Its job is to allow the host to insert packets to the internet, when data is sent, each layer treats all the information it receives as data and adds control information to the front of that data. This control information is called a header, and the addition of a header is called encapsulation. When data is received, the opposite procedure takes place as each layer removes its header before passing the data to the layer above. The protocols include IP (Internet Protocol), ICMP (Internet Control Message Protocol), ARP (Address Resolution Protocol) and RARP (Reverse Address Resolution Protocol).

[Read More Answers.](#)

Question # 177

What is IGP (Interior Gateway Protocol) in Computer Networks?

Answer:-

Within an autonomous system the interior gateway protocol (IGP) is used to exchange routing information.

There are two types of IGP

- 1.Distance-vector routing protocol
- 2.Link-state routing protocol.

[Read More Answers.](#)

Question # 178

What is the netted IP in Computer Networks?

Answer:-

Using a single IP address and locally splitting it up so that this single network IP address can actually be used on several interconnected local networks is known as netted IP.

[Read More Answers.](#)

Question # 179

Explain what is system recovery and system failure?

Answer:-

System recovery is a process of an overall plan for system recovery so that we are prepared if the system fails. System recovery is a two part system, including system recovery backup and system recovery restore. The SR Wizard, located in Backup, does the backup portion. The wizard backs up the system state, system services, and all the disks that are associated with the operating system components. The restore portion restores all the disk signatures, volumes, and partitions on (at a minimum) the disks that are needed to start the computer.

A system failure will cause the system to freeze, reboot, or stop functioning altogether. System failure can occur because of a hardware failure or a severe software issue, example, when a hard disk drive fails, it will prevent the computer from being able to boot. When a system fail occurs we use system recovery to recover the system back to its condition.

[Read More Answers.](#)

Question # 180

Tell me what is the default subnet mask for an ipv6 address?

Answer:-

A default subnet mask 255.0.0.0 for Class A,
255.255.0.0 for class B,
255.255.255.0 for Class C.

[Read More Answers.](#)

Question # 181

Suppose If you are given the IP address can u tell how many computers can be connected? What do you look at?

Answer:-

For Example in Class A If IP address is 1.0.0.1 then Network bits is 8 bits and hosts bits are 24 bits by calculating by formula $2^n - 2$ (2 power) Therefore for 1.0.0.1 the no computers can be connected 1,67,77,214

[Read More Answers.](#)

Question # 182

Tell me how to transfer some data periodically using RTP protocol without any loss?

Answer:-

Suppose I want to send some periodic information during the normal VoIP communication using RTP. How can I make sure that this data can be reached there without any loss?? And also is there any method to send data in such a way

[Read More Answers.](#)

Question # 183

What is the difference between networking and telecom domain ? Will network protocol testing will come under telecom domain?

Answer:-

Please share your answers.



[Read More Answers.](#)

Question # 184

What is ost file?

Answer:-

In Microsoft Office Outlook 2003, a new offline folder file format is introduced that offers greater storage capacity for items and folders and supports multilingual Unicode data. An offline file folder is used to keep a local copy of your Exchange Server mailbox on your computer. The items in your .ost file are synchronized with the server when a connection is available. Steps for offline file folder:- 1. On the File menu, click Work Offline. 2. Select or clear the Prompt me at startup so I may choose to work offline or online check box, and then click OK. If you clear the check box, Outlook will automatically start offline if a connection to the server is not available. 3. Click Yes to copy the data from the server to your new Offline Folder file (.ost).

[Read More Answers.](#)

Question # 185

Explain what is Printer driver replication and mapping?

Answer:-

Printer driver replication means if you have a network printer and if you want to share it among other Citrix servers, then we can replicate that driver to be used by all the Citrix servers or for few selected Citrix servers, however that driver should be installed in the Citrix server from which we are replicating the driver. Printer mapping relates to mapping the driver software for specific domain users only, these can be done by right clicking on the driver or by the printer option on the left pane of Citrix presentation server console.

[Read More Answers.](#)

Question # 186

Do you know what is difference between baseband and broadband transmission?

Answer:-

Baseband Signalling:

- 1) Uses digital signalling
- 2) No frequency-division multiplexing
- 3) Bi-directional transmission
- 4) Signal travels over short distances

Broadband Signalling:

- 1) Uses analog signalling
- 2) Unidirectional transmission
- 3) Frequency-division multiplexing is possible
- 4) Signal can travel over long distances before being attenuated

[Read More Answers.](#)

Question # 187

What is port address in Computer Networks?

Answer:-

A port number is a way to identify a specific process to which an Internet or other network message is to be forwarded when it arrives at a server. For the Transmission Control Protocol and the User Datagram Protocol, a port number is a 16-bit integer that is put in the header appended to a message unit. This port number is passed logically between client and server transport layers and physically between the transport layer and the Internet Protocol layer and forwarded on.

[Read More Answers.](#)

Question # 188

What are the Advantages and Disadvantages of DHCP?

Answer:-

Advantages All the IP configuration information gets automatically configured for your client machine by the DHCP server. If you move your client machine to a different subnet, the client will send out its discover message at boot time and work as usual. However, when you first boot up there you will not be able to get back the IP address you had at your previous location regardless of how little time has passed. Disadvantage Your machine name does not change when you get a new IP address. The DNS (Domain Name System) name is associated with your IP address and therefore does change. This only presents a problem if other clients try to access your machine by its DNS name.

[Read More Answers.](#)

Question # 189

What is the difference between physical address and logical address?

Answer:-

Logical address of any NIC card is IP address of the system. In any company LAN or WAN environment for machine to machine communication each and every machine required one number. That's why in a people's designed and introduced one good technology is IP addressing system. Physical address of any company NIC card is also known as a MAC address {Media Access Control address} MAC address mediator between cable and machine. It means MAC address main function is transfer the data cable language to machine language and machine language to cable language. It's a 48-bit address.

[Read More Answers.](#)

Question # 190

What is the default subnet mask for IPV6?

Answer:-



Computer Networks Interview Questions And Answers

There are 3 address types in v6 - Unicast, anycast, and multicast. Unicast addresses identify a single network device, anycast and multicast addresses identify a group of network devices. IPv6 addresses are 128 bit, compared to the 32 bit addresses of v4 and look like this example - 2001:0db8:85a3:08d3:1319:8a2e: 0370:7348IPv6 does not use subnetting.

[Read More Answers.](#)

Question # 191

Explain in detail about the working of SWITCH in Networking?

Answer:-

Switch is a data link layer device that connect multiple LAN segments to form a single network segment. In switch when we transmit the data first it examine the data packets for source and destination, then the switch forward the data packet to the appropriate destination.

Switch minimize the possibility of collision of data packets by reducing collision domains.

Collision domain are the network segment between two network devices, when the two devices transmit a data at a time then collision will occur. In such case both the device stop working. Then it starts to work for a specific period of time and retransmit the data.

Switches reduces the collision using micro-segmentation.

[Read More Answers.](#)

Question # 192

What is Active Directory in Computer Networks?

Answer:-

Active Directory is a directory service. The term directory service refers to two things - a directory where information about users and resources is stored and a service or services that let you access and manipulate those resources. Active Directory is a way to manage all elements of your network, including computers, groups, users, domains, security policies, and any type of user-defined objects. It melds several NT services and tools that have functioned separately so far - User Manager for Domains, Server Manager, Domain Name Server - and provides additional functions beyond these services and tools. Active Directory is built around Domain Name System (DNS) and lightweight directory access protocol (LDAP) - DNS because it is the standard on the Internet and is familiar, LDAP because most vendors support it. Active Directory clients use DNS and LDAP to locate and access any type of resource on the network. Because these are platform-independent protocols, Unix, Macintosh, and other clients can access resources in the same fashion as Windows clients.

[Read More Answers.](#)

Question # 193

What is ping to death packet?

Answer:-

POD (Ping of Death) is a type of attack at computer in a network that involves sending of a larger size malicious ping to a computer.

[Read More Answers.](#)

Question # 194

What is the size of ping to death packet?

Answer:-

A ping is normally 64 bytes in size. Many computers can not handle larger than the maximum ip packet size, which is 65,535 bytes. Sending a ping of this size can crash the target computer.

[Read More Answers.](#)

Question # 195

What is a SEGMENTED NETWORK?

Answer:-

Segment is a PDU (Packet Data Unit) of layer 4 transport layer. Segment is made of destination port no
senders port no
data
fcs

[Read More Answers.](#)

Question # 196

What is the difference between simplex and duplex?

Answer:-

simplex- one way transmission. only transmission will take place here.

duplex- two way transmission.

Both transmission and reception takes place.

2 types of duplex:

1) Half duplex

2) Full duplex

Half duplex:-

both transmission and reception takes place, but not at the same time. single channel is used.

Full duplex:-

both tx and recep... takes place simultaneously using 2 different channels. one for tx and other for reception.



[Read More Answers.](#)

Question # 197

Explain what is the routed protocols & routing protocols?

Answer:-

A routing protocol is used by router to dynamically find all the networks in the internetwork and to ensure that all routers have the same routing table. Basically routing protocol determines the path of a packet through an internetwork. (eg. RIP, RIPv2, EIGRP and OSPF). A routed protocol can be used to send user data through the established enterprise, when routers know about all networks. Routed protocols are assigned to an interface and determine the method of packet delivery. (eg. IP, IPv6)

[Read More Answers.](#)

Question # 198

What you will do, if you computer boots to the black screen?

Answer:-

- 1) Check cable between computer and monitor, as well as power to monitor.
- 2) Boot into safemode - Check status of driver, and run diagnostic on video card. - if no video try putting in a new video card and restart with step 2
- 3) Restore to previous bootable configuration
- 4) Re-install OS

[Read More Answers.](#)

Question # 199

Explain about Scan Disk? How scan disk fixes errors?

Answer:-

Scandisk is Windows' general-purpose hard drive diagnostic utility. It will find and fix any data errors present on the drive. A "standard" scan checks for any data errors on the drive. A "thorough" scan checks for any data errors on the drive and tests the hard drive for any physical errors. Defrag is Windows' utility for organizing the data structure on the hard drive. Through normal use, the data present on the hard drive becomes scattered across the data area.

[Read More Answers.](#)

Question # 200

What is difference between encoding and modulation? please give me detail of encoding and modulation?

Answer:-

Encoding is assigning binary codes according to algorithm, but modulation is changing the properties of one signal(value) according to properties of another signal.

[Read More Answers.](#)

Question # 201

Tell us which OSI layer participate in Bandwidth?

Answer:-

Data link layer/Transport layer

[Read More Answers.](#)

Question # 202

How to share a printer?

Answer:-

This is how I share a printer on a LAN. You can print from every PC on your network to one printer. To share a printer with the other PCs in your home you need to configure the PC to which the printer is connected and then install the shared printer on each PC that you want to print from. If you have not already done so, set-up and install the printer onto a PC following the manufacturer's instructions. The following instructions will vary slightly depending on which version of Windows you are using. 1. Turn on all of the PCs on your network and turn on the printer. 2. Start with the PC to which the printer is connected. Click Start, Settings, Control Panel, Printers. 3. In the Printers window, right click on the printer that you want to share on the network and choose "Sharing" from the menu. 4. If this is the first time anything has been set-up for sharing on this PC, you may receive a security warning. In the security message, click on "Just enable printer sharing" and then click "OK". Otherwise click on "Share this printer". 5. Enter a share name, something like "Laser printer in office". 6. Now click "OK".

[Read More Answers.](#)

Question # 203

Explain Full form of SATA hard disk?

Answer:-

Serial Advanced Technology Attachment (SATA) is a computer bus primarily designed for transfer of data between a computer and mass storage devices such as hard disk drives and optical drives. The main advantages over the older parallel ATA interface are faster data transfer, ability to remove or add devices while operating (hot swapping), thinner cables that let air cooling work more efficiently, and more reliable operation with tighter data integrity checks.

[Read More Answers.](#)

Question # 204

What do you need to know to set up a network?

Answer:-

First you need to specify your network size. Since the network equipments depend upon your size:



Computer Networks Interview Questions And Answers

Small network u could use as a 12 switch large network a 13/managed switch.

Same goes for routers and Wan connection.Servers:

- 1.Active Domain Controller
- 2.Back up Domain Controller.
- 3.Dhcp server.
- 4.Software Update services.

Hope this would suffice...

[Read More Answers.](#)

Question # 205

What is difference between TCP protocol& UDP protocol?

Answer:-

The difference between TCP and UDP is connection(TCP) and connectionless(UDP) protocol.Because In TCP for transferring every Packets it needs a acknowledgement packet from reciever ,so if any packet loss happens reciver will not send a acknowledge ment for that packet so Transmitter will once again send the packet.so TCP is reliable connection unless UDP will send a packet and will not expect any acknowledgment from the reciever so it is not reliable.

[Read More Answers.](#)

Question # 206

Explain what is difference between ARP and RARP?

Answer:-

The address resolution protocol (ARP) associates an IP address with the physical address. On a typical physical network (eg: LAN) each device on a link is identified by a physical or station address usually imprinted on the network interface card(NIC)Physical addresses can be changed easily, on the other hand IP addresses cannot be changed. ARP is used to find the physical address of the node when its internet address is known.

The reverse address resolution protocol(RARP) allows host to discover its internet address when it known only its physical address. RARP works much like ARP.

To obtain IP address the host first broadcasts an RARP request packet containing its MAC address on the network. All hosts on the network receive the packet, but only the server replier to the host by sending an RARP response packet containing the host's MAC and IP addresses. One limitation with RARP is that the server must be located on the same physical network as the host

[Read More Answers.](#)

Question # 207

How to recover deleted file from network?

Answer:-

It remains in the recycler on the drive or partions the held that data untill it is overwritten. To view the recycler you must allow hidden system files to be shown (in Windows this can be done under folder options). There are tool available to recover the deleted data. I recently have used a program call "Recover My files".

[Read More Answers.](#)

Question # 208

Tell me what is a VLAN? What does VLAN provide?

Answer:-

Short for virtual LAN, a network of computers that behave as if they are connected to the same wire even though they may actually be physically located on different segments of a LAN VLANs are configured through software rather than hardware, which makes them extremely flexible. One of the biggest advantages of VLANs is that when a computer is physically moved to another location, it can stay on the same VLAN without any hardware reconfiguration.

[Read More Answers.](#)

Question # 209

Explain what is file system? How a file is organized in file system? Give few examples?

Answer:-

File system is depending on Operation systems & hard Disk sizes.At the time 1990 there were only dos which supports only FAT16 (File allocation table)Upto MS-DOS 6.22 & Windows 3.1 & 3.11 It works only on FAT16FAT16 Has it's limitation that it can't support more than 2.1 GB partition at a time.After that windows 95 & Windows 98That supported FAT16 & FAT32 only. Windows NT supports FAT16 as well as It develops new file systems HPFS i.e. (High Performance File System)

Later i.e. is called as NTFS (New Technology File System)NTFS is now a largest support for us.

[Read More Answers.](#)

Question # 210

Can a machine with a single DNS name have multiple IP addresses? If yes then how could this occur?

Answer:-

yes it can happen. DNS, the Domain Name Service, as you would know, is used to help us resolve Fully Qualified Domain Names (FQDN) to IP addresses. There are different versions of DNS systems running all over the Internet, mainly ranging between Windows (which use the Windows DNS server) and Linux/Unix (using BIND DNS services). Considering there are some very popular Web sites which serve millions of DNS queries per day e.g., Google.com, Hotmail.com, it is logical that these domain names cannot solely rely on one single DNS server, cause if that fails, the whole domain could become unreachable! It is, for this reason, a fault-tolerant DNS service is put in place, which shares the DNS queries amongst several different DNS servers. All servers are configured to either randomly provide clients with IP addresses from a specific pool, or -- by using a round robin method -- cycle between the pool of IP addresses. This is what gives a DNS name multiple IP addresses.

[Read More Answers.](#)

Networking Most Popular Interview Topics.

- 1 : [CCNA Frequently Asked Interview Questions and Answers Guide.](#)
- 2 : [MCSE Frequently Asked Interview Questions and Answers Guide.](#)
- 3 : [Basic Networking Frequently Asked Interview Questions and Answers Guide.](#)
- 4 : [Active Directory Frequently Asked Interview Questions and Answers Guide.](#)
- 5 : [CCNP Frequently Asked Interview Questions and Answers Guide.](#)
- 6 : [Routing Frequently Asked Interview Questions and Answers Guide.](#)
- 7 : [VPN Frequently Asked Interview Questions and Answers Guide.](#)
- 8 : [CCNA Security Frequently Asked Interview Questions and Answers Guide.](#)
- 9 : [VoIP Frequently Asked Interview Questions and Answers Guide.](#)
- 10 : [Data Communications Frequently Asked Interview Questions and Answers Guide.](#)

About Global Guideline.

Global Guideline is a platform to develop your own skills with thousands of job interview questions and web tutorials for fresher's and experienced candidates. These interview questions and web tutorials will help you strengthen your technical skills, prepare for the interviews and quickly revise the concepts. Global Guideline invite you to unlock your potentials with thousands of [Interview Questions with Answers](#) or begin a tutorial right away, such as [HTML](#), [XML](#), [XSLT](#), [Cascading Style Sheet \(CSS\)](#), [Search Engine Optimization \(SEO\)](#), [JavaScript](#), [Structure Query Language \(SQL\)](#), [Database Articles](#), [Web Hosting Guide](#) and much more. Learn the most common technologies [Interview Questions and Answers](#). We will help you to explore the resources of the World Wide Web and develop your own skills from the basics to the advanced. Here you will learn anything quite easily and you will really enjoy while learning. Global Guideline will help you to become a professional and Expert, well prepared for the future.

* This PDF was generated from <http://www.GlobalGuideline.com> at **September 17th, 2015**

* If any answer or question is incorrect or inappropriate or you have correct answer or you found any problem in this document then don't hesitate feel free and [e-mail us](#) we will fix it.

You can follow us on FaceBook for latest Jobs, Updates and other interviews material.
www.facebook.com/InterviewQuestionsAnswers

Follow us on Twitter for latest Jobs and interview preparation guides
<http://twitter.com/InterviewGuide>

Best Of Luck.

Global Guideline Team
<http://www.globalguideline.com>
Support@globalguideline.com