

TEST KING



LEADING THE WAY IN IT
TESTING AND CERTIFICATION TOOLS!

Network+

Version 5.1

***Important Note
Please Read Carefully***

This product will provide you questions and answers along with detailed explanations carefully compiled and written by our experts. Try to understand the concepts behind the questions instead of just cramming the questions. Go through the entire document at least twice so that you make sure that you are not missing anything.

We are constantly adding and updating our products with new questions and making the previous versions better so email us once before your exam and we will send you the latest version of the product.

Each pdf file contains a unique serial number associated with your particular name and contact information for security purposes. So if we find out that particular pdf file being distributed by you. Testking will reserve the right to take legal action against you according to the International Copyright Law. So don't distribute this PDF file.

QUESTION NO: 1

Which three permissions are valid on a Unix/Linux file system? (Choose three)

- A. read (r)
- B. write (w)
- C. change (c)
- D. execute (x)

Answer: A, B, D

The UNIX/Linux file system have read, write and execute (but not change) file permissions.

QUESTION NO: 2

You have completed a weekly backup of your network servers. Where should you keep the tapes, for disaster recovery?

- A. in the CIO's office
- B. in the Network administrator's desk
- C. in a locked safe at an onsite location
- D. in a locked safe at on offsite location

Answer: D

It is best to keep the tapes offsite in case of theft or fire for example.

QUESTION NO: 3

Which three services does a proxy server provide? (Choose three.)

- A. cached e-mail
- B. cached client files
- C. cached web pages
- D. cached DNS information

Answer: A, B, C

A proxy server can cache e-mail, client files, or web pages, but not DNS information.

QUESTION NO: 4

Which two are purposes of a firewall? (Choose two.)

- A. block traffic
- B. permit traffic
- C. verify company policies
- D. authenticate internal users

Answer: A, B

A firewall can be used to block or permit traffic depending on port and protocol.

QUESTION NO: 5

Which three methods should you use to achieve fault tolerance? (Choose three.)

- A. tape backup
- B. mirrored servers
- C. RAID disk storage
- D. off-site data archive
- E. uninterruptible power supply

Answer: A, B, C

Fault tolerance can be achieved with

- backup to other media (tape for example)
- mirrored servers
- RAID (for example RAID-5) disks which stores parity bits for fault tolerance

An off-site data archive is used for disaster recovery, not for fault tolerance.

UPS are to keep the system up, not for fault tolerance.

QUESTION NO: 6

Your network has a permanent connection to the Internet. Your local network includes multiple services. You are concerned about hackers gaining access from the Internet. You decide to set up filtering on ports 100 through 200.

Which service might this affect?

- A. FTP
- B. NTP
- C. HTTP
- D. SMTP

Answer: B

NTP use UDP port 123.

QUESTION NO: 7

Given:

- Network B is IP network 172.17.0.0/16
- The IP address of the router for Network B is 172.17.0.1.

What is the subnet mask for a computer attached to network B?

- A. 127.0.0.1
- B. 172.17.0.0
- C. 172.17.0.1
- D. 255.255.0.0
- E. 255.255.255.0

Answer: D

A 172.17.0.0/16 network uses a 16-bit network mask with is expressed as 255.255.0.0.

QUESTION NO: 8

Which two communications dial-up protocols does Windows 2000 Server natively support?

- A. PPP
- B. SLIP
- C. TCP/IP
- D. IPX/SPX
- E. NETBIOS

Answer: A, B

Windows 2000 Servers supports PPP (in- and out-coming traffic), and SLIP (only out-coming traffic).

QUESTION NO: 9

You are asked to implement a solution that provides for security authentication and encryption to a private network for a client machine. The client machine needs to connect to a NetWare server inside the private network.

Which two protocols should implement to provide this functionality? (Choose two.)

- A. SMTP (Simple Mail Transfer Protocol)
- B. TFTP (Trivial File Transfer Protocol)
- C. PPTP (Point-to-point Tunneling Protocol)
- D. SNMP (Simple Network Management Protocol)
- E. TCP/IP (Transmission Control Protocol and Internet Protocol)

Answer: C, E

First we must a generic network protocol, for example TCP/IP, and then a remote protocol as PPTP.

SMTP is for mail, TFTP is used for fail transfers, and SNMP is used to monitor a network traffic.

QUESTION NO: 10

Given:

- **A user has a 24-port switch.**
- **The user wants to use 12 ports for an IP-based network and 12 ports for an IPX-based network.**

These two networks will not talk to each other.

What should the user implement on the switch?

- A. SNMP
- B. VLANs
- C. routing
- D. an RMON probe

Answer: B

We implement two virtual networks (VLANs) with the switch.

QUESTION NO: 11

Given:

- Network A is IP network 192.168.1.0/24
- Network B is IP network 192.168.2.0/24
- One router connects network A to network B correctly, using IP only
- Both networks use many types of machines, including Windows NT machines, Linux machines, and NetWare servers.

Every computer needs to be able to see every other computer using host names. Which two protocols should you install? (Choose two.)

- A. DNS
- B. WINS
- C. SNMP
- D. TCP/IP
- E. IPX/SPX

Answer: A, D

A: TCP/IP is supported by Windows, Linux, and NetWare.

D: To support host to IP address resolution we used DNS.

Note: DNS is primarily a network service and not a protocol.

Incorrect Answers

B: WINS is used for NetBIOS names, not host names.

C: SNMP is used to monitor network traffic.

E: Linux does not support IPX/SPX.

QUESTION NO: 12

Which two protocols does Network Attached Storage (NAS) use? (Choose two.)

- A. IPX
- B. ATM
- C. TCP/IP
- D. Frame Relay

Answer: A, C

NAS supports IPX and TCP/IP.

ATM and frame relay are not protocols supported by NAS:

QUESTION NO: 13

Which two pieces of information are required when logging on to a Windows NT Server? (Choose two.)

- A. password
- B. username
- C. IP address
- D. MAC address

Answer: A, B

To logon to a Windows NT Server the user must provide username and password.

QUESTION NO: 14

What is the worst time to find out that your weekly full backup job didn't complete?

- A. While testing your backup system
- B. While trying to recover a new piece of software that was just installed on the server
- C. When a user requests that you restore a file that was mistakenly deleted the day before
- D. When the main server crashes and you need to perform a full system disaster recovery restore

Answer: D

The worst case scenario would be if the main server crashes.

QUESTION NO: 15

A client machine needs to communicate with a NetWare 3.11 server and a UNIX system. Which two protocols should you implement?

- A. SNA
- B. TCP/IP
- C. IPX/SPX
- D. NetBEUI
- E. Banyan VINES

Answer: B, C

NetWare 3.11 natively supports with the IPX/SPX protocol.

UNIX and Linux systems use the TCP/IP protocol.

QUESTION NO: 16

You have implemented a permanent connection to the Internet for your home network that consists of three workstations. You are concerned about the threat of hackers gaining access from the Internet. You have set up filtering on your DSL router.

You are now unable to access Internet sites by their Domain Names, though you can access them by their IP addresses.

What is the most likely cause of the problem?

- A. Your DSL router is blocking port 21.
- B. Your DSL router is blocking port 53.
- C. Your DSL router is not logged in to the ISP.
- D. You do not have IP configured on your clients.

Answer: B

The DNS service uses port 53.

QUESTION NO: 17

Which name resolution technique does a UNIX host use?

- A. DNS
- B. DHCP
- C. Proxy
- D. LMHOSTS

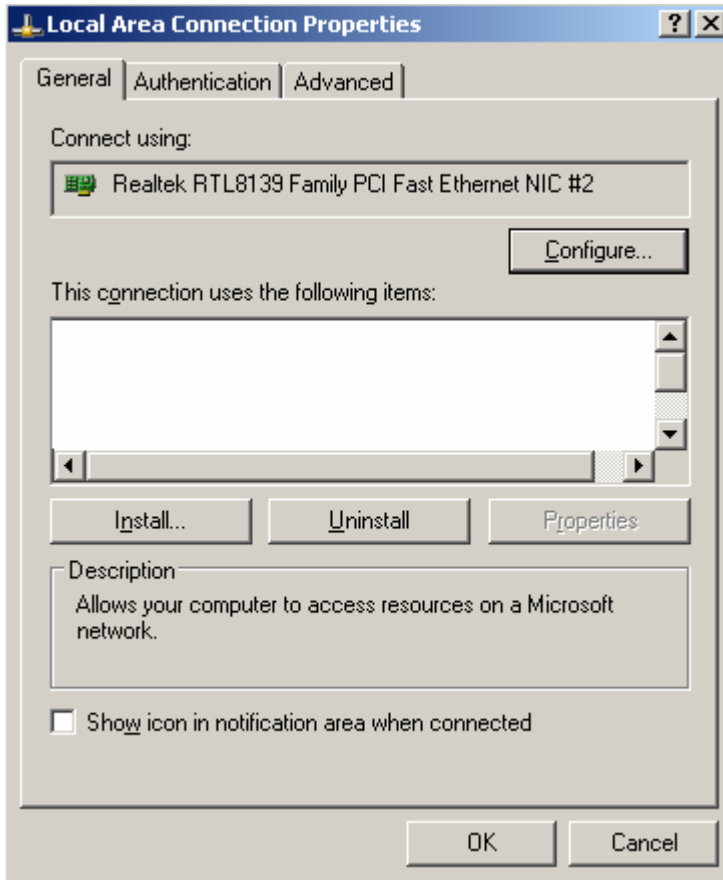
Answer: A

UNIX uses TCP/IP and host names. DNS is used for host to IP address resolution.

DHCP (automatic IP configuration of clients) or Proxy server (internet access) do not apply here.

LMHOSTS files are used for NetBIOS (not host names) to IP address resolution.

QUESTION NO: 18



A user cannot access files on the network. An examination of the workstation yields the results in the exhibit.

What is the most likely cause of this problem?

- A. A virus
- B. System file corruption
- C. Windows registry problem
- D. User changed configuration

Answer: D

The user has accidentally removed the installed network components.

QUESTION NO: 19

A network administrator plans on adding DNS to the network and moving server resources to a new server farm with new addresses. Prior to this addition, HOSTS files are used to get to resources by host name.

Which statement is true?

- A. Users will be able to connect if a DNS server is added to the affected network segments.
- B. Users will be able to connect if a WINS server is added to the affected network segments.
- C. Users will be able to connect if a DNS is enabled on the server and the HOSTS file is deleted.
- D. Users will be able to connect if a DNS is enabled on the workstation and the HOSTS file is deleted.

Answer: C

The DNS server will replace the hosts files. The old hosts file should be deleted.

QUESTION NO: 20

You are connecting an Apple workstation to a NetWare 4.11 server. The workstation is unable to connect to the server, but it is able to connect to the Internet.

Which two are possible problems? (Choose two.)

- A. The server is not running NetBEUI
- B. The server is not running AppleTalk
- C. The workstation is not running IPX/SPX
- D. The workstation is not running NetBEUI
- E. The workstation is not running the Microsoft Client for NetWare Networks.

Answer: B, C

To communicate the client and the server must use the same protocol. One solution is to install AppleTalk on the server. The other solution is to install IPX/SPX on the client.

QUESTION NO: 21

All users in an office cannot access the WAN. The office system was up and running this morning. At 10 A.M. there was an installation of a new employee, including telephone and network connections. You gather detailed information about the problem from the office and determine that no other WAN connections are involved.

What is your next troubleshooting step?

- A. Implement a solution
- B. Identify the affected area
- C. Established what has changed
- D. Select the most probable cause

Answer: B

After establishing the symptoms we should identify the affected area.

One possible order, within Comptia guidelines, when troubleshooting a network is:

1. Establish the symptoms
2. Identify the affected area. (B)
3. Establish what has changed. (C)
4. Establish the probable cause of the problem. (D)
5. Formulate a solution.
6. Implement a solution. (A)
7. Test the solution.
8. Recognize potential effects of the solution of the solution.
9. Document the problem and solution.
10. Give feedback to the users.

QUESTION NO: 22

Given:

- A corporation is adding a new department to its 100BASE-TX network.
- A switch is placed into the wiring closet for the new department.
- A certified drop from the router is plugged into the switch.
- Certified premise wiring is connected into the switch for connection to the wall outlets.

Some users are able to functions correctly, some are not. What is the most likely cause of the problem?

- A. The wiring used is Category 5.
- B. The jacks used for the wall outlets are RJ-45.
- C. The inhouse-made patch cables are only using two pairs.
- D. The lengths of the premise wiring cables are shorter than 300 feet.

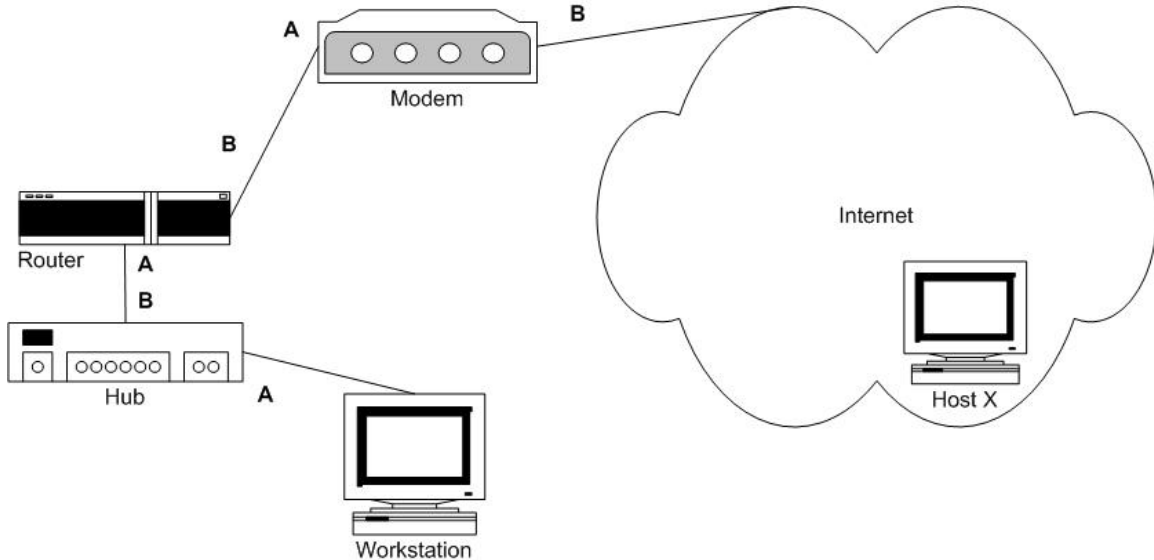
Answer: C

A possible cause of the problem could defective patch cables.

Category 5 cables and RJ-45 outlets should be used. Length up to 100 meters are supported in a 100BASE-TX network.

QUESTION NO: 23

Exhibit



You have finished building a small home network. You find that you cannot attach to Host X from your workstation. A visual examination reveals all link lights are lit.

Which component is the most likely cause of this problem?

- A. Bad cable
- B. Misconfigured router
- C. Misconfigured modem
- D. More information needed
- E. Misconfigured NIC at the workstation

Answer: E

The modem, router, and the hub seem to be working. The most likely is a problem with the local workstation-

QUESTION NO: 24

A new workstation cannot connect to the network. You verify that TCP/IP is installed correctly. The user uses a static IP address in the correct range for the segment and the subnet mask is correct.

Why is the user not able to connect to the network?

- A. The DHCP server is down.
- B. The static IP address is a duplicate to one already in use.
- C. A static IP address cannot be used on a network using DHCP.
- D. The user does not have permissions to add a static IP address.

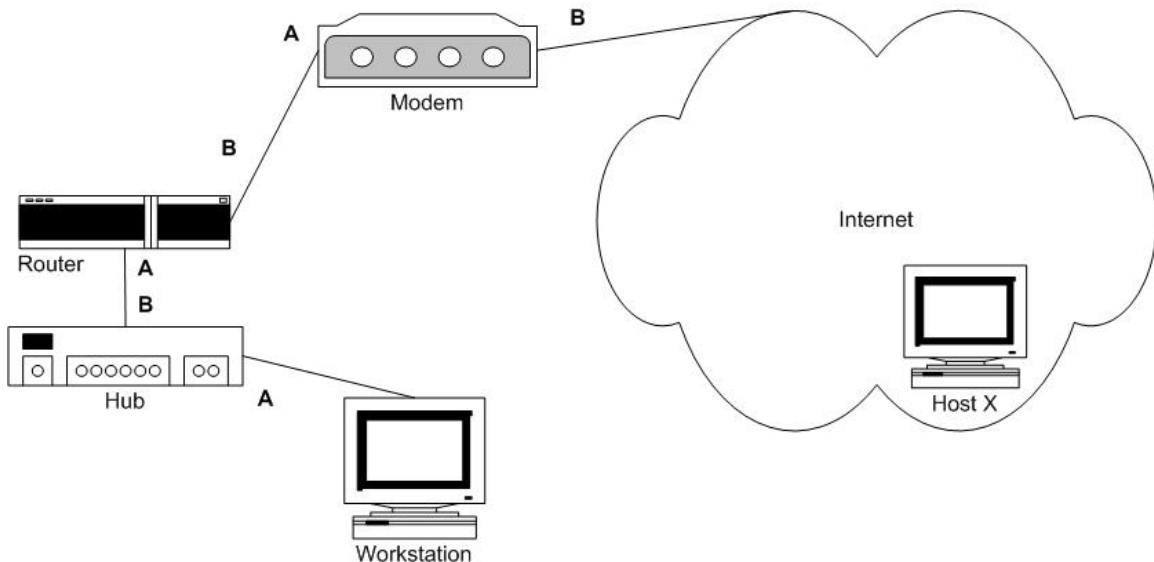
Answer: B

Two workstations cannot use the same IP address on the same network. This might be the reason of the problem.

The other alternatives are false.

QUESTION NO: 25

Exhibit



In the configuration shown in the exhibit, the link lights on Interface A of the router and interface B of the hub are not lit. All other link lights are lit.

Which component could NOT have caused this problem?

- A. hub
- B. router
- C. modem
- D. patch cord

Answer: C

The hub, the router, or the cable connecting them could be defective. The modem could not cause this problem.

QUESTION NO: 26

A technician added a MAU and workstations to an existing office. Users connected to the new MAU can communicate with each other but not with users on the original MAU. What should you instruct the field technician to check next?

- A. Connect a single cable to port 1 on each MAU.
- B. Connect the uplink ports to each other on the MAU.
- C. Connect the ring in port to the ring out port on each MAU.
- D. Connect the ring in port to the ring in port and ring out port to ring out port in each MAU.

Answer: C

The ring in port of one MAU should be connected to the ring out port of the other MAU.

QUESTION NO: 27

Exhibit

```
Windows IP Configuration
    Host Name..... : emc454w11
    DNS Servers..... :
    Node Type..... : Broadcast
    NetBIOS Scope ID..... :
    IP Routing Enabled..... : No
    WINS Proxy Enabled..... : No
    NetBIOS Resolution Uses DNS. : Yes

# Ethernet adapter :

    Description..... : Fast Ethernet+56K Modem Card
    Physical Address..... : 00-04-00-B3-20-4A
    DHCP Enabled..... : Yes
    IP Address..... : 192.168.10.23
    Subnet Mask..... : 255.255.255.0
    Default Gateway..... :
    DHCP Server..... : 192.168.10.1
    Primary WINS Server..... :
    Secondary WINS Server..... :
    Lease Obtained..... : 03 06 03 11:23:12 AM
    Lease Expires..... : 03 09 03 11:23:12 AM
```

You have finished building a small home network. Your DSL provider limits you to one static IP address. You give the IP address of your DHCP server to the DSL provider. During testing, you find that you cannot access the Internet from the workstations. You ping all the devices inside the DHCP server successfully.

What is the cause of the problem?

- A. Bad subnet mask
- B. DNS server not set on the workstations
- C. DNS server not set on the DHCP server
- D. Default gateway not set on the workstations

Answer: D

The exhibit shows that no default gateway has been configured. A default gateway is used to reach beyond the local network, to access Internet for example.

QUESTION NO: 28

A user calls the help desk after dialing into the RAS server. The user is unable to connect to the Internet with a Windows Laptop. The user is able to log in to the server running IPX/SPX. The IP address is 0.0.0.0.

What is the most likely problem?

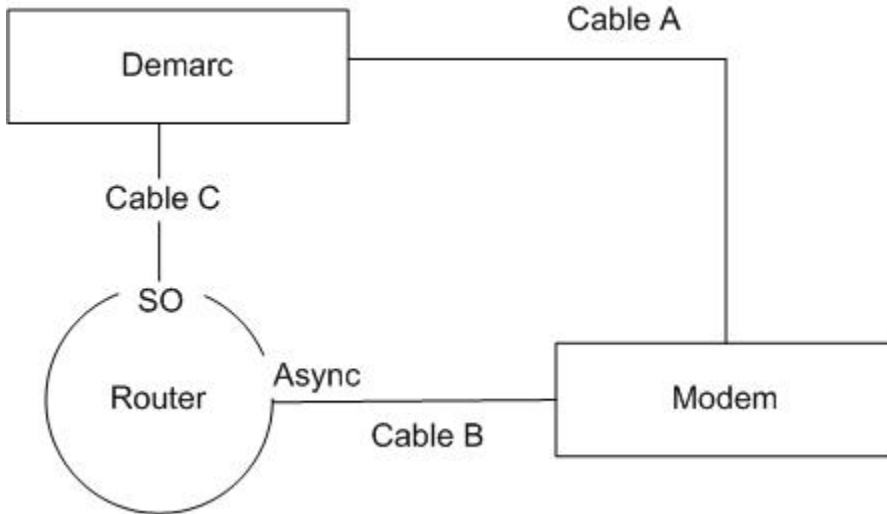
- A. The DNS server is down.
- B. The DHCP server is down.
- C. The NetBIOS over TCP/IP has been disconnected.
- D. The workstation has become unplugged from the network.

Answer: B

The IP address 0.0.0.0 indicates an IP configuration problem. The DHCP server cannot be reached.

QUESTION NO: 29

Exhibit



The circuit shown in the exhibit has a backup-up communications link failure. The telco has tested clean to the Demarc. The modem responds to a command to go off-hook, but no dial tone is detected.

What is a possible cause for this dial back-up failure?

- A. router
- B. cable C
- C. cable A
- D. cable B

Answer: A(?)

A problem with the router seems most likely.

QUESTION NO: 30

Which device checks the electrical signals being sent out of a port on a NIC?

- A. tone locator
- B. tone generator
- C. crossover cable
- D. hardware loopback

Answer: D

A hardware loopback checks outgoing signals of a device.

QUESTION NO: 31

Exhibit

Name	Type	HostAddress	Life [sec]
SERVER0	<00> UNIQUE	10.0.0.110	300

What does the command output indicate?

- A. A ping to server0
- B. A tracert to server0
- C. The arp table of server0
- D. The arp cache of server0
- E. The NetBIOS name cache
- F. The NetBIOS connection table

Answer: E

The NetBIOS name cache is shown.

QUESTION NO: 32

You have replaced a NIC in a workstation on an operating network. The workstation cannot log on to the server.

What should you do to determine the most likely cause of the problem?

- A. Reboot the server
- B. Run MAU loopback tests
- C. Run server NIC diagnostics
- D. Run workstation NIC diagnostics

Answer: D

The replaced device should be checked.

QUESTION NO: 33

A new workstation cannot connect to a Windows NT network. The link lights on both the NIC and the switch show activity. All protocols are installed and the cable is functioning properly. However, a second user complains of a sudden connection problem.

What is the most likely cause?

- A. DNS servers have not been assigned.
- B. WINS servers have not been assigned.
- C. Duplicate gateways have not been assigned
- D. Duplicate IP addresses have been assigned.

Answer: D

A duplicate IP address, which are not possible on a network, could be explain the problem for the single user.

The system did work earlier so it cannot be a DNS, WINS or gateway configuration problem.

QUESTION NO: 34

Exhibit

```
Active Connections
```

Proto	Local Address	Foreign Address	State
TCP	dell-45:137	DELL:0	LISTENING
TCP	dell-45:1026	DELL:0	LISTENING
TCP	dell-45:1031	DELL:0	LISTENING
TCP	dell-45:137	DELL:0	LISTENING
TCP	dell-45:1031	Server5:1433	ESTABLISHED
TCP	dell-45:137	DELL:0	LISTENING
TCP	dell-45:138	DELL:0	LISTENING
TCP	dell-45:nbssession	DELL:0	LISTENING
TCP	dell-45:11487	DELL:0	LISTENING
TCP	dell-45:1025	DELL:0	LISTENING
TCP	dell-45:1027	DELL:0	LISTENING
UDP	dell-45:nbname	*:*	
UDP	dell-45:nbdatagram	*:*	
UDP	dell-45:11487	*:*	

Which command's output is displayed in the exhibit?

- A. nbtstat
- B. network
- C. netstat -a
- D. network -a

Answer: C

This command shows the state of all sockets .

The -a option tells netstat to show you the status of all open sockets on a machine.

QUESTION NO: 35

A new MAU is added to increase capacity. Users are not able to connect to the LAN. The network analyzer shows connectivity from the NICs to the RJ-45 plugged into the MAU.

What is the most likely cause?

- A. MAU is set at full duplex
- B. CSU/DSU is disconnected
- C. The ring in and ring out are misconfigured between MAUs.
- D. The ring in of one MAU is connected to a ring out of other MAU.

Answer: C

A possible cause of this problem is that the new MAU been incorrectly connected to the existing network. The ring in on one MAU should be connected to the ring out on the other MAU.

QUESTION NO: 36

You have replaced a NIC in a workstation connected to a Token Ring network, but the workstation cannot communicate with the server. What is the most likely cause of this problem?

- A. The NIC has the wrong IP address
- B. The NIC is set for the wrong speed.
- C. The NIC is plugged into the wrong slot.
- D. The NIC does not have enough memory.
- E. The user does not have access to the server.

Answer: B

All NICs on a token ring must operate at the same speed.

QUESTION NO: 37

A small company (A) recently merged with a large company (B). Company A used static name resolution. The servers from company A were moved to company B's server farm and readressed. Company B uses DNS to provide name resolution.

Users at company A can reach other servers in the server farm but cannot reach the servers that were moved.

What should you do to correct the problem?

- A. Delete the HOSTS file
- B. Correct the LMHOSTS file
- C. Correct the NETWORKS file
- D. Create the static NETSTAT entries.

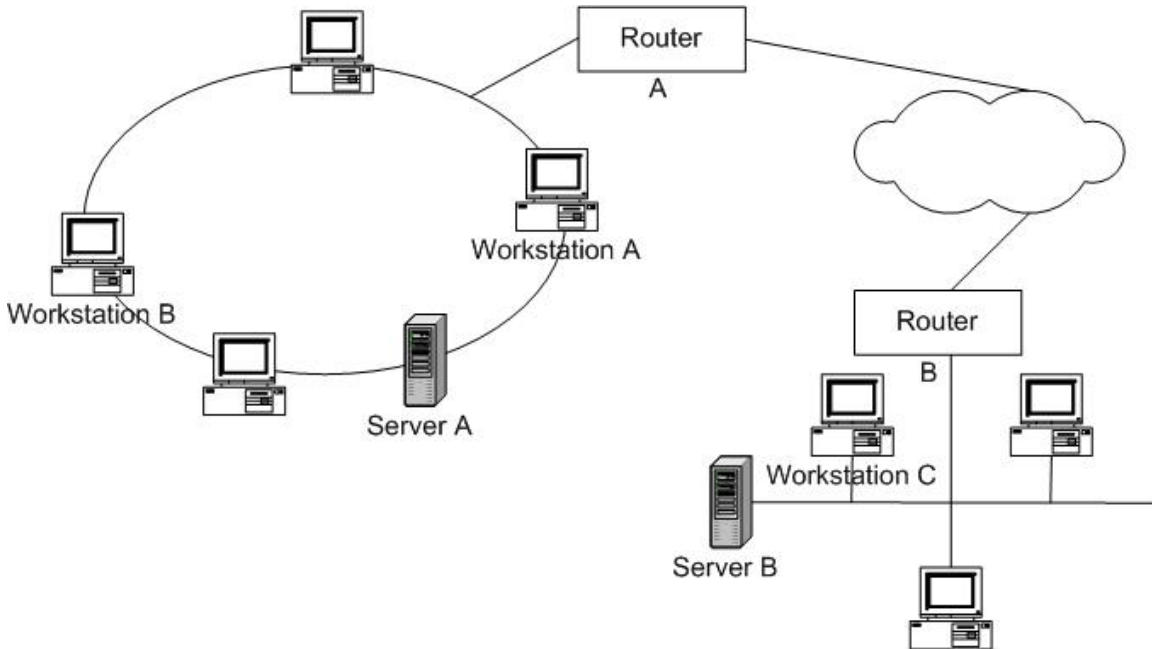
Answer: A

DNS replaces the static name resolution schema. DNS and HOSTS file use host names.

LMHOSTS file use NetBIOS to IP address resolution.

QUESTION NO: 38

Exhibit



Workstation C cannot access Server A. Workstation C can successfully ping Server B. Workstation A can access Server A.

Which command should you issue at Workstation C to narrow down where the network failure is located?

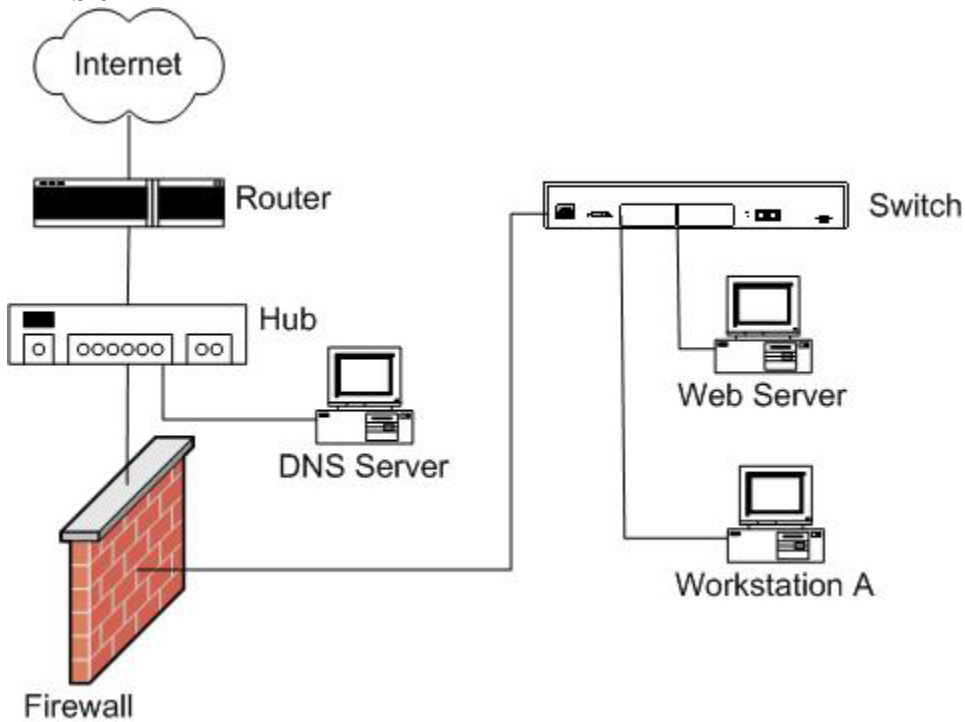
- A. Ping router B
- B. Tracert Router B
- C. Tracert Server A
- D. Ping Workstation A

Answer: C

The output of the tracert ServerA command would indicate where the problem occurred (on Router B, on Router A, or on ServerA).

QUESTION NO: 39

Exhibit



Given:

- External Web users coming in from the Internet are complaining of slow connectivity to the Web server.
- Workstation A can connect to the firewall without error.
- Workstation A can connect to the Internet without error.

What is the cause of the problem?

- A. A jabbering NIC in the Web server
- B. A jabbering NIC in the DNS server

- C. A bad cable between Workstation A and the switch
- D. A bad cable between Web server and the switch

Answer: A

The problem only concerns connectivity to the Web server. A jabbering NIC on the web server could cause slow access.

A bad cable would cause interruptions of the communication, not slow access.
A jabbering NIC on the DNS server would cause problems for all DNS traffic, including internet access.

QUESTION NO: 40

Which TCP/IP port number identifies Telnet sessions?

- A. 21
- B. 23
- C. 25
- D. 80
- E. 110

Answer: B

Telnet uses TCP port 23.

QUESTION NO: 41

What are three characteristics of a public network? (Choose three.)

- A. Host IP addresses are visible only on the LAN.
- B. IP hosts are directly accessible from the Internet.
- C. Network IP addresses are exposed to the Internet.
- D. Network IP addresses are not exposed to the Internet
- E. Additional network IP addresses must be registered with IANA.

Answer: B, C, E

A public network uses IP addresses registered with IANA. The IP addresses and the hosts using the IP addresses are accessible from the Internet.

QUESTION NO: 42

What is the transmission rate of a BRI ISDN circuit switched B channel?

- A. 44 Kbps
- B. 56 Kbps
- C. 64 Kbps
- D. 128 Kbps

Answer: C

The transmission rate of a single (out of two) BRI ISDN B channel is 64Kbps.

QUESTION NO: 43

In which OSI layer does a repeater operate?

- A. Network
- B. Physical
- C. Data link
- D. Transport

Answer: B

A repeater regenerates the signals and work on the physical OSI layer.

QUESTION NO: 44

Which three are true of IP subnets? (Choose three.)

- A. An IP router connects two subnetworks.
- B. Each subnetwork behaves as if it were independent.
- C. Routing between nodes on different subnets is transparent to the users.
- D. Nodes on different subnetworks cannot communicate except through the Internet.

Answer: A, B, C

IP subnetworks are connected by IP routers which enables communication between the subnets. Each IP subnetwork can function independently. Users are not directly aware of the routing between the subnets.

QUESTION NO: 45

Task

Place an address next to its associated class.
Place an address next to its associated class.

Term	Definition
<place here>	Class A
<place here>	Class B
<place here>	Class C

Addresses to be moved. Not all addresses will be used.

199.105.192.39 127.0.0.1 122.47.13.19

244.0.0.2 162.138.149.2

Answer:

Place an address next to its associated class.

Term	Definition
122.47.13.19	Class A
162.138.149.2	Class B
199.105.192.39	Class C

Addresses to be moved. Not all addresses will be used.

127.0.0.1

244.0.0.2

Class A networks use a default subnet mask of 255.0.0.0 and have 0-126 as their first octet.

Class B networks use a default subnet mask of 255.255.0.0 and have 128-191 as their first octet.

Class C networks use a default subnet mask of 255.255.255.0 and have 192-223 as their first octet.

QUESTION NO: 46

What OSI layer 4 protocol does Telnet use?

- A. TCP
- B. UDP
- C. ICMP
- D. HTTP

Answer: A

Telnet uses the TCP port 23

QUESTION NO: 47

Which two protocols provide OSI Network layer addresses? (Choose two.)

- A. IP
- B. IPX
- C. TCP
- D. SPX
- E. NetBEUI

Answer: A, B

The IP and IPX protocols are OSI network layer protocols.

QUESTION NO: 48

Which OSI layer 4 protocol provides connectionless-oriented services?

- A. IP
- B. UDP
- C. TCP
- D. ICMP

Answer: B

UDP provided connectionless services.

QUESTION NO: 49

Which protocol defines its address scheme using network classes?

- A. TCP/IP
- B. IPX/SPX
- C. NetBEUI
- D. AppleTalk

Answer: A

TCP/IP has 3 network classes: A, B, C, and D.

QUESTION NO: 50

What does the last three octets in 00 B0 D0 5A E1 B5 Identify?

- A. The device ID
- B. The type of device
- C. The manufacturer of the device
- D. The network address of the device
- E. The manufacture data of the device

Answer: A

This is a MAC address. The first three bytes contain a manufacturer code, the last three bytes contain a unique station ID.

QUESTION NO: 51

Which network file transfer protocol can be used only utilizing UDP?

- A. NNTP
- B. IRTF
- C. SNMP
- D. TFTP

Answer: D

The Trivial File Transfer Protocol transfers files and use UDP

QUESTION NO: 52

Which dial-up protocol is capable of passing multiple LAN protocols across the wire?

- A. PPP
- B. SLIP
- C. POTS
- D. TCP/IP

Answer: A

PPP is able to encapsulate different network protocols such as NetBEUI, IPX/SPX, and TCP/IP.

QUESTION NO: 53

Upon which protocol is HTTPS based?

- A. SSL (Secure Socket Layer)
- B. IPSec
- C. L2TP
- D. Kerberos

Answer: A

HTTPS is based on the Secure Socket Layer protocol (SSL).

QUESTION NO: 54

Which IPv4 address is a broadcast address for all nodes on the same network?

- A. 0.0.0.0
- B. 0:0:0:0
- C. 255.255.255.255
- D. 255:255:255:255

Answer: C

255.255.255.255 is the broadcast address.

Note that numbers are separated by dots (.) not colons (:).

QUESTION NO: 55

In which two OSI layers does a NIC (Network Interface Card) operate? (Choose two.)

- A. Network
- B. Session
- C. Physical
- D. Data Link
- E. Transport
- F. Application
- G. Presentation

Answer: C, D

A Network Interface Card (NIC) operates at the physical and the data link layer of the OSI model.

QUESTION NO: 56

Which function does a default gateway provide?

- A. Assigns an IP address to a client workstation.
- B. Provides address translation of an IP address to a host name.
- C. Provides a route for packets with destinations outside the local subnet.
- D. Provides a pointer to the home server address for the client workstation.

Answer: C

A default gateway enables access to resources outside the local subnet.

QUESTION NO: 57

Which protocol uses names as addresses?

- A. IP
- B. IPX
- C. TCP
- D. SPX
- E. NetBEUI

Answer: E

The NetBEUI protocol uses NetBIOS names as addresses.

QUESTION NO: 58

Which is a valid MAC address?

- A. 0x0000007B
- B. 51:50:VH:OU:81:2
- C. 00:B0:D0:5A:E1:B5
- D. 0103FBA1:00000001

Answer: C

A MAC consists of six hexadecimal numbers. The first three bytes contain a manufacturer code, the last three bytes contain a unique station ID.

QUESTION NO: 59

Which transmission medium does a vampire tap connect clients to?

- A. UTP
- B. STP
- C. fiber optic
- D. coaxial cable

Answer: D

Vampire taps are used to connect clients to Thicknet coaxial cables.

QUESTION NO: 60

Which network topology has physical paths between every node in a network of at least three nodes?

- A. bus
- B. ring
- C. star
- D. mesh

Answer: D

In a mesh topology every node is connected to three or more other nodes.

QUESTION NO: 61

Which fiber connector uses a twist-type attachment mechanism?

- A. FC
- B. ST
- C. SC
- D. MT-RJ

Answer: B

An ST (twist-on) connector uses a twist-type attachment mechanism.

QUESTION NO: 62

Which network transmission medium is limited to 10 megabits per second (Mbps) and can support cable segments up to a maximum distance of 185 meters (607 feet)?

- A. 10Base2
- B. 10Base5
- C. 10Base-F
- D. 10Base-T
- E. 10Base36

Answer: A

10Base2 network has a maximum speed of 10Mbps and a maximum distance of 185 meters.

10Base5 networks has a maximum distance of 500 meters.

10Base-T networks has a maximum distance of 100 meters.

There are no such standard as 10Base-F or 10Base36.

QUESTION NO: 63

Which device directs the data packet to all hosts on the LAN segment?

- A. hub
- B. router
- C. switch
- D. gateway

Answer: A

A hub directs data packets to all devices connected to the hub.

QUESTION NO: 64

Which networking topology has the most connections per node?

- A. bus
- B. ring
- C. star
- D. mesh

Answer: D

In a mesh topology each device is connected to at least three other devices.

QUESTION NO: 65

How many 64 Kbps channels does a BRI ISDN connection support?

- A. 1
- B. 2
- C. 12
- D. 23

Answer: B

A BRI ISDN connection support two 64Kbps channels.

QUESTION NO: 66

Which three media and connectors do 10Base2 networks use? (Choose three.)

- A. UTP cable
- B. STP cable
- C. RG-58 cable
- D. T-connectors
- E. BNC Terminators
- F. RJ-11 connectors

Answer: C, D, E

10Base2 network use Thinnet coaxial cables (RG-58 cable), T-connectors and BNC Terminators.

QUESTION NO: 67

Which two network devices pass data based solely on the MAC address? (Choose two.)

- A. hub
- B. router
- C. bridge
- D. Layer2 switch
- E. managed hub

Answer: C, D

MAC addresses are placed on Layer 2, the Data link layer, of the OSI model. MAC addresses are stored in Network adapters.

- C:** A bridge is used to connect two network segments. A bridge operates at the Data link layer and uses a table of learned MAC addresses to forward data to the correct destination.
- D:** Ordinarily switches work at layer 2 of the OSI layer. These switches use MAC addresses to forward data to the correct destination.
Layer 3 switches are able to work both at layer 2 and layer 3.

Incorrect Answers

- A:** A hub operates at the physical layer, layer 1, forwarding signals.
- B:** A router operates at the network layer, layer 3. Typically a router uses IP addresses to route data throughout the network.
- E:** A managed hub, like ordinary hubs, operates at the physical layer.

QUESTION NO: 68

Task

Click the BNC Connector





The upper connector is a RJ-45 connector.

QUESTION NO: 69

What is the maximum segment length of a 1000Base-T segment?

- A. 100 meters
- B. 325 meters
- C. 550 meters
- D. 3 kilometers

Answer: A

The maximum distance of a 1000Base-T segment is 100 meters (like a 10Base-T or a 100Base-T).

QUESTION NO: 70

Which network transmission medium is limited to 10 megabits per second (Mbps) and can support cable segments up to a maximum of 100 meters (330 feet)?

- A. 10Base2
- B. 10Base5
- C. 10Base-F
- D. 10Base-T
- E. 10Base36

Answer: D

10Base-T networks has a maximum speed of 10Mbps and maximum distance of 100 meters.

10Base2 network has a maximum distance of 185 meters.

10Base5 networks has a maximum distance of 500 meters.

There are no such standard as 10Base-F or 10Base36.

QUESTION NO: 71

Which IEEE specification uses a logical ring topology?

- A. 802.3
- B. 802.5
- C. 802.12
- D. 802.11b

Answer: B

The 802.5 standard defines a Token ring network.

QUESTION NO: 72

How many pair of wires does a 10Base-T cable use?

- A. one
- B. two
- C. three
- D. four

Answer: B

A 10Base-T cable use two pair of wires.

QUESTION NO: 73

Where is the packet sent if a client needs to send a packet that is not on the client's subnet?

- A. Local host
- B. Default gateway
- C. The nearest bridge
- D. Nowhere, because the packet is discarded

Answer: B

The default gateway is used to reach remote hosts located outside the local subnet.

QUESTION NO: 74

Which protocol is used for error reporting in concert with IP?

- A. SMTP
- B. ICMP
- C. RTMP
- D. SNMP

Answer: B

The Internet Control Message Protocol (ICMP) is used for IP error reporting and IP maintenance traffic.

QUESTION NO: 75

What does IP use for host name resolution?

- A. SAP
- B. NDS
- C. DNS
- D. WINS

Answer: C

Explanation: Host name resolution can be implemented by host files or by DNS.

Incorrect Answers

A: SAP (Service Advertisement Protocol) is used in Novell networks to advertise network services.

- B:** NetWare 4.0, released in 1993, was the first version to include NDS, which at that time stood for NetWare Directory Services, but is now Novell Directory Services.
- D:** WINS implements NETBios name resolution, not host name resolution.

QUESTION NO: 76

Which protocol identifies nodes through the use of the MAC address as part of its address scheme?

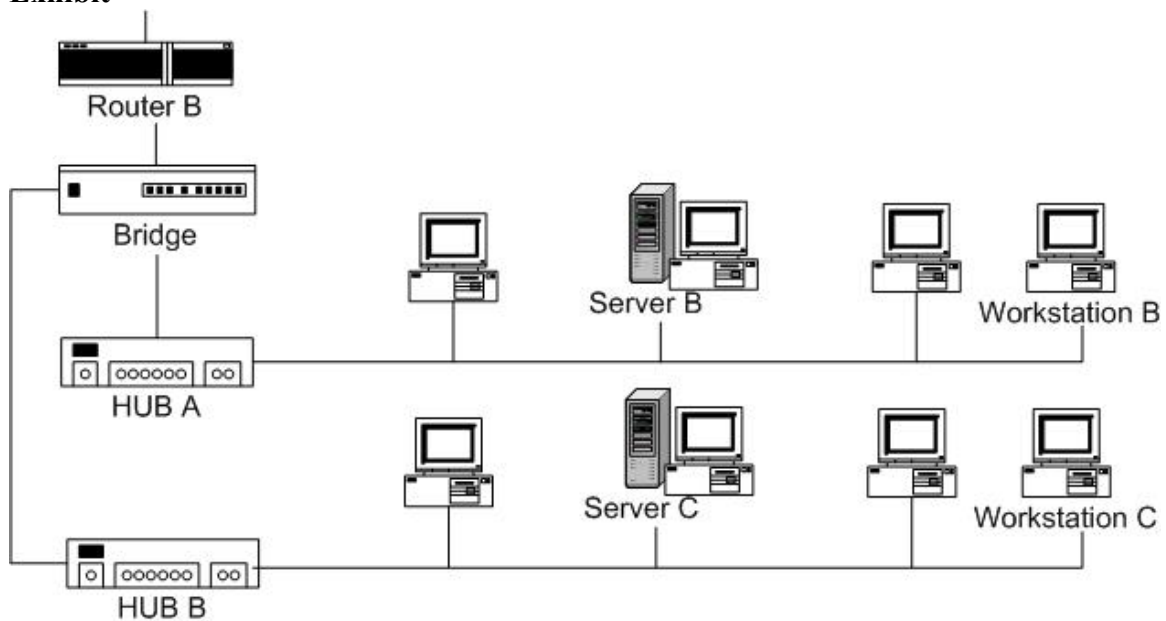
- A. TCP/IP
- B. IPX/SPX
- C. NetBEUI
- D. Banyan VINES

Answer: B

The address of an IPX frame is 80 bits. The network portion of an IPX address is 32 bits long. The host portion of an IPX address is taken from the station's 48 bit MAC address.

QUESTION NO: 77

Exhibit



In the network shown in the exhibit, Workstation B was moved to a new location on the same segment as Workstation C, and is no longer able to communicate on the network. Configurations on Workstation B are correct, and no other users have reported problems.

What is the most likely cause of this problem?

- A. hub B
- B. hub C
- C. bridge
- D. router B
- E. patch cable

Answer: E

The problem is only for one particular computer. A possible cause of the problem is the patch cable connecting the computer to the Network.
The other alternatives do not apply since they would affect several computers.

QUESTION NO: 78

A client has lost network connectivity in a large multiring environment. What is your first troubleshooting step?

- A. Isolate the ring
- B. Restore the ring
- C. Remove the failing section
- D. Repair the defective component

Answer: A

First we should isolate the ring and troubleshoot it locally.

QUESTION NO: 79

A user is unable to access data available to the account department but is able to view the data. Other users in the accounting department can access all data.

What is the cause of the problem?

- A. Bad NIC
- B. Insufficient user permission
- C. Bad user name and password
- D. Accounting system data is corrupt

Answer: B

The user has permission to view (=list) the data, but is not able to access (=open) it.

QUESTION NO: 80

Which media connector connects a client to a 100Base-FX switch?

- A. coaxial
- B. fiber optic
- C. Category 3 UTP
- D. Category 5 UTP

Answer: B

A 100Base-FX network uses fiber optic cabling.

QUESTION NO: 81

Which cable type is least susceptible to cross-talk?

- A. UTP
- B. STP
- C. coaxial
- D. fiber optic

Answer: D

There are never any cross-talk in fiber optic cables.

QUESTION NO: 82

Which three platforms can function as a NetWare print server? (Choose three.)

- A. Linux
- B. Palm OS
- C. NetWare 5
- D. Windows CE
- E. Windows NT

Answer: A, C, E

Linux, NetWare 5 and Windows NT can all be used for NetWare printers.
Palm OS and Windows CE are used for smaller computer systems.

QUESTION NO: 83

Which three methods implement disaster recovery? (Choose three.)

- A. Tape backup
- B. Mirrored servers
- C. A remote hot site
- D. Off-site data archive
- E. Uninterruptible power supply

Answer: A, C, D

To recover from a disaster we should make regular backups (to tape for example) and keep some of the backup media at an off-site location. Another disaster recovery solution is to use a remote hot site.

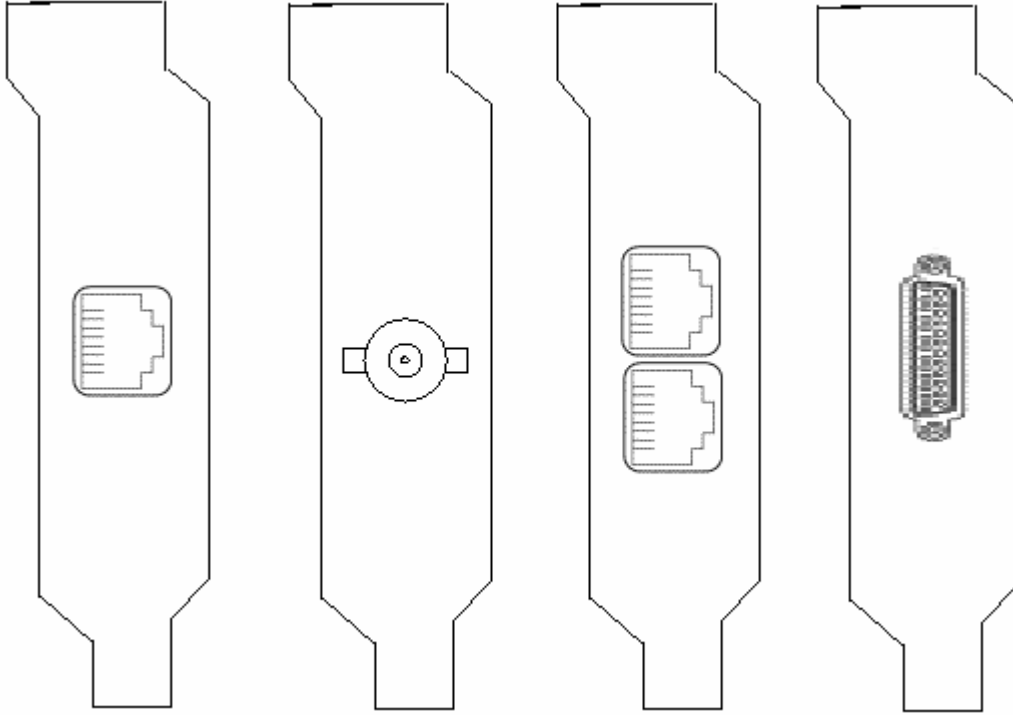
Note: Ordinarily the primary site of operation is the **hot site**. For backup reasons a remote **cold site** can be implemented. The cold site should include appropriate equipment and resources so that it can become a **remote hot site** if the local **hot site** gets hit by a disaster.

QUESTION NO: 84

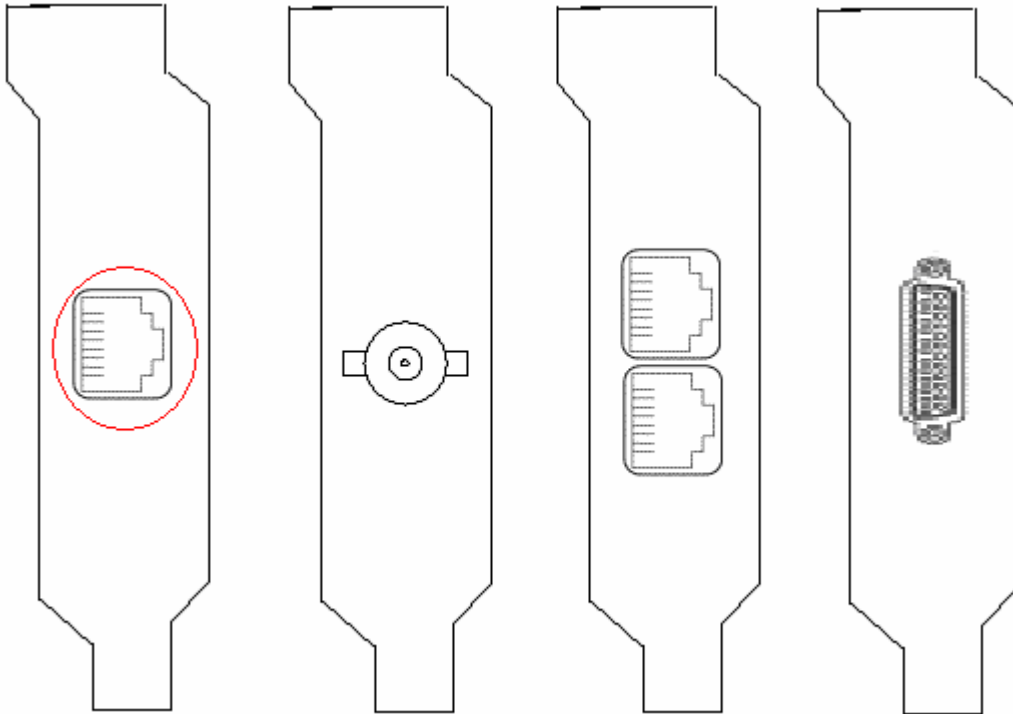
Task

You are installing a NIC for 100BASE-TX network.

Click the NIC that a 100BASE-TX network uses.



Answer:



A 100Base-TX network use CAT 5 cabling and RJ-45 connectors.
The ST connector is used for fiber optic.
The RJ-11 connector is the standard telephone connector.
The AUI connector is used for 10Base5 networks.

QUESTION NO: 85

Exhibit

```
C:\WINDOWS>"command" 10.0.0.131

"command" 10.0.0.131 with 32 bytes of data:

Reply from 10.0.0.0.131:bytes=32 time<10ms TTL=120
Reply from 10.0.0.0.131:bytes=32 time<10ms TTL=120
Reply from 10.0.0.0.131:bytes=32 time<10ms TTL=120
Reply from 10.0.0.0.131:bytes=32 time<10ms TTL=120

"command" statistics for 10.0.0.131:
  Packets Sents = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
  Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Which command's output is displayed in the exhibit?

- A. ping
- B. tracert
- C. nbstat
- D. traceroute

Answer: A

The ping command would produce such an output.

QUESTION NO: 86

Which TCP/IP utility lets you view the table that contains IP address to MAC address resolutions?

- A. arp
- B. ping
- C. telnet
- D. tracert
- E. netstat

Answer: A

The arp command with the -a switch displays the current ARP entries (IP address to MAC entries).

QUESTION NO: 87

A user cannot access one of two applications on a server. The other users can access both applications.

What is your first step to resolve the problem?

- A. Reboot the server
- B. Reboot the workstation
- C. Check the user's password
- D. Check the user's access permissions
- E. Ask the user to access the problem application

Answer: D

Since the user can access resources on the server we should check the access permissions.

QUESTION NO: 88

Given

- A company is upgrading its existing 10Base-T network to 100BASE-TX for faster performance.
- The company has purchased and installed a 100BASE-TX switch to replace its 10BASE-T switch.
- The NIC in the workstations are auto-negotiating 10/100 cards.
- After the switch installation, no workstation can communicate.
- A laptop plugged directly into any port on the 100Base-TX switch works fine.
- The old 10BASE-T switch is re-installed and all workstations begin to function.

What is the problem?

- A. The company is using Category 5 cabling
- B. The company is using 10-foot patch cables.
- C. The company is using Category 3 patch cables.
- D. The total segment length to the workstations from the switch is less than 300 feet.

Answer: C

Category 3 patch cables only supports 10Mbps not 100Mbps.

Category 5 cabling is required, there is no problem with 10-foot patch cables, and the maximum segment length in a 100Base TX network is 100 meters (330 feet).

QUESTION NO: 89

What should you configure to allow nodes on one local network to communicate with nodes on another network?

- A. WINS
- B. DHCP
- C. ARP Cache
- D. default gateway

Answer: D

Explanation: To allow communication outside the local subnet you must specify a default gateway. The default gateway provides access to resources outside the local subnet.

QUESTION NO: 90

Which OSI layer is responsible for dividing data into frames so it can be sent across a network?

- A. Network
- B. Data Link
- C. Physical
- D. Session
- E. Transport

Answer: B

The data link layer disassembles data into frames (and assembles them from frames).'

QUESTION NO: 91

Which protocol is used by most e-mail programs?

- A. FTP (File Transfer Protocol)
- B. TFTP (Trivial File Transfer Protocol)
- C. SMTP (Simple Mail Transfer Protocol)
- D. SNMP (Simple Network Management Protocol)

Answer: C

The Simple Mail Transfer Protocol (SMTP) in most e-mail programs.

QUESTION NO: 92

What is the maximum length of a 1000Base-CX segment?

- A. 25 meters
- B. 100 meters
- C. 550 meters
- D. 3 kilometers

Answer: A

1000BASE-CX is intended for short-haul copper connections (25 meters or less) within wiring closets.

QUESTION NO: 93

You are asked to implement a solution that provides for security authentication and encryption to a private network for a client machine. The client machine needs to connect to a NetWare server inside the private network.

Which two protocols should you implement to provide this functionality (Choose two.)

- A. SMTP
- B. TFTP
- C. PPTP
- D. SNMP
- E. TCP/IP

Answer: C, E

First we must use a generic network protocol (TCP/IP). Point-to-point Tunneling Protocol (PPTP) can be used for security authentication and encryption.

QUESTION NO: 94

You have a Windows NT network of 50 users configured for DHCP. You want to create dial-in connectivity for the Engineering department. The server has an installed modem.

Where should you configure the modem's services?

- A. My Computer -> Control Panel -> Services -> Add -> Remote Access Service
- B. My Computer -> Control Panel -> Network -> Services -> Add -> Dial Up Services
- C. Network Neighborhood -> Dial Up Networking -> Services -> Add -> Dial Up Services
- D. Network Neighborhood -> Dial Up Networking -> Network -> Add -> Remote Access Service

Answer: A

We want to allow the Engineering department dial-in access to the server. We must add the Remote Access Service (not Dial Up services). We install it as a normal service by using the Services Control Panel applet.

QUESTION NO: 95

How does user level security differ from share level security in a domain environment?

- A. Fewer privileges can be set
- B. One password is used for everyone to connect
- C. Multiple accounts and privileges are centrally administered
- D. Privileges and rights cannot be changed on a case-by-case basis

Answer: C

User level security allows a centrally managed security administration.

QUESTION NO: 96

Which two LAN protocols does Windows 2000 Server natively support?

- A. PPP
- B. SLIP
- C. TCP/IP
- D. IPX/SPX
- E. NETBIOS

Answer: C, D

Windows 2000 Server natively supports TCP/IP; IPX/SPX, NetBEUI etc.

QUESTION NO: 97

What is the copper cable requirement for 100BaseT?

- A. RG-58 Coax
- B. RG-62 Coax
- C. Category 3 UTP
- D. Category 5 UTP
- E. Telephone Twisted pair (TTP)

Answer: D

100BaseT networks require Category 5 UTP cabling.

QUESTION NO: 98

Yu are setting up a data link between two offices of your company. There are 17 employees located in each office. Your main concern as the Network Administrator is the speed of the connections and the reliability of transferring of data. You must also consider cost.

Which solution solves these issues?

- A. Connect an ISDN circuit to each workstation in both locations
- B. Place a modem on a server in each office to connect to each other
- C. Use an ISDN circuit connected to a dedicated server in each building
- D. Have each workstation at both locations use a modem to connect to the opposite office.

Answer: C

ISDN provides better speed, connection time, and reliability compared to a modem. We only need one ISDN circuit, not several.

QUESTION NO: 99

What is the process of changing the configuration of an A, B, or C network so that it treats the network and node number differently?

- A. routing
- B. proxying
- C. subnetting
- D. reverse lookup

Answer: C

By subnetting the network into several distinct networks the address is separate into a network part and a node number (called subnet mask and host number when using TCP/IP).

QUESTION NO: 100

Which protocol maps IP addresses to layer 2 addresses?

- A. IP
- B. TCP
- C. UDP

D. ARP

Answer: D

ARP maps IP addresses to MAC addresses.

QUESTION NO: 101

Which two communication protocols utilize a vector distance protocol to maintain routing table information?

- A. TCP/IP
- B. NetBEUI
- C. IPX/SPX
- D. AppleTalk

Answer: A, C

TCP/IP and IPX/SPX are routable protocols. They use a vector distance protocol to maintain routing table information.

NetBEUI and AppleTalk are not routable.

QUESTION NO: 102

According to industry standards, at which OSI layer does a switch operate?

- A. Network
- B. Physical
- C. Transport
- D. Data Link

Answer: D

QUESTION NO: 103

Which protocol links addresses to physical addresses in AppleTalk?

- A. AFP
- B. ASP
- C. AARP
- D. ARAP

Answer: C

AppleTalk Address Resolution Protocol (AARP) maps AppleTalk addresses (network and node numbers) into LAN hardware addresses (for example, Ethernet or token ring addresses), and manages the process of each AppleTalk node acquiring its unique AppleTalk address on these media.

QUESTION NO: 104

Which authentication solution uses tickets in a heterogeneous environment with an authorization server?

- A. SSL
- B. L2TP
- C. IPsec
- D. Kerberos

Answer: D

The Kerberos security system use security tickets.

QUESTION NO: 105

Which type of network uses network addresses assigned by the IANA?

- A. POTS network
- B. public network
- C. ARCNet network
- D. private network

Answer: B

Public networks use public addresses. These must be acquired through IANA.

QUESTION NO: 106

A user has configured a Windows 9x workstation with a dial-up SLIP connection to an ISP. The system connects without a problem; however the user cannot access the Internet.

What is the first thing you should instruct the user to do?

- A. Verify the userID
- B. Verify the password
- C. Verify the phone number of the ISP
- D. Change the protocol from SLIP to PPP

Answer: D

SLIP is an older remote access protocol. PPP and PPTP are the preferred remote access protocols.

QUESTION NO: 107

Which protocol recovers from lost or corrupted packets during transmission?

- A. IP
- B. IPX
- C. UDP
- D. TCP
- E. NetBIOS

Answer: D

TCP is able to recover from lost or corrupted packets.

QUESTION NO: 108

Which medium connects a client to a 100Base-T switch?

- A. coaxial
- B. fiber optic
- C. Category 3 UTP
- D. Category 5 UTP

Answer: D

Category 5-UTP cables are used in a 100Base-T network.

QUESTION NO: 109

Which network device provides public to private network security and may also use Network Address Translation (NAT)?

- A. hub
- B. bridge
- C. switch
- D. firewall

Answer: D

A firewall provides public to private network security by providing ability to permit or deny ports and protocols. A firewall can also provide NAT.

QUESTION NO: 110

Which TCP/IP port number identifies FTP?

- A. 21
- B. 23
- C. 25
- D. 80
- E. 110

Answer: A

FTP uses TCP port 21.

QUESTION NO: 111

Which utility should you use to troubleshoot NetBIOS over TCP/IP from Workstation A to Workstation B on a Windows network?

- A. ping
- B. tracert
- C. nbtstat
- D. netstat

Answer: C

The nbtstat utility displays protocol statistics and current TCP/IP connections using NBT(NetBIOS over TCP/IP).

QUESTION NO: 112

While setting up a new computer on the local subnet, you get the following Windows NT error message:

"Your default gateway does not belong to one of the configured interfaces."

What should you do next?

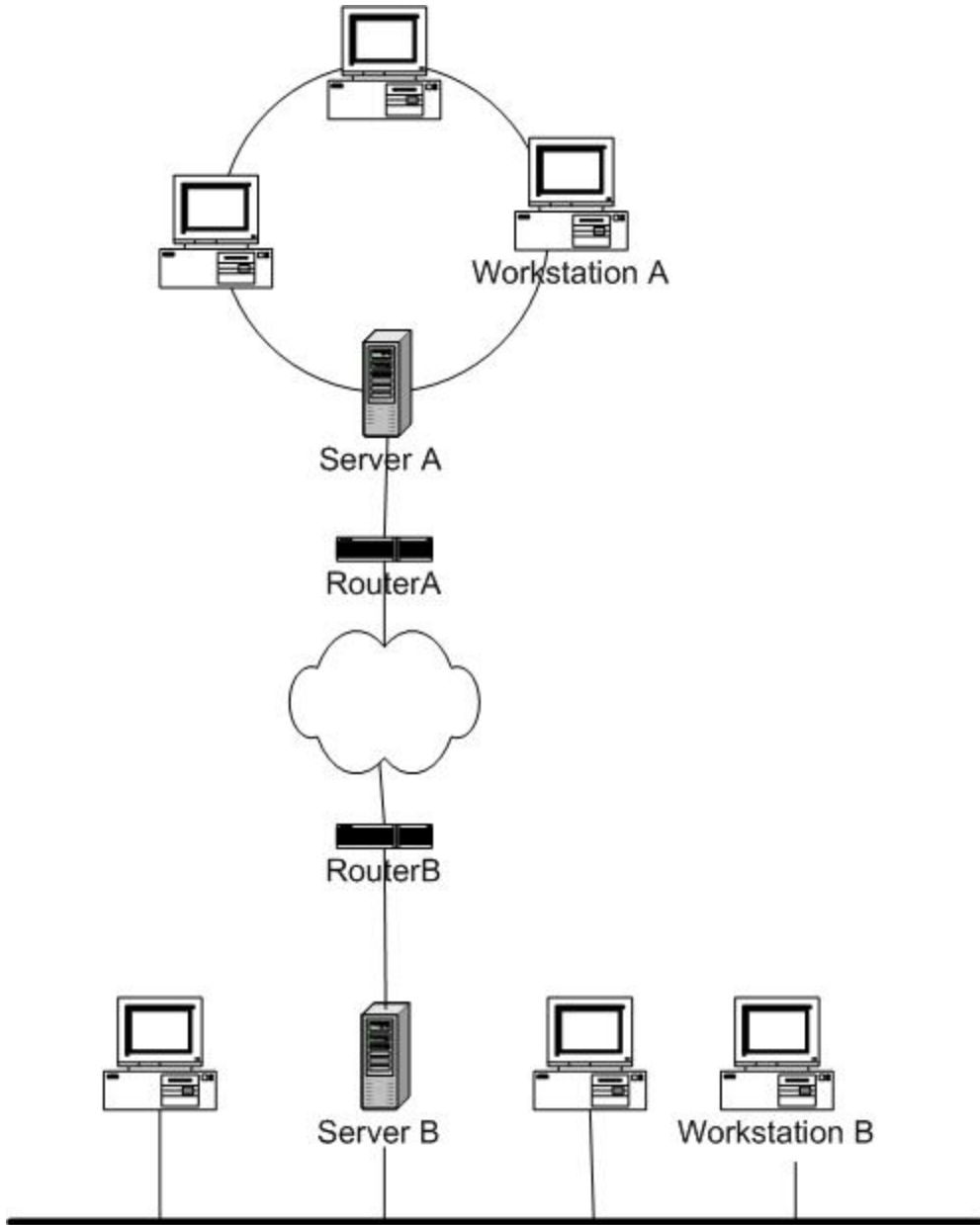
- A. run ftp
- B. run ping
- C. run nbstat
- D. run tracert
- E. run ipconfig

Answer: E

The default gateway has been misconfigured. The default gateway setting is an IP configuration setting. The Ipconfig command line utility can be used to change the IP configuration parameters.

QUESTION NO: 113

Exhibit



Workstation B cannot retrieve files from server B. However, workstation A is able to retrieve files from server B without incident.

What is the most likely cause of this problem?

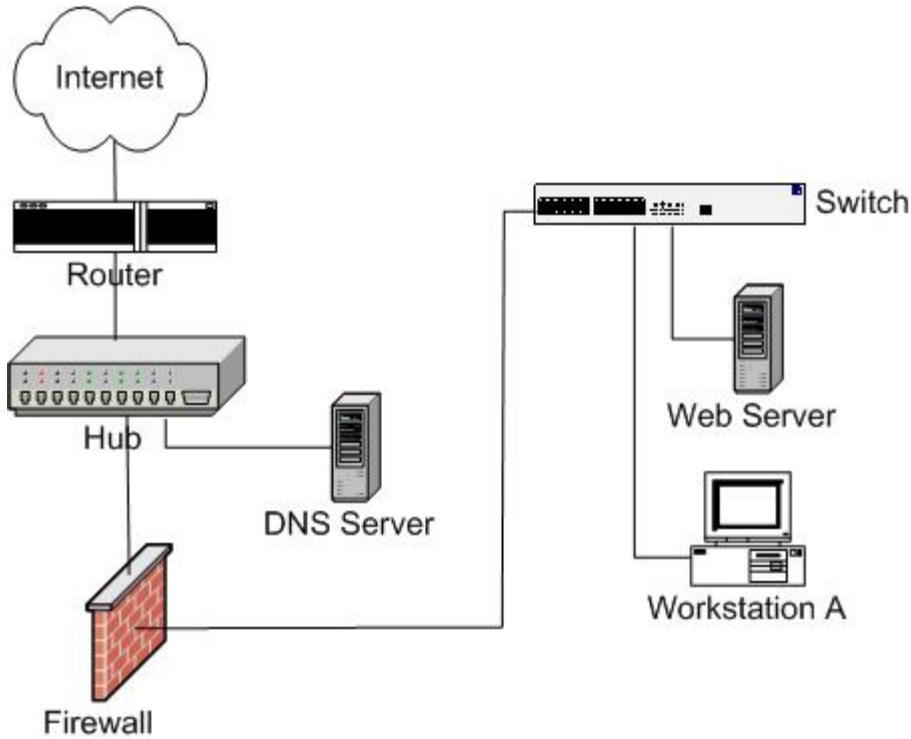
- A. bus failure
- B. server B failure
- C. router B failure
- D. Token Ring failure

Answer: A

The failure must be between Workstation B and Server B. A possible source of the failure is the bus network (or the patch cables, or the NIC of the workstation).

QUESTION NO: 114

Exhibit:



Given:

- External Web users coming in from the Internet are complaining of intermittent connectivity to the Web Server.
- Workstation A can connect to the Web server without error.
- Workstation A can connect to the firewall without error.
- Workstation A is experiencing intermittent connectivity to the Internet.

What is the cause of the problem?

- A. High utilization on the router
- B. High utilization on the Web server.
- C. A bad cable between Workstation A and the switch.
- D. A bad cable between the Web server and the switch.

Answer: A

High utilization of the router could explain both problems.
High utilization of the Web server could not cause intermittent Internet connectivity.

QUESTION NO: 115

You are troubleshooting at Workstation B. You suspect that there is a TCP session connected from Workstation A.

Which command should you issue at Workstation B to see if there is an established TCP connection?

- A. netstat
- B. ipconfig /all
- C. ping Workstation A
- D. nslookup Workstation A

Answer: A

The netstat utility provides information on current TCP sessions.

QUESTION NO: 116

You are connecting a Windows 98 workstation to an existing Novell NetWare 5.1 server. Network connectivity has already been verified for the workstation.

Which three steps are necessary to authenticate to the server? (Choose three.)

- A. Configure the tree
- B. Configure the context
- C. Install the Novell NetWare client
- D. Install File and Printer Sharing for NetWare Networks.

Answer: A, B, C

We should install the Novell NetWare client and configure the tree and a context.
It is not necessary to install File and Printer Sharing for NetWare Networks to be able to logon to the NetWare server.

QUESTION NO: 117

You have dispatched a technician to a remote site. After talking through multiple troubleshooting sequences, you need to have the technician test the Ethernet NIC. You ask the technician to make a loopback plug.

Which two sets of pins should you connect when creating a hardware loopback plug? (Choose two.)

- A. 1 and 2
- B. 1 and 3
- C. 2 and 5
- D. 2 and 6
- E. 3 and 4
- F. 4 and 6

Answer: B, D

In a loopback plug, pin 1 should be connected to 3, and pin 2 should be connected to pin 6.

QUESTION NO: 118

A remote user is having difficulties dialing in the network from a hotel room. The user unplugged the cable from the phone and plugged it into the modem. There is no dial tone.

What is the problem?

- A. The dial-up server is not responding.
- B. The modem does not support digital phone lines.
- C. The modem protocols are not configured properly.
- D. The dial-up connection protocols are not configured properly.

Answer: D

No dial tone indicates an error on the client, for example a misconfiguration of the dial-up connections protocols. Both the client and the remote access server must use the same authentication protocols.

Incorrect Answers

- A:** There is no dial tone so the dial-up server cannot be reached.
- B:** Phone lines are mostly used for analog communication. Digital data connections through are rare (DSL).
- C:** There are no such things as modem protocols.

QUESTION NO: 119

Your WAN is spread across 15 locations in multiple states. You receive a call from a user who cannot use the local printer. You need to determine the extent of the problem.

Which two questions can be eliminated?

- A. Is the problem enterprise-wide?
- B. Is the problem easy to duplicate?
- C. Is the problem across the WAN?
- D. Is the problem isolated to the user's workstation?

Answer: A, C

The problem only involves the local network. It is not a WAN or enterprise problem.

QUESTION NO: 120

You have installed WINS on your server and want to verify that names are resolved via WINS. Which command should you issue?

- A. arp -r
- B. nbsstat -r
- C. nbtstat -r
- D. nslookup -r

Answer: C

NBTSTAT utility can be used to find connectivity problems between TCP/IP and NetBIOS (WINS resolves NetBIOS names to IP addresses).

The -r parameter of nbtstat stands for resolved. It can give you a quick view of how your system is resolving and registering names.

QUESTION NO: 121

Given

- **A TCP/IP network environment with multiple subnets.**
- **A user connects to a Windows NT server named CORPSERV on its local subnet.**
- **WINS is NOT in use**

A user is moved to another subnet. The user is now unable to login to CORPSERV. What is the problem?

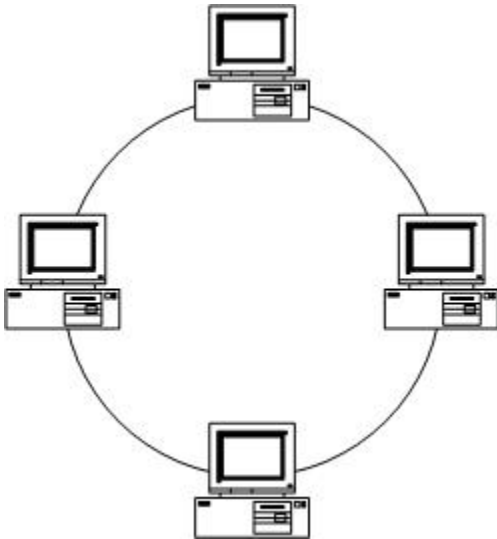
- A. A HOSTS file needs to be configured
- B. A LMHOSTS file needs to be configured
- C. A SERVICES file needs to be configured
- D. A PROTOCOL file needs to be configured

Answer: A

Either host names or NetBIOS names can be used in a TCP/IP network environment. WINS (NetBIOS name resolution) is not used on the network, so host names must be used instead. We should configure the HOSTS file.

QUESTION NO: 122

Exhibit



Users on the network segment shown in the exhibit are experiencing slow response time.

Which statement is true?

- A. The network segment is open.
- B. The network is experiencing late collisions due to cable length.
- C. The network token passing is delayed due to large file transfers.
- D. The network is experiencing early collisions due to cable length.

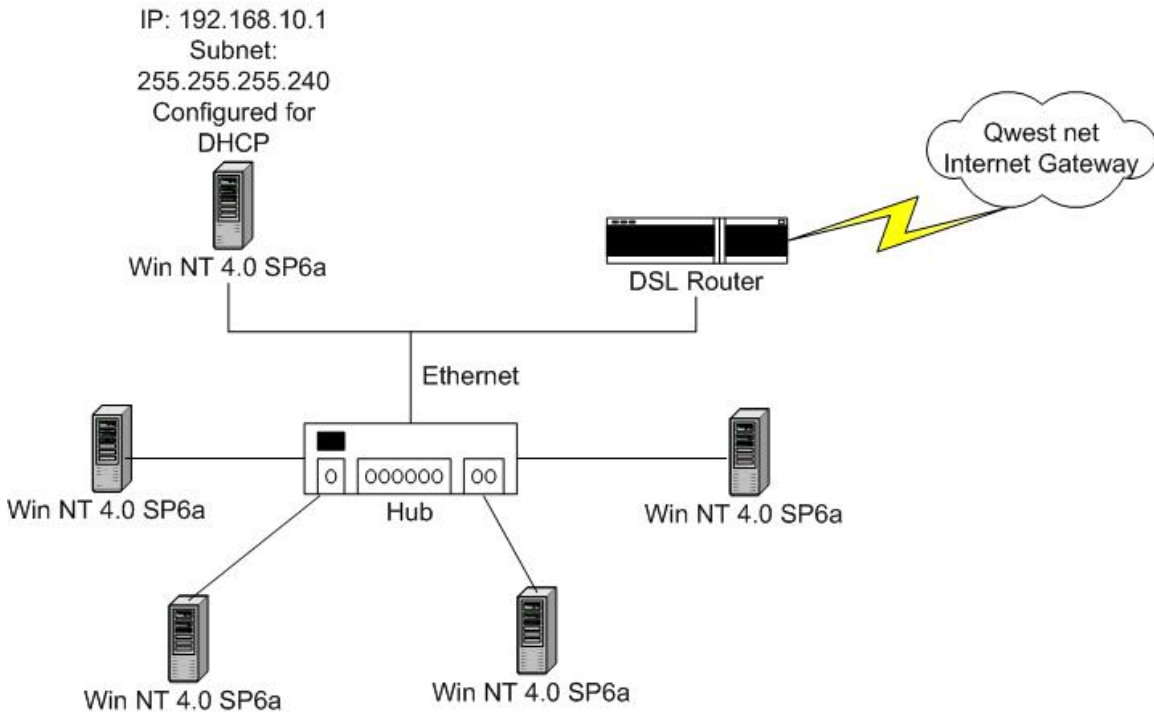
Answer: C

Large file transfers could slow down the traffic on a token ring network.

A token ring segment that has an open segment would not function at all. There are no collisions on token ring networks. Data is transferred in a token.

QUESTION NO: 123

Exhibit.



After installing a DSL router in your small office/home office network, you lose connectivity to your server. You are able to successfully ping the router. When you issue an ipconfig command you notice your workstation's IP address is 192.145.15.10.

What is the cause of this failure?

- A. The hub is powered off
- B. The Ethernet cable between the hub and the DSL router is bad.
- C. The Ethernet cable between the hub and the workstation is bad.
- D. The DSL Router is also running DHCP, causing a DHCP conflict.

Answer: D

The Workstation has an incorrect IP address. The DHCP server has not been able to configure the client. One possible cause of this problem could be a second DHCP server running on the network leasing an incorrect IP address.

The other alternatives are very unlikely since the only change of the network is the addition of the DSL router.

QUESTION NO: 124

Exhibit

```
C: \WINDOWS\ "command" ServerX

"command" to ServerX[10.0.0.110]
over a maximum of 30 hops:

 1 <10 ms <10 ms <10 ms routerA[10.0.0.6]
 2 <10 ms <10 ms <10 ms routerB[10.0.0.7]
 3 <10 ms <10 ms <10 ms ServerX[10.0.0.110]

"command" complete
```

Which command's output is displayed in the exhibit?

- A. ping
- B. ping -a
- C. tracert
- D. nbtstat

Answer: C

The output produced in the exhibit comes from a tracert command. The tracert command shows all the intermediate steps in the path.

QUESTION NO: 125

Your network uses DHCP to deliver IP settings to the Windows 2000 workstations. Your Network Administrator split the DNS domain into sub-domains. Users were not notified of the change until after it went into effect. Some users are now unable to reach the new sub-domain locations by host name.

What should you instruct users to do to correct this problem?

- A. Reinstall the TCP/IP stack
- B. Perform an **ipconfig/renew**
- C. Perform an **ipconfig/showclassid**

- D. Configure the subdomains in the IPX/SPX properties dialog box.
- E. Configure the IP address of the subdomain in the TCP/IP properties dialog box.

Answer: B

QUESTION NO: 126

The only Macintosh computer on your network is unable to print to a network print device. This computer does not have problems connecting to any of the other printers on your network. You reset the printing device. Windows users have no problem printing to the device.

What should you do next?

- A. Replace the printing device.
- B. Verify the printer connection to the printing device.
- C. Plug the Macintosh network cable in to a different port on the hub.
- D. Ensure that AppleTalk is an installed protocol on the printing device.

Answer: D

Apple clients, with no additional software, require the use of the AppleTalk protocol for printing.

QUESTION NO: 127

Exhibit

```
Windows 98 IP Configuration

Host Name . . . . . : Client1.IDW
DNS Servers . . . . . :
Node Type . . . . . : Broadcast
NetBIOS Scope ID . . . . . :
IP Routing Enabled . . . . . : No
WINS Proxy Enabled . . . . . : No
NetBIOS Resolution uses DNS . . . . . : No

1 Ethernet adapter:

Description . . . . . : 3Com Etherlink PCI
Physical Address . . . . . : 00-B0-D0-5A-56-EA
DHCP Enabled . . . . . : Yes
IP Address . . . . . : 10.0.0.130
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . :
DHCP Server . . . . . : 10.0.0.110
Primary WINS Server . . . . . :
Secondary WINS Server . . . . . :
```

Which command's output is displayed in the exhibit?

- A. ipconfig
- B. ipconfig/all
- C. ipconfig/renew
- D. ipconfig/release

Answer: B

Typing ipconfig/all and the command line would produce something very similar to the exhibit.

QUESTION NO: 128

Your network utilization spikes and stays at a high level. What is your first troubleshooting step?

- A. Isolate the faulty node
- B. Verify problem resolution
- C. Isolate the faulty cable section
- D. Isolate the faulty network segment
- E. Isolate the faulty transceiver, transceiver cable, or NIC

Answer: D

First we should isolate the network segment in order to find the faulty device.

QUESTION NO: 129

What is the primary purpose of a proxy server?

- A. It protects the Internet from internal network traffic.
- B. It acts as a file on a router that lists which addresses can go where.
- C. It acts as an intermediary that recreates the packets and services of the communication that is trying to get through.
- D. It acts as a type of firewall that manages packet sequence and origin to reduce the chance of hackers hijacking communication sessions.

Answer: D

A proxy server is a kind of buffer between your computer and the Internet resources you are accessing. The data you request come to the proxy first, and only then it transmits the data to you. It acts like in some ways as a firewall and can be used to protect the local network behind it.

QUESTION NO: 130

Devices within the same VLAN always belong to the same _____.

- A. switch
- B. CSDU/DSU
- C. broadcast domain
- D. Windows NT domain

Answer: C

Virtual network within a switch belongs to the same broadcast domain.

QUESTION NO: 131

You are configuring a Windows NT 4.0 workstation for dial-up networking. It will dial into a Microsoft Windows NT 4.0 Remote Access Server. The workstation needs to access a UNIX machine.

Which two should you install on the workstation to perform this operation? (Choose two.)

- A. TCP/IP Protocol
- B. NetBEUI Protocol
- C. Remote Access Service
- D. Novell Remote Console
- E. IPX/SPX Compatible Protocol

Answer: A, C

We must use the TCP/IP protocol which is the native protocol of UNIX machines. We must then install RAS (remote access service) on the NT Server to allow the NT workstations to log in remotely.

QUESTION NO: 132

Given

- **Network B is IP network 172.17.0.0/16**
- **The IP address of the router for network B is 172.17.0.1.**

What is the default gateway for a computer attached to network B?

- A. 127.0.0.1
- B. 172.17.0.0
- C. 172.17.0.1
- D. 255.255.0.0
- E. 255.255.255.0

Answer: C

The default gateway is often the IP address of the local LAN interface of the router.

QUESTION NO: 133

Which three basic technologies are used with firewalls? (Choose three.)

- A. proxy servers
- B. packet filtering
- C. dynamic routing
- D. Network Address Translation

Answer: A, B, D

Proxy servers functions like firewalls.

Firewalls filters packets.

Firewalls performs Network Address Translation.

Firewalls does not perform dynamic routing.

QUESTION NO: 134

What does a proxy protect?

- A. system data
- B. external users
- C. personnel costs
- D. hardware from failure

Answer: A

A proxy server protects local data from being exposed to external users.

QUESTION NO: 135

Which is a benefit of fault tolerance?

- A. The efficient use of network bandwidth
- B. The elimination of a single point of failure
- C. The ability to restore data after a disk crash
- D. The ability to distribute CPU load across multiple servers

Answer: B

The purpose of fault tolerance is to eliminate a single point of failure.

QUESTION NO: 136

What is the goal of disaster recovery?

- A. To rebuild the structure area around the server farm
- B. To recover all users data/software for all workstations
- C. To recover various non-job-related files from users and workstations
- D. To recover the pertinent software applications and data to continue business

Answer: D

The goal of disaster recovery is to be able recover data and continue the business.

QUESTION NO: 137

You want to implement two separate networks. You have only one switch.

What should you do to complete your task?

- A. Enable SNMP on the switch
- B. Enable Sntp on the switch
- C. Implement QoS on the switch
- D. Implement VLANs on the switch

Answer: D

Virtual local area networks (VLANs) can be implemented within a switch.

QUESTION NO: 138

**Which two benefits does starting Samba on a UNIX/LINUX server provide?
(Choose two)**

- A. Web access
- B. Telnet access
- C. The server access
- D. Print server access

Answer: C, D

A Samba server provides a centralized server authentication and the print server service.

QUESTION NO: 139

**Which four permissions types are available in a Windows NT environment?
(Choose four.)**

- A. list
- B. read
- C. write
- D. modify

E. change

Answer: A, B, C, D

There is no change permission in an NT/2000/XP environment. Instead it is called Modify permission.

QUESTION NO: 140

You have a permanent connection to the Internet for your network. Your local network includes a Web server and an SMTP server. You are concerned about the threat of hackers gaining access from the Internet. You have enforced HTTPS access to your Web server.

After you make this change, your Web server is no longer accessible from the Internet, but can still be accessed by your internal network users.

What would you predict is causing this problem?

- A. Your DNS server is down.
- B. Your Web server address has changed.
- C. Your Internet router is blocking port 389.
- D. Your Internet router is blocking port 443.

Answer: D

HTTPS (the SSL protocol) use port 443. The router might be blocking this port.

QUESTION NO: 141

Network A is IP network 192.168.100.0/24. What is a valid IP address for a computer located on network A?

- A. 192.168.1.1
- B. 192.167.100.10
- C. 192.168.100.254
- D. 192.168.100.255

Answer: C

Any valid IP address on the 192.168.100.0/24 must have the format 192.168.100.xx since the subnet mask is 24 bits. We cannot use the 192.168.100.255 address since it is reserved for broadcasts. The 192.168.100.254 address can be used however.

QUESTION NO: 142

**Which two application protocols does Network Attached Storage (NAS) use?
(Choose two.)**

- A. NFS
- B. EMI
- C. ATM
- D. SMB
- E. HDLC

Answer: A, D

NAS can use the Network File System (NFS) or Server Message Block (SMB).

QUESTION NO: 143

Which LAN network access security does Windows 2000 Server use?

- A. SSL
- B. L2TP
- C. IPsec
- D. Kerberos

Answer: D

Windows 2000 uses the Kerberos protocol for access security.

QUESTION NO: 144

Which networking topology requires less hardware and cabling than other topologies?

- A. bus
- B. ring
- C. star
- D. mesh

Answer: A

A bus network requires only a single cable trunk.

QUESTION NO: 145

Which networking topology is the easiest to reconfigure?

- A. bus
- B. ring
- C. star
- D. mesh

Answer: C

A star topology requires virtually no reconfiguration.

QUESTION NO: 146

Which networking topology connects computers via multiple paths?

- A. bus
- B. ring
- C. star
- D. mesh

Answer: D

In a mesh topology every node is connected to three or more other nodes.

QUESTION NO: 147

Which device connects multiple computers to create a single logical network segment?

- A. hub
- B. NIC
- C. router
- D. bridge

Answer: A

A hub connects multiple computers to create a single logical network segment.

QUESTION NO: 148

Which connector connects an external transceiver to a NIC?

- A. ST
- B. SC
- C. AUI
- D. BNC
- E. RJ-45

Answer: C

An AUI connector connects the clients via an external transceiver to a Thicknet coaxial cable.

QUESTION NO: 149

Which connector should you use in a 10BASE2 environment?

- A. SC
- B. ST
- C. BNC
- D. RJ-11
- E. RJ-45

Answer: C

10Base2 networks uses Thinnet coaxial cables. BNC connectors are used to connect clients to a Thinnet coaxial cable.

QUESTION NO: 150

Which IEEE 802.x standard describes the Physical layer for networks that use a ring topology?

- A. 802.1
- B. 802.2
- C. 802.3
- D. 802.4
- E. 802.5

Answer: E

802.5 is the Standard for Token ring networks.

QUESTION NO: 151

Which cable type is most susceptible to cross-talk?

- A. UTP
- B. STP
- C. coaxial
- D. fiber optic

Answer: A

Unshielded twisted pair cables are most cross-talk susceptible.

QUESTION NO: 152

Devices on a Token Ring network need to access files on a server in an AppleTalk network. Which device connects the two networks?

- A. hub
- B. bridge
- C. switch
- D. gateway

Answer: D

A gateway is used to connect dissimilar systems. Here the gateway is used to connect two dissimilar networks.

QUESTION NO: 153

Which device connects a computer to an analog data service provided by the local telephone company?

- A. Fax machine
- B. V.90 modem
- C. ISDN adapter
- D. LAN adapter

Answer: B

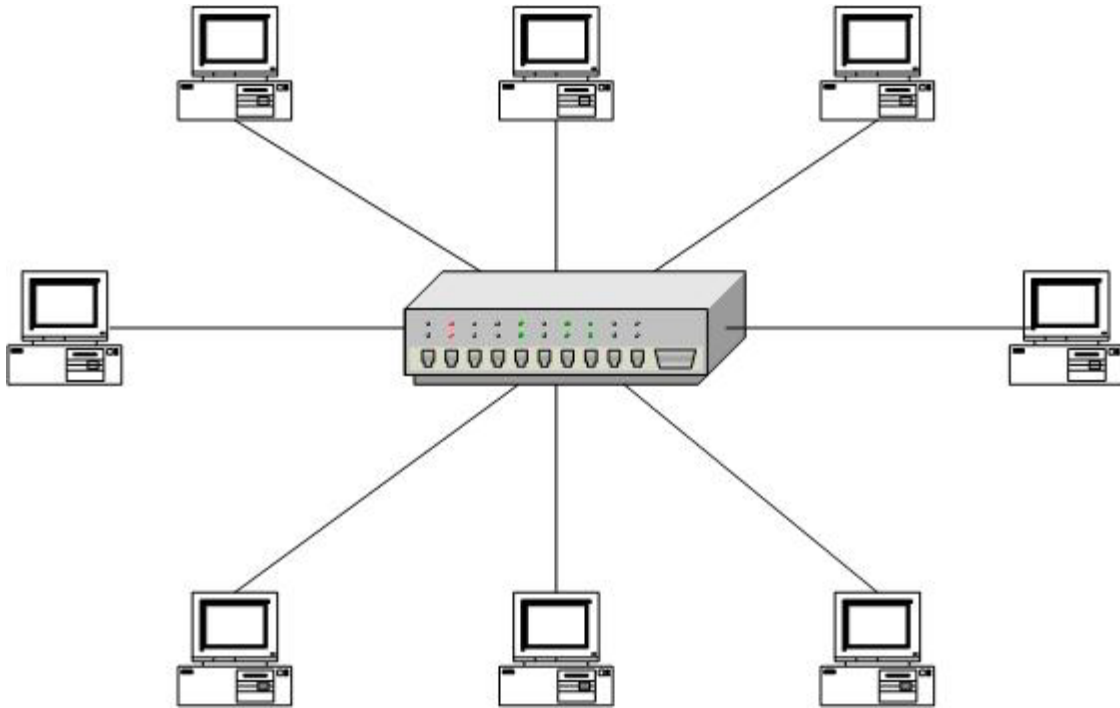
Answer:



Don't select the coaxial port in the middle or the fiber optic to the right.

QUESTION NO: 156

Exhibit



Which networking topology is shown?

- A. bus
- B. ring
- C. star
- D. mesh

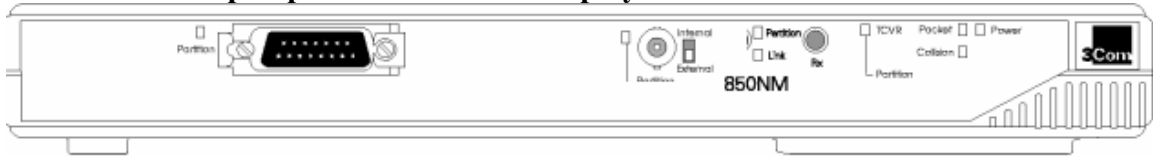
Answer: C

In a star topology the clients are connected to a hub.

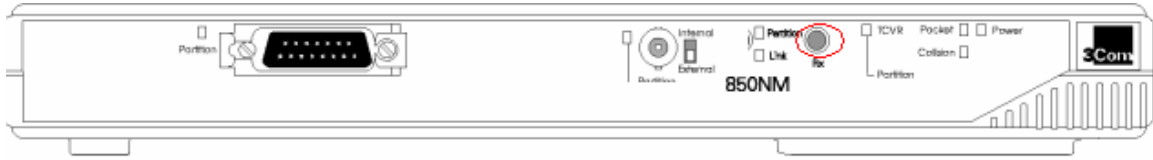
QUESTION NO: 157

Task

Click the fiber optic port on the screen display.



Answer:



Don't select the AUI port (to the left), or the coaxial port in the middle.

QUESTION NO: 158

A user cannot access an application on a server. Other users can access the application. You ask the user to access another application on the same server, and the user is able to access the other application. What is your next to resolve the problem?

- A. Reboot the server
- B. Reboot the workstation
- C. Check the user's password
- D. Check the user's access procedures
- E. Ask the user to access the problem application from another workstation

Answer: E

Explanation: Either it is a problem with this computer or it is a problem with the user account. By trying from another computer we can eliminate one of the causes.

Incorrect Answers

- A:** The application is functioning at the server. It can be accessed from other workstations.
- B:** Rebooting is often a useful practice when troubleshooting. However, other applications on the server work on the workstation.
- C:** The user is able to access the server through another application. Apparently he is logged in to the network
- D:** There is no such notation called access procedures.

QUESTION NO: 159

Your company is moving into a new building. The cabling company has labeled all 10BaseT jacks for the workstation. However, when you plug in a workstation to a jack and plug the patch cable from the patch panel to the hub, you do not get a link light on the NIC or the hub. You have tried to replace both patch cables with known, good patch cables. It still does not work. What should you do next?

- A. Hook a protocol analyzer to the hub.
- B. Reinstall the network interface card driver.
- C. Test the cable from wall jack to patch panel.
- D. Replace the workstation patch cable with a crossover cable.

Answer: C

Explanation: We should analyze the cable. It could be the cause of the problem.

Incorrect Answers

A: It seems likely that this is a physical problem, not a network configuration problem.

B: It seems likely that this is a physical problem, not a driver problem.

D: A crossover cable should not be used between the PC and the wall jacket. Crossover cables are used to connect two similar devices, for example two hubs, or two PCs.

QUESTION NO: 160

Which command displays the per protocol statistics? (Be careful to distinguish between upper and lower case characters.)

- A. arp -s
- B. arp -S
- C. nbstat -s
- D. nbstat -S
- E. netstat-s
- F. netstat-S

Answer: E and F

Explanation:

E: netstat -s displays detailed network traffic statistics for the IP, ICMP, TCP, and UDP protocols.

F: netstat -S is the same as **netstat -s**. It displays detailed network traffic statistics for the IP, ICMP, TCP, and UDP protocols.

Note: Only **nbstat** is case sensitive. **arp** and **netstat** are not case sensitive.

Incorrect Answers

A: arp -s adds a new entry to the ARP cache.

B: arp -S is the same as **arp -s**. It adds a new entry to the ARP cache.

C: nbstat -s displays a list of the computer's currently active NetBIOS settings (identifying remote computers by name), their current status, and the amount of data transmitted to and received from each system.

D: nbtstat -S -displays a list of the computer's currently active NetBIOS settings (identifying remote computers by IP address), their current status, and the amount of data transmitted to and received from each system

QUESTION NO: 161

Prior to any new network implementation, which two procedures need to be implemented? (Choose two.)

- A. Compile documentation
- B. Disable network logins
- C. Implement network load balancing
- D. Determine needs and expectations

Answer: A, D

Explanation:

A: Solid documentation of the network implementation will be beneficial later on.

D: Needs are expectations should always be considered before implementing a network.

Incorrect Answers

B: In general, it is not necessary to disable network logins.

C: Load balancing is only required to increase performance.

QUESTION NO: 162

Which two are good password practices? (Choose two.)

- A. Keep passwords indefinitely
- B. Change passwords every 90 days
- C. Maintain minimum password length
- D. Use only alphanumeric symbols in passwords

Answer: B, C

Explanation:

B: Passwords should be changed regularly.

C: A minimum password length strengthens security.

Incorrect Answers

A: Passwords should be changed regularly.

D: A password should be a mixture of alphanumeric and numbers. It makes it much harder to guess the passwords.

QUESTION NO: 163

Given the following information:

- Your company's regular business hours are from 8 a.m. to 5 p.m. Monday to Friday.
- Your supervisor instructed you to run backups only after business hours to avoid impacting network performance.
- You have a 50 GB tape drive with a data transfer rate of 3600 KB/min, allowing transfer of 2.1 GB per hour.
- You have 40 GB to backup.

On which day(s) can you do full backups? (Choose all that apply.)

- A. Monday
- B. Tuesday
- C. Wednesday
- D. Thursday
- E. Friday

Answer: E

Explanation: 2.1 GB per hour and 40 GB to backup make the duration of the backup process 19.1 hours long. The backup should take place during the weekends, starting Friday night.

Incorrect Answers

A, B, C; D: There are only 15 non-business hours between 5 p.m. and 8 a.m. The 19.1 hour backup process must not be started Monday to Thursday.

QUESTION NO: 164

Which layer of the OSI model is responsible for establishing, managing, and terminating communications between two computers?

- A. session
- B. network
- C. physical
- D. transport
- E. data-link
- F. application

Answer: A

Explanation: The Session Layer controls the establishment the establishing, managing and terminating communications sessions between presentation layers.

Incorrect Answers

B: The network layer provides logical addressing which device us for path destinations.

C: The physical layer is responsible to move bits between devices and specifies voltage, wire speed and pin-out cables.

D: The transport layer provides for both reliable and unreliable delivery and error correction before retransmit.

E: The data link layer combines bits into bytes and bytes into frames, provided access to media using MAC addresses, and error detection.

F: The application Layer is where the user/applications access the network.

QUESTION NO: 165

On IP networks, what is the term that refers to any device with a logical address?

- A. host
- B. peer
- C. client
- D. server

Answer: A

Explanation: Any device that has a logical address, an IP address, is referred to as a host.

Incorrect Answers

B: A peer device is a corresponding device. For example all computers in a peer network are considered equal.

C: Clients are just an example of IP host.

D: Servers are just an example of IP host.

QUESTION NO: 166

Which three are valid TCP/IP protocols? (Choose three)

- A. SAP
- B. TCP
- C. HTTP
- D. DHCP

E. NetBEUI

Answer: B, C, D

Explanation:

B: TCP is a transport layer protocol in the TCP/IP protocol suite.

C: HTTP is a TCP/IP protocol is the engine of WWW.

D: DHCP is a TCP/IP which automates the management of IP configuration of hosts.

Incorrect Answers

A: SAP (Service Advertising Protocol) is a protocol used in Novell networks. SAP is used to advertise network services. SAP use IPX/SPX not TCP/IP.

E: NetBEUI is a legacy broadcast protocol originally from IBM. NetBEUI does not support routing and is not a member of the TCP/IP suite.

QUESTION NO: 167

Which TCP/IP protocol gives a logical address to a host?

- A. IP
- B. TCP
- C. UDP
- D. SMTP

Answer: A

Explanation: The logical address is a synonym for IP address in the context of TCP/IP.

Incorrect Answers

B: TCP is a connection-oriented transport layer protocol.

C: UDP is a connection-less transport layer protocol.

D: SMTP is used for transferring mails.

QUESTION NO: 168

You have just installed a 10BaseT NIC into a Windows 95 workstation and you are trying to configure it on an Ethernet network. After configuring the IRQ and I/O base address properly, what else must you do?

- A. Install network client software.
- B. Connect the cable to the MAU.
- C. Connect the cable to the network card.
- D. Install the terminator at the network card.

Answer: A, C

Explanation:

A: We need to install network client software, such as network drivers and network protocols.

C: We must physically connect the workstation to the network through the network card.

Incorrect Answers

B: MAU are specialized hubs used only in token ring network. There is no general requirement to connect a workstation to a MAU.

D: Terminators are only used on Coaxial cable networks such as 10Base2 (Thinnet) and 10Base5 (Thicknet). However, this workstation use a 10-BaseT NIC so it cannot be connected to these networks.

QUESTION NO: 169

What utility can allow you to see active connections on a server?

- A. PING
- B. NBTSTAT
- C. NETSTAT
- D. TRACERT

Answer: C

Explanation: Netstat is a command-line program that displays information about a TCP/IP computer's current network connections and about the traffic generated by the various TCP/IP protocols.

Incorrect Answers

A: PING is used to test network connectivity.

B: Nbtstat.exe is a Windows utility displays information about the NetBIOS over TCP/IP connections that Windows uses when communicating with other Windows computers on the TCP/IP LAN.

D: TRACERT is used to trace routes throughout the network.

QUESTION NO: 170

What is the default subnet mask for a class C network?

- A. 255.255.255.224
- B. 255.255.255.0

- C. 255.255.0.0
- D. 255.0.0.248

Answer: B

Explanation: Class C networks have a 24-bit subnet mask of 255.255.255.0.

Incorrect Answers

- A:** This is a 27-bit subnetted subnet mask
- C:** Class B networks have a 16-bit subnet mask of 255.255.0.0.
- D:** This is not a correct subnetmask since it is discontinuous.

QUESTION NO: 171

Which OSI level handles networking functionality?

- A. Network
- B. Application
- C. Functionality
- D. Physical

Answer: D

QUESTION NO: 172

You have 21 Windows NT servers, 6 UNIX servers, 1 Novell 5 server, and 50 Windows 95 workstations.

Choose one protocol that will connect to ALL servers.

- A. IP
- B. DLC
- C. NWLink
- D. NetBEUI

Answer: A

Explanation: Novell 5 supports TCP/IP natively. UNIX use TCP/IP. Windows 95 and Windows NT can be configured for TCP/IP.

Incorrect Answers

- B:** DLC is mainly used by IBM mainframes and some HP printers.

- C:** NWLink is Microsoft's implementation of IPX/SPX: IPX/SPX is not supported by UNIX computers.
- D:** NetBEUI is not supported by UNIX computers.

QUESTION NO: 173

What device can translate between dissimilar network protocols?

- A. Router
- B. Gateway
- C. Bridge

Answer: B

Explanation: A gateway can translate between different protocols. A gateway can operate on most of layers in the OSI model.

Incorrect Answers

- A:** A routing routes data throughout the network. It does not translate protocols. Routers work at the network layer.
- C:** A bridge is used to physically connect two network segments. A bridge works at the Data link layer.

QUESTION NO: 174

Which of the following uses FDM (Frequency Division Multiplexing)?

- A. Broadband
- B. Baseband
- C. Wideband

Answer: A

Explanation: In broadband, multiple signals can be transmitted on the same cable simultaneously by means of frequency division multiplexing (FDM).

Incorrect Answers

- B:** Baseband only use one signal at a time. Baseband can use time division multiplexing (TDM).
- C:** Wideband does not use FDM.
- Note:** Wideband is a transmission medium or channel that has a wider bandwidth than one voice channel (with a carrier wave of a certain modulated frequency). This term is usually contrasted with narrowband.

QUESTION NO: 175

You transfer data via a WAN and want to secure data. Which of the following is the best approach?

- A. Share level security
- B. Encrypt Data
- C. Password protect data
- D. Use ISDN

Answer: B

Explanation: Anyone could have access to the WAN, so the data must be secured by the means of encryption

Incorrect Answers

- A:** Share-level security only secures local resources. It does not secure anything transferred on the WAN.
- C:** Password-protected data would be unprotected when it is transferred on the WAN.
- D:** ISDN does not provide any security.

QUESTION NO: 176

What is one security function of a firewall?

- A. Allows people on the Internet to see just one IP address
- B. Does not allow any connections to the server
- C. Manages password functions
- D. Restricts unauthorized users from accessing sensitive data

Answer: B

Explanation: A firewall is used to restrict traffic. Traffic can be restricted on ports, source address, destination address, or protocol. We can restrict access to a specific server by denying any traffic to the destination address of this server.

Incorrect Answers

- A:** Network address translation (NAT) hides the local IP addresses from external internet users. Only one address would be public.
- C:** Passwords functions are not managed by a firewall.
- D:** A firewall can not distinguish between authorized and non-authorized users.

QUESTION NO: 177

Which character signifies the start of a comment line in a HOSTS file?

- A. ;
- B. %u
- C. \$
- D. @
- E. *
- F. #

Answer: F

Explanation: # is used for comments in hosts files.

QUESTION NO: 178

You are concerned about security in your organization and decide to implement a secure password policy. What can you do to make your password policy more secure?

- A. Require users to change passwords randomly
- B. Set password expiration to 2 days
- C. Make scheduled changes regularly
- D. Require passwords with random numbers of characters

Answer: C

Explanation: Password should not be kept constant. By changing the passwords regularly security is enhanced.

Incorrect Answers

- A:** Users should not change passwords randomly. By using password policies you can force users to, for example, a minimum password length and passwords that contain both letters and numerals.
- B:** Two days is too short time. Also the password changes should be scheduled on a regular basis.
- D:** A minimum number of characters should be required.

QUESTION NO: 179

An employee is complaining that when he turns his lights on in the office, he can't connect to the network. With the light off his system works fine. What could be the problem?

- A. There is a voltage drop when the lights are turned on
- B. The NIC needs to be replaced
- C. The cabling system is faulty
- D. All of the above

Answer: C

Explanation: There is a cabling problem. There is interference between the network cabling and the power cabling.

Incorrect Answers

A: The problem is constant when the lights are on, not just when the lights are turned on.

B: The NIC works fine when the lights are off.

D: A) and B) are false.

QUESTION NO: 180

Which network resource provides services for users?

- A. Local host
- B. Server
- C. Workstation
- D. ISDN

Answer: B

Explanation: Servers provide login services, file services, e-mail services, internet connectivity services, printing services etc. to the users.

Incorrect Answers

A: Local host is not a service.

C: The workstation only provides a very limited amount of services to the users, such as the network browsing service.

D: ISDN is not a service.

QUESTION NO: 181

You have a 10BaseT connection. It is 10 meters between the NIC and the wall plug, 90 meters from plug to wiring closet, and 3 meters from wiring closet to hub. Your computer cannot connect. What should you do?

Required objectives:

- **Connect to the server.**

Optional Objectives:

- **Faster connection.**
- **Easier access for users.**

Proposed solution:

- **Replace the NIC with a 100baseFX NIC**
- A. This meets only the required objective and not the optional objective
B. This meets the optional objective only
C. This meets the required and optional objectives
D. This does not meet the required or optional objectives

Answer: D

Explanation: The first problem is that UTP that is used in a 10BaseT network has a maximum distance of 100 meters. Currently there are 103 meters between your computer and the hub. This is not fixed by changing the NIC of your computer (Required objective not met).

Furthermore, just using a faster NIC would not improve speeds as long as 10BaseT cabling still is in use or easier access for the users (optional objectives not met).

QUESTION NO: 182

What three things do you need to specify on a workstation for DNS resolution? (Select three)

- A. Domain name
- B. Host name
- C. NetBIOS name
- D. IP address of the DNS server

Answer: A, B, D

Explanation:

A: DNS works in domain namespaces. A domain name must be specified.

B: The workstation must have a host name.

D: The workstation must be configured with the IP address of a DNS server.

Incorrect Answers

B: DNS does not use NetBIOS names.

QUESTION NO: 183

What utility can you use to troubleshoot an HTTP server?

- A. PING
- B. TDR
- C. Telnet
- D. NBTSTAT

Answer: C

Explanation: Telnet can be used to connect to a HTTP server. With telnet you can issue local commands on the HTTP server which could aid you in troubleshooting.

Incorrect Answers

A: PING can be used to test connectivity to a server. You could test connectivity to the HTTP server, but this is not actually troubleshooting the HTTP server.

B: A time domain reflectometry (TDR) is used to test network cabling.

D: Nbtstat.exe is a Windows command-line program that displays information about the NetBIOS over TCP/IP connections that Windows uses when communicating with other Windows computers on the TCP/IP LAN. This would not be useful in troubleshooting an HTTP server however.

QUESTION NO: 184

Which two tape backup methods clear the archive attribute? (Choose two.)

- A. Differential
- B. Sequential
- C. Full
- D. Incremental

Answer: C, D

Explanation:

- C: A full backup backs up all files and clears the archive attribute of each file that has been backed up.
- D: An incremental backup backs up all files that have changed since the last incremental or full backup were performed.

Incorrect Answers

- A: A differential backup backs up all files that have changed since the last full backup, but it does not clear the archive bit of those files.
- B: Sequential backup refers how data is written to the backup media. It does not refer of whether the archive bit is cleared or not.

QUESTION NO: 185

Your entire network of 100 computers is bogged down. Everything is connected correctly and there are no conflicts that you are aware of. What can you use to help isolate the problem?

- A. NETSTAT
- B. NBTSTAT
- C. Loopback hardware
- D. Network Monitor

Answer: D

Explanation: We need to monitor the network traffic to find out what is causing all the network traffic.

Incorrect Answers

- A: NETSTAT is a command-line program that displays information about a computer's current TCP/IP network connections and about the traffic generated by the various TCP/IP protocols. It could be of some use in this scenario; however it would be better to monitor the network traffic.
- B: Nbtstat.exe is a Windows command-line program that displays information about the NetBIOS over TCP/IP connections that Windows uses when communicating with other Windows computers on the TCP/IP LAN.
- C: Loopback hardware is used to test the NIC of a computer.

QUESTION NO: 186

Which of the following are features of PSTN? (Choose three)

- A. Ease of configuration
- B. Inexpensive cost

- C. Readily available
- D. 64 Kpbs

Answer: A, B, C

Explanation:

- A:** Just plug into the phone line.
- B:** It is inexpensive.
- C:** Telephone lines are readily available.

Incorrect Answers

D: The Public Switched Telephone Network (PSTN) typically supports speeds of maximum 56Kbps not 64Kbps.

QUESTION NO: 187

You install a new anti-virus suite in your network of 120 computers. In the same afternoon, you configure RAID on one system. You are experiencing system crashes throughout your network. What can you do to correct the problem?

- A. Get the newest anti-virus update from the vendor.
- B. Disable the RAID system.
- C. Check the anti-virus vendor for system patches or service packs.
- D. Uninstall the virus suite.

Answer: C

Explanation: The most likely cause of this problem would be related to a problem between the RAID hardware and the Operating System (OS). Install system patches and service packs is a good idea. However, you should download them from the OS vendor, not from the anti-virus vendor.

Incorrect Answers

A, B, D: The anti-virus suite is not the most likely cause of this problem

QUESTION NO: 188

A user complains of slow access to a server. What utility can you use to find the bottleneck?

- A. PING
- B. TELNET
- C. TRACERT

D. NBTSTAT

Answer: C

Explanation: Tracert can be used to trace a route between two devices. The trace includes information connectivity and speed. It would be possible to locate the bottleneck.

Incorrect Answers

A: Ping only tests connectivity.

B: Telnet is used for remote login.

D: Nbtstat displays information about the NetBIOS over TCP/IP connections. It would be useful to identify

QUESTION NO: 189

You have sent an email to them@theirmail.au. Your email address is me@mymail.com. In what order are the domain names resolved?

- A. com, au, theirmail.au, mymail.com,
- B. mymail.com,.com, au, theirmail.au
- C. com, mymail.com.au, theirmail.au
- D. theirmail.au mymail.com, com, au,

Answer: B

QUESTION NO: 190

What is the directory service called in Netware 4.xx?

- A. SPX
- B. IPX
- C. DFS
- D. NDS

Answer: D

Explanation: NetWare 4.0, released in 1993, was the first version to include NDS, which at that time stood for NetWare Directory Services, but is now Novell Directory Services.

Incorrect Answers

A, B: IPX/SPX-is a network protocol of Novell, not a directory service.

C: Distributed File System (DFS) is a file service, not a directory service. DFS enables shared drives on servers all over the network to appear to clients as a single combined share.

QUESTION NO: 191

Which device operates in the Network layer and the Data Link layer?

- A. Router
- B. Brouter
- C. NIC
- D. Bridge

Answer: B

Explanation:

Incorrect Answers

A: A router operates only at Network layer.

B: A brouter combines the function of a bridge and a router, A brouter operates both at the Network and the Data Link layer.

C: A NIC operates at the Data Link Layer.

D: A bridge operates only at the Data Link Layer.

QUESTION NO: 192

What is used to resolve a host name on a UNIX server?

- A. IPX
- B. HOSTS
- C. LMHOSTS
- D. ARP

Answer: B

Explanation: On a UNIX either a HOSTS file or a DNS server is used for name resolution. These maps host names to IP addresses.

Incorrect Answers

A: UNIX computers do not use IPX protocol.

C: LMHOSTS file contains NetBIOS to IP address mapping.

D: ARP provides IP to MAC address resolution.

QUESTION NO: 193

What OSI model transport layer connection type is used by UDP?

- A. Connection-oriented
- B. Connectionless
- C. token transport
- D. packet transport

Answer: B

Explanation: UDP is a connectionless protocol.

Incorrect Answers

A: TCP is connection-oriented.

C, D: Token and packet transport does not apply to UDP.

QUESTION NO: 194

You are configuring a workstation to use dial-up networking by installing an ISA internal modem operating on COM2 using standard settings. You are unable to initialize the modem. What is the most likely cause of this problem?

- A. Conflict with IRQ3.
- B. Conflict with IRQ4.
- C. Incorrect IP addressing.
- D. Incorrect IPX addressing.

Answer: A

Explanation: This is a likely hardware conflict problem. Two devices are using the same IRQ. QUESTION NO: COM2 use IRQ3.

Incorrect Answers

B: COM2 does not use IRQ4.

C, D: This is not a network configuration problem. You don't have to configure network protocols in order to initialize a modem.

QUESTION NO: 195

You are servicing a workstation that will not connect to the network. You notice that the link light on the NIC does not illuminate. You replace the workstation

patch cable and are still unable to log on to the network. You move the network patch cable to a different port at the wiring closet hub and the link light is now illuminated. What should you do next?

- A. Replace the NIC.
- B. Replace the NIC driver.
- C. Attempt to connect and transfer a file.
- D. Document the problem and solution.

Answer: C

Explanation: By moving the patch cable to another port at the wiring closet hub we seem to have fixed the problem: the NIC light is on. We should go on an attempt to use the connection.

Incorrect Answers

- A:** The NIC light is on so the NIC seems to be functioning.
- B:** We have not tried the NIC driver yet. There is no reason to think that is could cause any problem.
- D:** It would probably a good idea to document the fact that a port on the closet hub is malfunctioning. However, we should first try to use the connection.

QUESTION NO: 196

Which TCP/IP utility is used to determine whether a remote computer is reachable by sending it multiple ICMP echo requests?

- A. ARP
- B. PING
- C. Telnet
- D. Ipconfig
- E. Winipcfg

Answer: B

Explanation: The PING utility is to test connectivity. PING uses ICMP echo requests.

Incorrect Answers

- A:** ARP is used to resolve IP address to MAC addresses.
- C:** Telnet is used to login on remote computers.
- D:** IPConfig is used to configure IP settings on Windows NT2000/XP/.NET computers.
- E:** Winipcfg is used to configure IP settings on Windows 9x computers.

QUESTION NO: 197

Which two are used with digital signatures? (Choose two.)

- A. EncryptAPI
- B. certificate authority
- C. asymmetric algorithm
- D. complete data encryption

Answer: B, C

Explanation:

B: Digital signatures use an asymmetric algorithm. Some data is encrypted and some data is unencrypted.

C: A certificate authority issues certificates ensuring that the digital signatures are valid.

Incorrect Answers

A: EncryptAPI enables software developer to encrypt data in their applications. It does not apply to digital signatures.

D: Digital signatures does not provide complete encryption. Public keys are used.

QUESTION NO: 198

What should you use to inhibit the spread of viruses on your peer-to-peer network?

- A. firewall
- B. scandisk utility
- C. tape backup drive
- D. workstation protection program

Answer: D

Explanation: A workstation protection program could help stopping the spread of viruses. It should include an antivirus program that is current.

Incorrect Answers

A: A firewall stops traffic at port and protocol level. It is not used to stop traffic.

B: The scandisk utility is used to diagnose and fix hard disk problems.

C: A tape backup drive does not help in stopping the spread of viruses.

QUESTION NO: 199

Which two protocols can be routed? (Choose two.)

- A. IP
- B. IPX
- C. TCP
- D. NetBEUI
- E. NetBIOS

Answer: A, B

Explanation: IP and IPX are network layered protocols and both can be routed.

Incorrect Answers

C: TCP is a transport layer protocol. Network layer protocol are routed.

D: NetBEUI is broadcast only and it is not routable.

E: NetBIOS is not a protocol in itself.

QUESTION NO: 200

At which layer of the OSI model does the UDP reside?

- A. session
- B. network
- C. physical
- D. transport
- E. data-link
- F. application
- G. presentation

Answer: D

Explanation: UDP is connectionless transport layer protocol.

QUESTION NO: 201

Which two Internet protocols can work with application layer proxies? (Choose two.)

- A. FTP
- B. HTTP
- C. PPTP
- D. SMTP
- E. POP3
- F. Telnet

Answer: A, B

Explanation: Application layer proxies are applications running on the firewall, which users on one or both sides of the firewall can communicate with.

The most common example of an application layer proxy is an HTTP proxy. There also exist FTP proxies which also work at the application layer.

QUESTION NO: 202

You have installed a PCI 100BaseT network card into a Windows 95 workstation. The workstation cannot see any of the other computers on the network. All other workstations on the network are operating normally. You have examined the configuration settings of the network card. The patch cable has passed all tests, but the workstation still cannot see the network. What additional troubleshooting method would now be useful?

- A. Internal MAU loopback
- B. External MAU loopback
- C. Internal hardware loopback
- D. External hardware loopback

Answer: D

Explanation: By using an external hardware loopback we could test the NIC itself.

Incorrect Answers

A, B: MAUs are hubs used in token ring networks.

C: There is no such thing as an Internal hardware loopback.

QUESTION NO: 203

Which of the following are connectionless? (Select two)

- A. TFTP
- B. NetBEUI
- C. FTP
- D. HTTP

Answer: A, B

Explanation:

A: TFTP, Trivial FTP is connectionless.

B: NetBEUI uses broadcasts and is therefore connectionless.

Note: Using connectionless protocols packets are sent over the network without regard to whether they actually arrive at their destinations. There are no acknowledgments or guarantees.

Incorrect Answers

C: FTP is a connection-oriented application layer TCP/IP tool.

D: HTTP runs of TCP and TCP is connection-oriented. So HTTP is not connectionless.

QUESTION NO: 204

Octet Inc. has 410 users connected with Cat3 cabling in a star configuration using 10BaseT cabling.

Required Results:

- **Add 60 more users to the existing network**
- **Increase the speed of the network from 10Mbps to 100Mbps**

Optional Results:

- **Increase the speed of operations on the application server.**
- **Allow the clients to connect to the server quicker.**

Proposed Solution:

- **Put 100Mbps cards in the 100 new machines and add them to the network.**
- **Replace the existing NICs in the clients and the server with 100Mbps cards.**
- **Add more RAM to the server.**
- **Change the protocol binding order on the clients to put the most used protocol at the top.**

- A. The solution meets the required results and both optional results.
- B. The solution meets the required results and one optional result.
- C. The solution meets the required results and no optional results.
- D. The solution does not meet the required results.

Answer: D

Explanation: The speed of the network will not be increased. Cat3 cabling only support 10Mbps. 100Mbps requires Cat5 cabling. The required result is not met.

QUESTION NO: 205

What multiport device connects network segments and allows full bandwidth on all ports?

- A. Repeater
- B. Hub
- C. Switch
- D. MAU

Answer: C

Explanation: A switch allows full bandwidth on all ports.

Incorrect Answers

A: A repeater only repeats the signals.

B: A hub splits the available bandwidth between the ports on the hub.

D: A MAU is a hub used in token ring network.

QUESTION NO: 206

You set up a dialup network using the SLIP protocol. You cannot transfer files with FTP and have problems connecting to the Internet. What is a possible alternative?

- A. Install a proxy with TCP/IP
- B. Try pinging the FTP server
- C. Try pinging the local host
- D. Change to PPP

Answer: D

Explanation: SLIP is an old remote access protocol. SLIP should not be used unless a required by older equipment or software. A possible cause of the problem in this scenario could be a Remote Access Server which does not support SLIP.

PPP is more modern remote access protocol and is the preferred solution.

Incorrect Answers

A: A proxy would not be necessary in this scenario.

B: We have a connection problem. Pinging the FTP server is not of much use.

C: Pinging the local host can be used to test if TCP/IP has been installed correctly.

QUESTION NO: 207

E-mail and FTP services work at which OSI layer?

- A. Presentation
- B. Session
- C. Application

Answer: C

Explanation: E-mail and FTP services operate at the application layer of the OSI layer. Other application layer protocols/services are Telnet, SMTP, SNMP, DNS, and HTTP.

QUESTION NO: 208

Which of these is the most secure choice for a user password?

- A. Uone
- B. UserO
- C. Password
- D. User\$one

Answer: D

Explanation: It is best to mix alphanumerical and non alphanumerical letters. The length of the password is also important.

Incorrect Answers

A: Too short and only alphanumerical letters.

B: Too short.

C: Only alphanumerical letters.

QUESTION NO: 209

With regard to NT and NetWare 5 connectivity, what protocols can be used to connect the two? (Choose two)

- A. IP
- B. IPX
- C. NetBEUI
- D. DLC

Answer: A, B

Explanation:

- A:** IP is supported by all modern network operating systems including NT and NetWare.
- B:** Novell made IPX. Windows support IPX/SPX with the NWLink protocol.

Incorrect Answers

- C:** NetBEUI is not supported by NetWare 5.
- D:** DLC is mainly used in IBM mainframes and HP legacy printers.

QUESTION NO: 210

Which TCP/IP protocol does a UNIX server use to send e-mail to another UNIX server?

- A. POP3
- B. SNMP
- C. SMTP
- D. FTP

Answer: C

Explanation: Simple Mail Transport Protocol (SMTP) is the protocol that e-mail servers use to transmit messages to each other across the Internet.

Incorrect Answers

- A:** Post Office Protocol (POP3) is one of the protocols that e-mail clients use to retrieve their messages from an e-mail server.
- B:** Simple Network Management Protocol (SNMP) is a network management protocol.
- D:** FTP is used for file transfers.

QUESTION NO: 211

Which routing method requires the most administrative overhead?

- A. Bridging
- B. Static
- C. Dynamic
- D. Relay

Answer: B

Explanation: Static routing requires manual configuration of the routing tables. The administrator must add and delete each single route. This can easily get out of hand if the routing tables are large.

Incorrect Answers

- A:** Bridging is not a routing method. Bridges works at the Data Link layer, layer 2, of the OSI model. Routing takes place at the Network Layer, layer 3.
- C:** Dynamic routing is automatic. Routers exchange routes between themselves. It requires little or no administrative effort.
- D:** Relaying is not a routing method.

QUESTION NO: 212

What can convert media types?

- A. Transceiver
- B. Hub
- C. Gateway
- D. Switching Hub

Answer: B

QUESTION NO: 213

What network topology is most fault tolerant and has the most redundancy?

- A. BUS
- B. RING
- C. STAR
- D. MESH

Answer: D

Explanation: In a meshed topology every device is directly connected to all other devices.

Incorrect Answers

- A:** A bus is a single network segment. If this segment breaks the whole network stops to function.
- B:** If a single link in a ring network fails, the whole ring fails.
- C:** The central hub in a star topology is a single point of failure.

QUESTION NO: 214

What does a patch cable connect to in a token ring network?

- A. A workstation to a router
- B. Two workstations
- C. Two MAU's together

Answer: C

Explanation: MAUs are hubs in a token ring network. Two MAUs are interconnected with a patch cable.

Incorrect Answers

A: In a token ring environment a workstation would not be directly connected to a router.

B: Two workstations are connected with a standard STP/UTP cable.

QUESTION NO: 215

A UNIX server on the Internet is configured to host a web site and an FTP site. How will the server know what service incoming packets are intended for?

- A. Protocol ID
- B. Port number
- C. Host header
- D. TCP address

Answer: B

Explanation: Both HTTP and FTP use the TCP protocol. HTTP use TCP port 80 and FTP use TCP port 21. The server will use the port number to distinguish between the traffic.

Incorrect Answers

A: Both HTTP and FTP use the TCP protocol.

C: Host headers are used by web servers to distinguish between virtual sites. It is not used to distinguish between protocols.

D: TCP does not have any address. IP is the address part of the TCP/IP protocol.

QUESTION NO: 216

What must you have on your workstation to implement a full suite of network card diagnostics?

- A. Router
- B. Hardware loop
- C. Protocol analyzer
- D. Additional NIC

Answer: B

Explanation: A hardware loop adapter is used to enable the full troubleshooting of a network adapter.

Incorrect Answers

- A:** A router is used to route data throughout a network.
- C:** A protocol analyzer is used to analyze traffic on a network.
- D:** Another network adapter is not required.

QUESTION NO: 217

A user complains of slowness accessing a web page on the intranet. What utility can you use to find the bottleneck?

- A. TELNET
- B. PING
- C. TRACERT
- D. NBTSTAT

Answer: C

Explanation: Tracert can be used to trace a route between two devices. The trace includes information connectivity and speed. It would be possible to locate the bottleneck.

Incorrect Answers

- A:** Telnet is used for remote login.
- B:** Ping only tests connectivity.
- D:** Nbtstat displays information about the NetBIOS over TCP/IP connections. It would be useful to identify

QUESTION NO: 218

What layer of the OSI model places the signal on the cable?

- A. Physical

- B. Network
- C. Data Link
- D. Transport

Answer: A

Explanation: The physical layer is responsible to move bits between devices and specifies voltage, wire speed and pin-out cables.

Incorrect Answers

- B:** The network layer provides logical addressing which device us for path destinations.
C: The data link layer combines bits into bytes and bytes into frames, provided access to media using MAC addresses, and error detection.
D: The transport layer provides for both reliable and unreliable delivery and error correction before retransmit.

QUESTION NO: 219

What are the most common IEEE standards? (Choose three)

- A. 802.2
- B. 802.3
- C. 802.4
- D. 802.5

Answer: A, B, D

Explanation:

- A:** 802.2 defines Logical Link Control. It is used both by 802.3 and 802.5.
B: 802.3 is the Ethernet standard. It is the most common IEEE standard.
D: 802.5 defines token ring.

Incorrect Answers

- C:** 802.4 describes the token bus standard, not a popular implementation.

QUESTION NO: 220

Routers operate at the _____?

- A. Transport Layer
- B. Network Layer
- C. Data Link Layer
- D. Application Layer

Answer: B

Explanation: Routers work at layer 3 of the OSI model, the Network layer. Routers route traffic.

QUESTION NO: 221

Which of the following security scenarios is the most restrictive?

- A. Share level access
- B. User level access
- C. None of these

Answer: B

Explanation: User level security is more granular than share level security. Furthermore, as user level security implements centralized security which enables a more restrictive network wide security approach.

QUESTION NO: 222

You manage a Windows NT network with five clients. Which two commands can you use to view the routing table of your NT server? (Choose two.)

- A. arp
- B. ping
- C. route
- D. tracert
- E. netstat
- F. nbstat

Answer: C, E

Explanation:

C: The route command displays the routing table.

E: netstat -r displays the routing table, plus the current active connections.

Incorrect Answers

A: arp would show IP address to MAC address mappings.

B: Ping is used to test network connectivity.

D: Tracert is used to test routes between devices.

F: nbstat show NetBIOS mappings.

QUESTION NO: 223

A user complains that he can't log onto a server. What troubleshooting steps should you take to resolve the problem? (Choose three)

- A. Ask a user on the same segment to try and connect.
- B. Ask a user on a remote segment to try and connect.
- C. Replace the NIC.
- D. Try and ping the server.

Answer: A, B, D

Explanation:

A, B: We could ask other users, either on the same segment or on remote segment, to try and connect. This could help us to localize the problem.

D: We should see if we have connectivity between the client computer and server.

Incorrect Answers

C: If we localize the problem to the computer and exclude configuration problem we could consider replacing the NIC. However, we should try to find simpler solution first.

QUESTION NO: 224

Which backup method can you combine with differential backup?

- A. Full backup
- B. Incremental backup
- C. Decremental backup
- D. Comparative backup

Answer: A

Explanation: First we must perform a full backup, and then we are able to perform differential backups.

Incorrect Answers

B: Differenatal backups require that a full backup has been performed.

C: There is no such thing as a decremental backup.

D: There is no such thing as a comparative backup.

QUESTION NO: 225

You need to connect three network segments where one segment is using TCP/IP and NetBEUI, and the other two segments use NetBEUI alone. Which hardware device should you use?

- A. hub
- B. router
- C. gateway
- D. brouter

Answer: D

Explanation: A brouter could bridge NetBEUI traffic and route TCP/IP traffic. This would be the most effective solution.

Incorrect Answers

- A:** A hub would connect the two network segments, however network performance would decrease.
- B:** NetBEUI is not routable. NetBEUI traffic would not be able to pass the router.
- C:** A gateway is not necessary. No translation between protocols is required.

QUESTION NO: 226

You have three hard disks with capacities of 200 MB, 400 MB, and 500 MB. Which storage technology would allow the largest contiguous space for data?

- A. volume
- B. striping
- C. partition
- D. mirroring

Answer: B

Explanation: Disk striping, RAID 0, would allow 1100MB of storage space. All available space could be used.

Incorrect Answers

- A:** A volume could ordinarily not span several disks.
- C:** A partition cannot span several disk. It must be contained on a single physical disk.
- D:** Mirroring could only use two hard disks. Furthermore, mirroring provided a disk utilization of only 50%

QUESTION NO: 227

Which application supports NetBIOS over TCP/IP?

- A. IP
- B. DNS
- C. NFS
- D. WINS
- E. NTFS

Answer: D

Explanation: WINS provides NetBIOS to IP resolution.

Incorrect Answers

A: IP is a protocol not an application.

B: DNS provides host name resolution, not NetBIOS resolution.

C: NFS is Novell's file system.

E: NTFS is the file system of Windows 2000/XP/.NET and later.

QUESTION NO: 228

Which type of hub is limited to supporting distances of less than 30 meters (100 feet)?

- A. active
- B. hybrid
- C. passive
- D. switching

Answer: C

Explanation: Maximum distance between a Passive Hub and an Active Hub or a workstation is 30 meters.

Incorrect Answers

A: Active hubs support 100m in a 100BaseT network for example.

B: A hybrid hub would be a hybrid between a switch and hub. Switching hubs do support 100 meters of distance in a 100BaseT network for example.

D: Short for port-switching hub, a special type of hub that forwards packets to the appropriate port based on the packet's address. Switching hubs do support 100 meters of distance in a 100BaseT network for example.

QUESTION NO: 229

You load print services on a server and the service does not appear to have started and is causing problems. Where would you look to investigate further?

- A. Registry
- B. Network settings
- C. Log file
- D. DNS

Answer: C

Explanation: The log files contain alerts and errors regarding network services. Troubleshooting information regarding the failure of the print service should be found here.

Incorrect Answers

- A:** It would be very awkward to try the cause of the problem by looking into the registry.
- B:** The network settings could be a problem. However, it is better to start with checking the log files for possible errors.
- D:** The print service should ordinarily not depend on the DNS service. Furthermore it is better to start with checking the log files for possible errors.

QUESTION NO: 230

You want to connect your network to the Internet but are concerned that users will download viruses. What can you do to protect the systems?

- A. Install virus protection on each workstation
- B. Install a network virus protection suite
- C. Install a firewall
- D. Install a proxy

Answer: B

Explanation: A network protection suite provides network wide anti-virus protection and keeps the installation, administration and monitoring effort to a minimum. This is achieved by the centralized virus protection suite.

Incorrect Answers

- A:** It could be a daunting administrative task to install virus protection on each workstation. Furthermore, it would be less easy to administer and monitor such a solution.
- C:** A firewall provides protection at port, IP address, or protocol level. A firewall cannot stop viruses however.

D: A proxy provides better network performance, but is not capable of stopping viruses.

QUESTION NO: 231

Which IP Address is a Class B address?

- A. 127.26.36.85
- B. 211.39.87.100
- C. 89.156.253.10
- D. 191.123.59.5
- E. 199.236.35.12

Answer: D

Explanation: Class B address are in the 129.0.0.0 through 191.255.255.255 range

Incorrect Answers

B, E: These are class C addresses since the first octet is in the 192 through 223 range.

A, C: These are a class A address since the first octet is in the 1 through 127 range.

QUESTION NO: 232

You have an email server using SMTP. You want to check that it is accepting requests on port 25. What can you use?

- A. Ping the email server
- B. Telnet
- C. NETSTAT
- D. NBTSTAT

Answer: B

Explanation: We can use telnet to test if a particular port is open.

Incorrect Answers

A: Ping can only be used to test connectivity, not to test any ports.

C: Netstat is a command-line program that displays information about a TCP/IP computer's current network connections .

D: Nbtstat.exe is a Windows command-line program that displays information about the NetBIOS over TCP/IP connections.

QUESTION NO: 233

Which of the following uses TDM (Time Division Multiplexing)?

- A. Broadband
- B. Baseband
- C. Wideband

Answer: B

Explanation: Baseband technologies can use time division multiplexing (TDM) to transmit data signals more efficiently. In TDM, signals are allowed to use the network medium for a certain block of time. When this block of time has expired, then the signal must give up the network medium to another signal.

Incorrect Answers

- A:** Broadband use frequency division multiplexing (FDM) to transmit several signals concurrently.
- C:** Wideband does not use FDM.

QUESTION NO: 234

To configure TCP/IP to use WINS what settings on your PC must be set properly? (Choose two)

- A. Primary WINS Server
- B. Scope ID
- C. Enable WINS Resolution
- D. Secondary WINS Server

Answer: A, C

Explanation:

- A:** We must define at least a primary WINS Server.
- C:** We must also enable WINS Resolution.

Incorrect Answers

- B:** ScopeID is not used in WINS. It is a DNS concept.
- D:** A secondary WINS Server would provide fault tolerance, but is not strictly necessary.

QUESTION NO: 235

Which router on your segment is sent all the packets destined for the remote network?

- A. Bridge
- B. Switch
- C. Default Gateway

Answer: C

Explanation: All non-local traffic must pass the router.

Incorrect Answers

A: A bridge only connect two network segments.

C: A switch is just a more efficient hub. A switch transmits data-

QUESTION NO: 236

You have many users who access the Internet. You are worried about security. What can you use so that only one IP is visible when users connect to the Internet?

- A. FTP
- B. HTTP
- C. Proxy Server
- D. NBT Server

Answer: C

Explanation: A proxy server can implement network address translation (NAT). Private addresses could be used on the network and just a one IP public need to be used.

QUESTION NO: 237

You are installing a NetWare based server system. You have 10 Windows 95 workstations and 4 Unix workstations. What do you install on the Windows 95 systems that will allow you to connect to the NetWare server? (Choose two)

- A. Novell Client for Microsoft Windows systems
- B. Novell Client for Windows
- C. Microsoft Client for Novell NetWare
- D. Novell install suite

Answer: B, C

Explanation: We can either use the Novell Client for Windows, or the Microsoft Client for Novell NetWare.

Incorrect Answers

A, D: There are no such things.

QUESTION NO: 238

You want to check your local TCP/IP connection. How? (Choose two)

- A. Ping host
- B. Ping localhost
- C. Ping 127.0.0.1
- D. Ping 127.0.0.0
- E. Ping local

Answer: B, C

Explanation: We must ping the local host address. We must either use localhost or the IP address of 127.0.0.1.

QUESTION NO: 239

What client software is required on Windows 95/98 to browse an NDS tree? (Select two)

- A. Novell Client for Windows
- B. Microsoft Client for Novell NetWare
- C. Novell Client for Microsoft Windows systems
- D. Novell install suite

Answer: A, B

Explanation: We can either use the Novell Client for Windows, or the Microsoft Client for Novell NetWare. This would allow the Windows client to connect to the Novell Server and browse the NDS (Novell Directory Services) tree.

Incorrect Answers

C, D: There are no such things.

QUESTION NO: 240

What IEEE specification does CSMA/CD map to?

- A. 802.4
- B. 802.2
- C. 802.3
- D. 802.6

Answer: C

Explanation: CSMA/CD is better known as Ethernet. Ethernet is defined in the IEEE 802.3 standard.

Incorrect Answers

- A:** 802.4 describes the token bus standard, not a popular implementation.
- B:** 802.2 defines Logical Link Control. It is used both by 802.3 and 802.5.
- D:** 802.6 defines a MAN (Metropolitan Area Network) standard.

QUESTION NO: 241

Which of the following is true of user level security?

- A. It has less permissions than share level security
- B. Permissions are assigned to resources
- C. It is centrally administrated

Answer: C

Explanation: User level security is centrally configured on a server.

Incorrect Answers

- A:** Share level security has less permissions compared to user level permissions.
- B:** Permissions are assigned to users and groups.

QUESTION NO: 242

What utility do you use to check your IP configuration on a Windows 95/98 workstation?

- A. NETSTAT
- B. PING
- C. WINIPCFG
- D. IPCONFIG

Answer: C

Explanation: The graphical utility are used on Windows 9x to manage IP configuration.

Incorrect Answers

- A:** Netstat displays information about the traffic generated by the various TCP/IP protocols.
- B:** PING is only used to test network connectivity.
- D:** Windows NT/2000/XP/.NET machines have the IPCONFIG utility to manage IP configuration. IPCONFIG cannot be run on Windows 9x machines.

QUESTION NO: 243

What can be used to transfer a file from a UNIX server to yours?

- A. Telnet
- B. Netstat
- C. FTP
- D. NBTSTAT

Answer: C

Explanation: FTP (File Transfer Protocol) can be used to transfer files between different computer systems. For example between UNIX and Windows computers.

Incorrect Answers

- A:** Telnet is used for remote login.
- B:** Netstat displays information about the traffic generated by the various TCP/IP protocols.
- D:** Nbtstat.exe displays information on the NetBIOS over TCP/IP connections.

QUESTION NO: 244

What network utility is the following printout from?

Internet Address	Physical Address	Type
10.36.14.92	00-60-08-75-43-d7	static
197.45.367.42	20-53-32-45-00-00	dynamic
123.34.34.34	20-53-54-67-00-00	dynamic

- A. NETSTAT
- B. NBTSTAT

- C. ARP
- D. Ipconfig

Answer: C

Explanation: The exhibit displays entries that contains both IP address and MAC address (Physical Address). These entries are contained in the ARP cache and could be displayed with the “arp -a” command.

Incorrect Answers

- A:** Netstat displays information about the traffic generated by the various TCP/IP protocols.
- B:** Nbtstat.exe displays information on the NetBIOS over TCP/IP connections.
- D:** Ipconfig is used to display and configure IP.

QUESTION NO: 245

Tom is trying to back up data to a DLT tape drive. He receives an error message that the tape drive is not available, this occurs even if Tom tries a new cartridge. What can you do to resolve the problem?

- A. Replace the cable
- B. Replace the tape drive
- C. Put a tape cleaner into the drive
- D. Replace the adapter card

Answer: C

QUESTION NO: 246

What layer of the OSI model ensures packets are delivered error free, in sequence, and without losses?

- A. Network
- B. Transport
- C. Physical
- D. Data Link

Answer: B

Explanation: The transport layer provides for both reliable and unreliable delivery and error correction before retransmit. The transport layer ensures that packet are delivered error free, in sequence, and without losses.

Incorrect Answers

A: The network layer provides logical addressing which device us for path destinations.

C: The physical layer is responsible to move bits between devices and specifies voltage, wire

D: The data link layer combines bits into bytes and bytes into frames, provided access to media using MAC addresses, and error detection.speed and pin-out cables.

QUESTION NO: 247

You have 300 users that all access the Internet through a T1 link. Typically, the majority of the users access the same Web sites. Which Internet technology could you implement to improve the performance of their Web surfing?

- A. IP Proxy
- B. HTTP Proxy
- C. WINS Proxy
- D. FTP Proxy

Answer: B

Explanation: Hypertext Transfer Protocol (HTTP) provides web access. Proxy servers can help improving performance by local caching. HTTP proxy caches web pages that are accessed.

Incorrect Answers

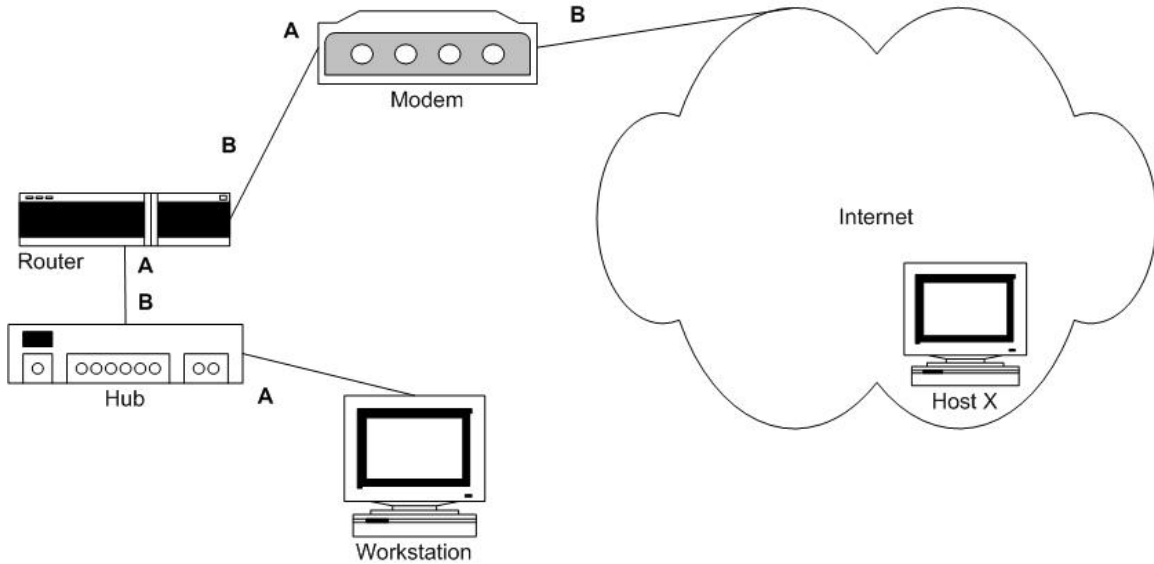
A: IP Proxy is used for IP tunneling.

C: WINS is used for name resolution

D: FTP is used for file transfers.

QUESTION NO: 248

Exhibit:



In the configuration shown in the exhibit, the link lights on the interface A of the router and interface B of the hub are not lit. All other link lights are lit. Which component is LEAST likely to have failed?

- A. hub
- B. modem
- C. router
- D. patch card

Answer: B

Explanation: The problem is between the router and hub. It could be a problem with the router, perhaps the port, or it could be a failure on the hub, or finally it could be patch cable between the hub and the router that is bad. The modem is not related to this problem.

QUESTION NO: 249

Computers are rebooting spontaneously. The room is cold and there are space heaters in use. What is the problem?

- A. Bad NICs
- B. Bad UPS
- C. Bad wiring
- D. Voltage drop at the outlet

Answer: D

Explanation: Uneven voltage, spikes, sags, or brownouts, could cause computers to reboot spontaneously. An UPS could solve the problem at hand.

Incorrect Answers

A: Bad NICs is not the most likely cause of this problem.

B: This could be a cause of the problem; however no UPS is mentioned in the scenario.

C: Bad wiring could be the cause of the problem, but it is not the most likely cause.

QUESTION NO: 250

Which transport layer protocol can be validated by successfully using FTP?

- A. IP
- B. TCP
- C. UDP
- D. ICMP

Answer: B

Explanation: FTP uses TCP. TCP connection-oriented is a transport layer protocol.

Incorrect Answers

A: IP is a network protocol.

C: UDP is a connection-less transport layer protocol. TFTP, not FTP, uses UDP.

D: ICMP is an IP management protocol.

QUESTION NO: 251

A firewall protects an internal private network from the Internet by filtering TCP/IP traffic based upon which three parts of a TCP/IP packet? (Choose three.)

- A. port number
- B. DNS lookup order
- C. source IP address
- D. IPX network number
- E. destination IP address
- F. WINS server NetBIOS name

Answer: A, C, E

Explanation: Firewall filtering can be done using

- port numbers (A)

- source addresses (C)
- destination address (E)
- protocol (not listed here)

Incorrect Answers

DNS lookup order, IPX network number and WINS server NetBIOS name are irrelevant for TCP/IP filtering on firewalls.

QUESTION NO: 252

Which two terms are synonymous? (Choose two.)

- A. ROM
- B. RAM
- C. firmware
- D. freeware
- E. hard drive space

Answer: A, C

Explanation: Firmware consists of programs installed semi-permanently into memory, using various types of programmable ROM chips. So we can say that the concepts of Firmware and ROM are connected, though they are not strictly synonyms.

Incorrect Answers

The other terms are not directly connected to each other.

QUESTION NO: 253

Which header field is used to route datagrams?

- A. port address
- B. MAC address
- C. source address
- D. destination address

Answer: D

Explanation: A router use the destination address to decide where to send the data next when it routes data.

Incorrect Answers

A: The port address is used when filters are applied, not to route data.

- B:** Routers work at the network layer of the OSI model. MAC address belongs to the Data Link layer. Switches and bridges use MAC addresses to forward data in the correct direction.
- C:** The source address is not used when routing data.

QUESTION NO: 254

What is the physical layout of components on a network called?

- A. backbone
- B. protocol
- C. segment
- D. topology

Answer: D

Explanation: The topology is the pattern used to connect the computers together.

Incorrect Answers

- A:** The backbone is the highspeed connections that connect different LANs.
- B:** Networked computers use protocols to communicate.
- C:** A segment is only one part of the network.

QUESTION NO: 255

Which TCP/IP protocol will your e-mail client use to download mail from the server?

- A. FTP
- B. POP3
- C. SMTP
- D. SNMP

Answer: B

Explanation: POP3 is the most recent version of a standard protocol for receiving e-mail. POP3 is a client/server protocol in which e-mail is received and held for users by their e-mail server.

Note: POP stands for Post Office Protocol.

Incorrect Answers

- A:** FTP is used to transfer files.

- C:** SMTP is used for sending e-mail and for communication between e-mail servers.
D: SNMP is used to monitor network traffic.

QUESTION NO: 256

You are the administrator of a network with 250 nodes. You want to implement video conferencing, but your network is performing poorly. Through network work analysis software, you determine that the hub is the bottleneck. Which device should you install in place of the hub to alleviate the bottleneck?

- A. A MAU
- B. A switch
- C. A repeater
- D. A transceiver

Answer: B

Explanation: The capacity on the hub are shared by all ports, but a switch increases performance by giving each port on the switch the full capacity. For example, on a 100Mbps switch each port has 100Mbps capacity at all times.

Incorrect Answers

- A:** A MAU is a specialized hub used in token ring networks.
C: A repeater only regenerates the signal. It does not affect the speed.
D: A transceiver is used to connect the network adapter with the network media. It is not a bottleneck, it is just a connector.

QUESTION NO: 257

What is one disadvantage of using a bus topology on a 100 user network?

- A. Prone to cable faults
- B. Requires expensive cabling
- C. You have to terminate each node

Answer: A

Explanation: A single bus segment is a single point of failure. If the cable is broken in just a single point, the whole network would go down. It would be better to separate the network into several interconnected network segments.

Incorrect Answers

- B:** Bus topology requires less cabling than star topology for example.

C: A bus must only terminated at both ends, not at each node.

QUESTION NO: 258

The unique number stamped onto every Ethernet card ever made is known as a

- A. Hosts Address
- B. Serial Number
- C. IP Address
- D. MAC Address

Answer: D

Explanation: Every Network Adapter has a unique Media Access Control (MAC) address.

Incorrect Answers

- A:** A host address is a logical address, not a physical address, typically an IP address.
- B:** Network adapters have MAC addresses not serial numbers.
- C:** A network adapter could be configured with different IP addresses.

QUESTION NO: 259

Servers are rebooting. An investigation indicates humidity of 40% and a temperature of 95 degrees Fahrenheit. All UPS units are working. What should you do?

- A. Lower the temperature
- B. Increase temperature
- C. Do nothing

Answer: A

Explanation: A too high temperature could cause the server to reboot. We should therefore try to lower the temperature. We could, for example, add extra fans or replace malfunctioning fans.

Incorrect Answers

- B:** An increased temperature would not improve the situation.
- C:** We should take some action. Automatic unscheduled reboots of server is unacceptable.

QUESTION NO: 260

You use NetBEUI exclusively on your network. Traffic is heavy. What can you do to improve performance?

- A. Segment the network with a bridge
- B. Use a gateway
- C. Use a repeater
- D. Use a router

Answer: A

Explanation: We could segment the network with a bridge. Bridges work at the data link layer of the OSI model and are able to contain traffic within a segment.

Note: Broadcasts would still reach the whole network. It might therefore be better to use a router and a routable network protocol. However, that is not an option in this scenario.

Incorrect Answers

B: A gateway is used to transfer between different network protocol. But in this scenario only a single network protocol is used so there would be no use of a gateway.

C: A repeater only regenerates the signal and increases the maximum distance on the network.

D: NetBEUI is not a routable protocol.

QUESTION NO: 261

You must implement a remote access strategy for your corporate network.

Required objectives:

- Full WAN connectivity.

Optional objectives:

- Secure connection.
- Access via Internet Service Provider (ISP).

Proposed solution:

- Use PPTP.

Which objectives are met by the proposed solution?

- A. The required and both of the optional results
- B. The required and one optional result
- C. The required and no optional results
- D. None of the objectives are met

Answer: A

Explanation: Point to Point Tunneling (PPTP) protocol can be used to connect different LANs to achieve WAN connectivity (Required objective met).

PPTP use secure tunneling through the WAN media (1st optional objective met).

ISPs provide internet access. PPTP connectivity can be implemented through Internet (2nd optional objective met).

QUESTION NO: 262

Which of these protocols are routable? (Choose two)

- A. NetBIOS
- B. NetBEUI
- C. IP
- D. TCP
- E. IPX

Answer: C, E

Explanation: Routing takes place at the network layer of the OSI model. IP and IPX are routable network layer protocol.

Incorrect Answers

A: NetBIOS is strictly speaking not a protocol.

B: NetBEUI only use broadcasts and are not routable.

D: TCP is a transport layer protocol.

QUESTION NO: 263

What is the best strategy for implementing a continuous power supply?

- A. UPS
- B. SPS
- C. CPU

Answer: A

Explanation: Unlimited Power Supply (UPS) units is a good strategy to protect against disruptions of the power source. An UPS could provide supply for some hours, if the main power supply is down.

Incorrect Answers

B: SPS does not apply here.

C: The central processor (CPU) only consumer power. It cannot provide power.

QUESTION NO: 264

On an NT4 system what command do you use to determine what the workstation's IP address is?

- A. IP
- B. WINIPCONFIG
- C. IPCONFIG
- D. IPSTAT

Answer: C

Explanation: IPCONFIG is a command-line utility that is used to display and configure IP on Windows NT/2000/XP/.NET computers.

Incorrect Answers

A: IP is a protocol, not a utility.

B: Winipcfg only works on Windows 9x computers.

D: IPSTAT is not a utility for Windows system.

QUESTION NO: 265

Which hub type boosts signal strength?

- A. Passive
- B. Hybrid
- C. Token
- D. Active

Answer: D

Explanation: Active hubs regenerate the signals.

Incorrect Answers

A: Passive hubs just distributes the signals.

B: The notion of hybrid hubs would apply the USB hubs that are both bus powered and self-powered. However, a hybrid hub could be either passive or active.

C: MAU are hubs that are used in token rings. MAUs are not called token hubs.

QUESTION NO: 266

You cannot connect to a network server. The light in the back of the NIC is not flashing. You change the patch cable and it is still not flashing. You go into the wiring closet and switch the connector from one connection on the hub to another. You check the NIC light and it is blinking. What should you do next?

- A. Replace the NIC
- B. Replace the HUB
- C. Log in and try to transfer a file
- D. Replace the cable

Answer: C

Explanation: The light on the NIC is blinking. This indicates that the NIC is able to communicate with the hub. We should try the connection, for example by trying to transfer a file.

Incorrect Answers

The NIC and the hub have physical connectivity. We should try it works, and there is no need to replace anything at this point.

QUESTION NO: 267

Which type of IP routing incorporates RIP?

- A. CRC
- B. Static
- C. Dynamic
- D. Circular

Answer: C

Explanation: RIP uses dynamic routing. Dynamic routing is when the routers exchange routing information automatically. Dynamic routing enables the routers to build their own routing tables.

Incorrect Answers

A: CRC is used to detect errors in data.

B: Static routing does not involve any routing protocol. The administrator must manually add the appropriate routes into the routing table.

D: There is no such thing as circular routing.

QUESTION NO: 268

On a TCP/IP network, each computer that is assigned a network ID is called a _____?

- A. Name server
- B. Workstation
- C. Server
- D. Host

Answer: D

Explanation: All devices that is assigned a network ID (an IP address), is called an host.

QUESTION NO: 269

What UART chip is needed to provide a modem connection of 115200 bps?

- A. 85.xx
- B. 65.xx
- C. 100.xx
- D. 165.xx

Answer: D

Explanation: Most computers today have 16550 UART chips for both of their serial ports, which can run as fast as 256 Kbps.

QUESTION NO: 270

Which three connectors can be used with external SCSI interfaces? (Choose three.)

- A. DB-25 Female
- B. Centronics-36
- C. Centronics-50
- D. High density 68-pin
- E. DB-9 Male
- F. RJ-11

Answer: A, C, D

Explanation:

A: DB-25 female adapter are used on some older SCSI implemenations.

- C: The earliest SCSI implementations used a 50-pin Centronics connector for external connections
- D: Later SCSI implementations use unique 50-pin High-Density or 68-pin High-Density connectors on their cables.

Incorrect Answers

- B: A 36-pin Centronics connector is used to connect to printer (print device).
- E: DB-9 male cannot be used as a SCSI connector. It has too few connectors.
- F: RJ-11 is used to connect a telephone.

QUESTION NO: 271

Which TCP/IP utility produces the following sample output?

```
1 <10 ms  1 ms  <10 ms  192.168.2.99
2 105 ms  92 ms  98 ms  qrvl-67terminal01.epoch.net [199.24.67.3]
3 101 ms  110 ms  98 ms  qrvl.epoch.net [199.24.67.1]
4 123 ms  109 ms  118 ms  svcr03-7b.epoch.net [199.24.103.125]
5 123 ms  112 ms  114 ms  clsm02-2.epoch.net [199.24.88.26]
6 136 ms  130 ms  133 ms  sl-gw19-pen-6-1-0-T3.sprintlink.net [144.228.116.5]
7 143 ms  126 ms  138 ms  sl-bb10-pen-4-3.sprintlink.net [144.232.5.117]
8 146 ms  129 ms  133 ms  sl-bb20-pen-12-0.sprintlink.net [144.232.5.1]
9 131 ms  128 ms  139 ms  sl-bb20-nyc-13-0.sprintlink.net [144.232.18.38]
10 130 ms  134 ms  134 ms  sl-gw9-nyc-8-0.sprintlink.net [144.232.7.94]
```

- A. PING
- B. NETSTAT
- C. NBTSTAT
- D. TRACERT

Answer: D

Explanation: This output is produced by the TRACERT (traceroute) utility. Traceroute displays the path that packets take to their destination.

Incorrect Answers

- A: PING is only used to test connectivity.
- B: NETSTAT displays current TCP/IP connections and information generated by TCP/II protocols.
- C: NBSTAT is used to troubleshoot NetBIOS resolution.

QUESTION NO: 272

"Mirroring" uses what RAID level?

- A. 2
- B. 1
- C. 3
- D. 4

Answer: B

Explanation: Mirroring is also known as RAID-1.

QUESTION NO: 273

IEEE 802.5 maps to

- A. Voice data transmissions
- B. Token bus
- C. Ethernet
- D. Token Ring

Answer: D

Explanation: The IEEE 802.5 standard defines token ring.

Incorrect Answers

A: Voice data transmissions does not map directly to any IEEE 802.x standard.

B: Token bus is defined in IEEE 802.4.

C: The IEEE 802.3 standard defines Ethernet.

QUESTION NO: 274

What layer of the OSI model does a bridge operate under?

- A. Session
- B. Data Link
- C. Transport
- D. Network

Answer: B

Explanation: Bridges work at the Data Link layer, layer 2, of the OSI model. Bridges use MAC address to forward data to the correction destination.

Incorrect Answers

A, C: No particular network device work at the session or at the transport layer.

D: Routers work at the network layer.

QUESTION NO: 275

Maria, who works in the finance department, calls you and states that she cannot print to the network printer. She is member of a group who has the correct permissions to print. However, all other users of the same group can print to the printer. What is the problem?

A. Her user access permissions are set wrong

B. Her printer domain is set wrong

C. Her share access is set wrong

Answer: A

Explanation: To be able to print you must have print permission (access permission) to the printer.

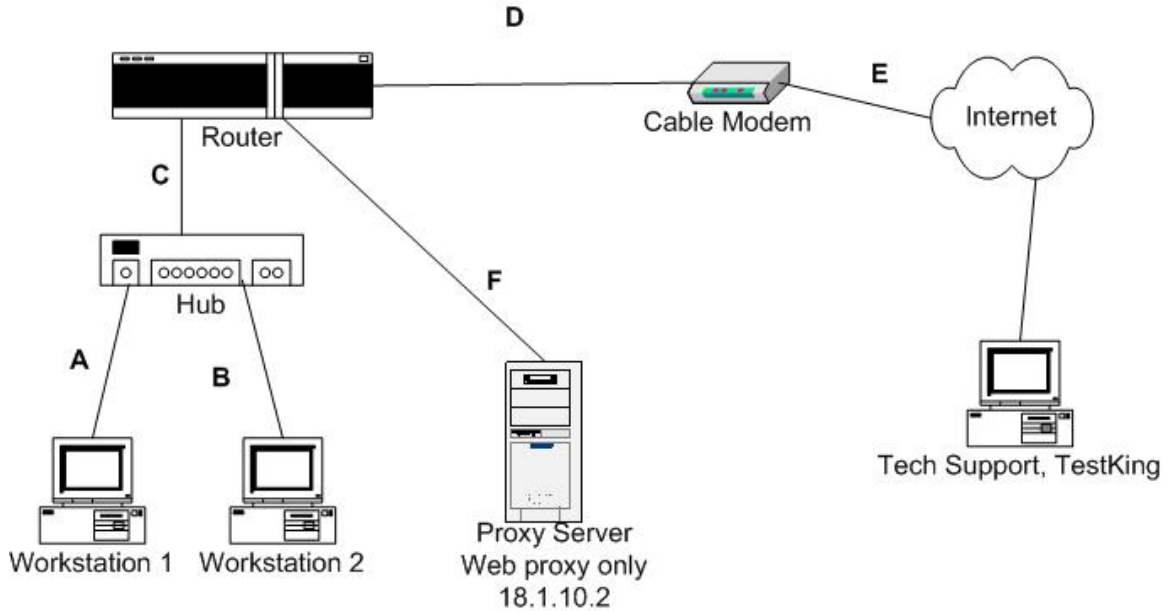
Incorrect Answers

B: The term printer domain does not apply.

C: Share access permissions are used to configure permissions for folders and files that are shared, and not for sharing printers.

QUESTION NO: 276

Exhibit:



The customer reports loss of Internet connectivity from all workstations. Tech Support can ping the router but cannot Telnet into it. ICMP port is not open in the router. Which two steps would be useful in troubleshooting this problem? (Choose two.)

- A. Restart the router.
- B. Replace patch cord C.
- C. Replace patch cord A.
- D. Replace patch cord B
- E. Restart the cable modem.

Answer: A, B

Explanation:

- A:** The router might be malfunctioning. An indication of this possibility is the fact that Tech Support cannot telnet the router. Rebooting it might resolve the problem.
- B:** A faulty patch cable between the router and the hub would affect all workstations. It could be the reason of the problems.

Incorrect Answers

- C, D:** All workstations lost network connectivity, not just some. Just replacing a patch cord between a workstation and a hub would only affect that particular computer connected through that patch cable.
- E:** We know that the cable modem is operational since Tech Support can ping the router.

QUESTION NO: 277

A user is having problems accessing the local Intranet web site. How should you determine if the problem is related to this user's workstation only?

- A. Run WINIPCFG.
- B. Try accessing the Intranet from another workstation.
- C. Try to PING the Intranet from the user's workstation.
- D. Run TRACERT to the InterNIC from the user's workstation.

Answer: B

Explanation: We should try to access the local web site from another computer. If that is possible, we would have reason to believe that the problem was only the workstation of this user.

Incorrect Answers

A, C, D: If we troubleshooting the computer locally we could not be sure if the problem is related to this workstation alone. We must use other workstations as well.

QUESTION NO: 278

You are the network administrator for a network with 10 stations. One workstation experiences problems communicating with the server. The workstation can communicate properly during daylight hours, when the room lights are off. You have noticed, however, that at night, when the lights are on, the workstation experiences this problem. What could cause this problem?

- A. A bad port on the hub
- B. Voltage drop in the cable
- C. Improperly installed cabling
- D. User's password has expired

Answer: C

Explanation: There is a cabling problem. There is interference between the network cabling and the power cabling.

Incorrect Answers

- A:** A faulty port an hub would not cause this behavior.
- B:** The problem is constant when the lights are on, not just when the lights are turned on.
- D:** This is not a problem related to permissions or rights.

QUESTION NO: 279

Which statement about user level security is true?

- A. The user of each machine can decide which resources from the machine are made available to other users on the network.
- B. The network administrator can decide which resources are made available to other users on the network.
- C. The user of each machine can decide which resources from the network server are made available to other users on the network.
- D. The network administrator can decide which resources are made available to other users outside the network.

Answer: B

Explanation: User level security is managed centrally from a server by the network administrators. The network administrators assign permissions for resources on the network to users and groups.

Incorrect Answers

- A, C:** User level security is managed centrally from a server, not locally on the workstations.
- D:** User level permissions only apply within the network, not outside it.

QUESTION NO: 280

You have several LANs in your organization. Which three protocols might you use on these LANs to enable LAN to LAN communication? (Choose three.)

- A. IPX/SPX
- B. PPP
- C. LAT
- D. TCP/IP
- E. NetBEUI
- F. AppleTalk

Answer: A, D, F

Explanation:

IPX/SPX, TCP/IP, and AppleTalk are all routable protocols and can all be used for inter-LAN communication.

Incorrect Answers

- B:** PPP is used for WAN connections connecting LANs. PPP cannot be used as a LAN protocol
- C:** LAT does not apply here.
- E:** NetBEUI is not routable and can therefore not be used when LAN to LAN communication is required.

QUESTION NO: 281

Which 100 Mbps networking standard uses only two pairs of a Category 5 UTP cable?

- A. 10BaseT
- B. 100BaseT4
- C. 100BaseTX
- D. 100BaseVG

Answer: C

Explanation: 100BaseTX uses two UTP pairs (four wires) in a Category 5 UTP cable

Incorrect Answers

- A:** 10BaseT requires Category 3 UTP.
- B:** 100BaseT4 requires Category 3 UTP.
- D:** 100BaseVG requires Category 3 unshielded twisted pair (UTP) cable

QUESTION NO: 282

You want to enable WINS on a Windows 9x machine. From the Network Properties dialog, you have selected TCP/IP and clicked the Properties button.

What should you do next?

- A. Click the enable WINS resolution button
- B. Click "specify name resolution," type WINS
- C. Click DNS configuration, click the enable WINS resolution button
- D. Click WINS configuration, click the enable WINS resolution button

Answer: D

Explanation: The procedure is.

1. Open TCP/IP properties
2. Find the WINS Configuration tab at the top of the window and click it.

3. Click the Enable WINS Resolution button.

Incorrect Answers

A: First you must click WINS configuration.

B: There is no specific name resolution configuration available.

C: We want to use DNS not WINS. Furthermore, there is no DNS configuration available

QUESTION NO: 283

Which of these parameters can be configured in your Network Properties? (Choose four)

- A. WINS server IP address
- B. DNS server IP address
- C. IP address
- D. Gateway
- E. IP address of DHCP server

Answer: A, B, C, D

Explanation: WINS server address, DNS server address, IP address (and subnet mask), and default gateway can all be configured in Network Properties on Windows computers.

Incorrect Answers

The initial communication between a DHCP client and the DHCP server is achieved by broadcasts. There is no need for the DHCP client to know the IP address of the DHCP server. In fact, this is not configurable.

QUESTION NO: 284

What name resolution system can be used across different common network platforms?

- A. DHCP
- B. NetBIOS
- C. DNS
- D. WINS

Answer: C

Explanation: DNS is used for host name to IP address resolution. TCP/IP is used on most common network platforms.

Incorrect Answers

A: DHCP automates IP configuration of clients.

B: NetBIOS is not a name resolution scheme. It is a type of naming scheme.

D: WINS is used for NetBIOS name to IP address resolution. It can only be used on Windows platforms.

QUESTION NO: 285

You can access your Web server by its IP but not by its host name. What type of problem could be present?

- A. WINS
- B. LMHOSTS
- C. DNS

Answer: C

Explanation: DNS is used to resolve host names to IP addresses. This allows use to use host names instead of IP addresses. A failure to use host name indicates a DNS problem.

Incorrect Answers

A: WINS is used for NetBIOS name resolution and cannot be used to resolve host names.

B: The hosts file can be used for host name resolution, however the LMHOSTS file is used for NetBIOS name resolution and cannot be used to resolve host names.

QUESTION NO: 286

Which Ethernet implementation do you use for a connection of a distance over 1 km?

- A. 10Base2
- B. 10Base5
- C. 10BaseT
- D. 10BaseFX

Answer: D

Explanation: Fiber must be used for connections over 1000 meters in length. 10BaseFX use fiber.

Incorrect Answers

- A: 10Base2 has a maximum connection distance of 185 meters.
- B: 10Base5 has a maximum connection distance of 500 meters.
- C: 10BaseT has a maximum connection distance of 100 meters.

QUESTION NO: 287

How can you connect with a Unix server using terminal emulation software?

- A. FTP
- B. Telnet
- C. Internet Explorer
- D. Netscape

Answer: B

Explanation: Telnet is used for remote login using terminal emulation.

Incorrect Answers

A: FTP is used for file transfers.

C, D: Internet Explorer Or Netscape cannot be used as terminal emulator (without additional software).

QUESTION NO: 288

Given

- **A TCP/IP network environment with multiple subnets.**
- **A user connects to a Windows NT server named CORPSERV on its local subnet.**
- **WINS is NOT in use**

A user is moved to another subnet. The user is now unable to login to CORPSERV. What is the problem?

- A. a HOSTS file needs to be configured
- B. a LMHOSTS file needs to be configured
- C. a SERVICES file needs to be configured
- D. a PROTOCOL file needs to be configured

Answer: A

A Windows NT network either uses NetBIOS to IP address, or host name to IP address resolution. WINS is a NetBIOS to IP address resolution method. Since WINS isn't used a host name to IP address mechanism must be in use. Hosts files stores host to IP address mappings.

QUESTION NO: 289

You are troubleshooting a TCP/IP network and want to test a network adapter on a client computer. What TCP/IP utility could be used to find out if TCP/IP is configured correctly on the system, and to find out if the host can contact a host at another location?

- A. ARP
- B. PING
- C. RARP
- D. FINGER

Answer: B

PING, a TCP/IP suite utility/protocol, is used to test network connectivity.

QUESTION NO: 290

Which of the following is used by Network Management applications to monitor network devices remotely?

- A. SNMP
- B. SMTP
- C. DHCP
- D. WINS
- E. DNS

Answer: A

SNMP, or Simple Network Management Protocol, is a protocol designed to give a user the capability to remotely manage a computer network by polling and setting terminal values and monitoring network events.

QUESTION NO: 291

Which of the following devices operate at the Data Link layer? (Choose all that apply.)

- A. Hub
- B. NICs
- C. Router
- D. Switches

E. Bridges

Answer: B, D, E

B: The data link layer is concerned with physical addressing, the MAC addresses which are stored in the NICs.

D: Layer-2 switches are fast because they do not look at the Network layer header information, looking instead at the frame's hardware addresses before deciding to either forward the frame or drop it.

E: A bridge is used to break larger network segments into smaller network segments. It works much like a repeater, but because a bridge works solely with Layer 2 protocols and layer 2 MAC sublayer addresses, it operates at the Data Link layer.

Incorrect Answers

A: Hubs work at the physical layer.

C: Routers work at the network layer.

QUESTION NO: 292

Your network has a permanent connection to the Internet. Your local network included a Web server and an SMTP server. You are concerned about the threat of hackers gaining access from the Internet. You decide to set up filtering on your Internet router. After you make this change, your local clients can no longer download files from an external FTP site. You think your router may be blocking a standard port. What port is being blocked?

- A. 21
- B. 25
- C. 53
- D. 110

Answer: A

Explanation: FTP uses TCP port 21.

Incorrect Answers

B: SMTP use TCP port 25.

C: DNS use port 53.

D: POP use TCP port 110.

QUESTION NO: 293

You have a permanent connection to the Internet for your network. Your local network included a Web server and an SMTP server. You are concerned about the

threat of hackers gaining access from the Internet. You have set up filtering on your Internet router.

Your local SMTP server has stopped sending or receiving messages from the Internet, although your local users can still access local and Internet Web servers. What should predict the cause of the problem is?

- A. Your DHCP server is down.
- B. Your Internet router is blocking port 25.
- C. Your Internet router is blocking port 110.
- D. Your Web server is filtering mail requests.

Answer: B

Explanation: SMTP use TCP port 25.

Incorrect Answers

A: DHCP is only used to automate IP configuration. A DHCP server that is down would not affect SMTP traffic.

C: Port 110 is used for POP traffic, not for SMTP traffic.

D: Web servers are not used for e-mails.

QUESTION NO: 294

Which three processes does a proxy server perform? (Choose three)

- A. Compresses data on the disk storage device.
- B. Enhances security and administrative control.
- C. Acts as an intermediary between an application and the Internet.
- D. Acts as an intermediary between a workstation user and the Internet.

Answer: B, C, D

Explanation:

B: A proxy server allows the administrator to control traffic that goes into and out of the network.

C, D: A proxy server is located between the workstations and the Internet. It acts as an intermediary between applications run on the clients and internet.

Incorrect Answers

A: A proxy server does not store compressed data on disks.

QUESTION NO: 295

You currently have a permanent connection to the Internet for your network. Your network included a Web server and an SMTP server. You are concerned about the threat of hackers gaining access from the Internet. You set up filtering on your Internet router. You users are no longer able to access their external POP3 accounts.

What is the most likely cause of the problem?

- A. Your DHCP server is down.
- B. Your Internet router is blocking port 25.
- C. Your Internet router is blocking port 110.
- D. Your Web server is filtering mail requests.

Answer: C

Explanation: POP use TCP port 110.

Incorrect Answers

A: DHCP is only used to automate IP configuration. A DHCP server that is down would not affect POP traffic.

B: SMTP use TCP port 25

D: A Web server does not filter mail requests.

QUESTION NO: 296

Which two drive technologies does Network Attached Storage (NAS) use? (Choose two)

- A. IDE
- B. LUN
- C. DMA
- D. SCSI

Answer: A, D

Explanation: IDE and SCSI are drive technologies.

Incorrect Answers

B: LUN is part of SCSI address, but it not a drive technology.

C: Direct Memory Access (DMA) is not a drive technology.

QUESTION NO: 297

Which piece of information do you need to obtain root access to resources on a Linux system?

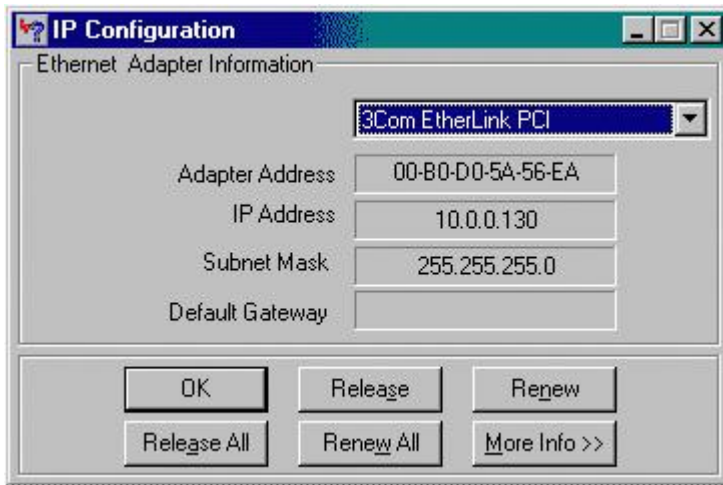
- A. username
- B. password
- C. domain name
- D. e-mail address

Answer: B

Explanation: A password is required to obtain root access.

QUESTION NO: 298

Exhibit:



Which command's output is displayed in the exhibit?

- A. ipcfg
- B. ipconfig
- C. winipcfg
- D. winipconfig

Answer: C

Explanation: The Winipcfg utility has been started on a Windows 9x computer.

QUESTION NO: 299

Which two items should you use to connect a Windows 9x machine to a Novell server? (Choose two)

- A. NetWare
- B. IPX/SPX
- C. NetBEUI
- D. Client for NetWare Networks.

Answer: B, D

Explanation: The client needs a protocol that is supported by NetWare. The native protocol of NetWare is SPX/IPX. We also need software which enables the client to emulate a Novell client. We can use client for NetWare Networks.

Incorrect Answers

A: NetWare is the name of Novell's network OS.

C: NetBEUI is not supported by Novell.

QUESTION NO: 300

What are three typical functions of the client in the client/server environment? (Choose three)

- A. It formats a request for data.
- B. It performs a search for the data.
- C. It displays data results to the user.
- D. It produces requested information.
- E. It presents an interface to the user.

Answer: A, C, E.

Explanation:

A: The client is used to format the data request.

C: The client displays data to the end user.

E: The client presents and interface to the user.

Incorrect Answers

B: The server performs the search for data.

D: The server produces requested information.

QUESTION NO: 301

Where is the file system located in a Network Attached Storage (NAS) system?

- A. At the router.
- B. At the switch.
- C. At each client.
- D. At the storage device.

Answer: D

Explanation: NAS challenges the traditional file server approach by creating systems designed specifically for data storage. A single hardware device, often called the NAS box or NAS head, acts as the interface between the NAS and network clients. The NAS devices require no monitor, keyboard or mouse.

Incorrect Answers

A: A router is used for routing data throughout a network.

B: A switch only forwards data.

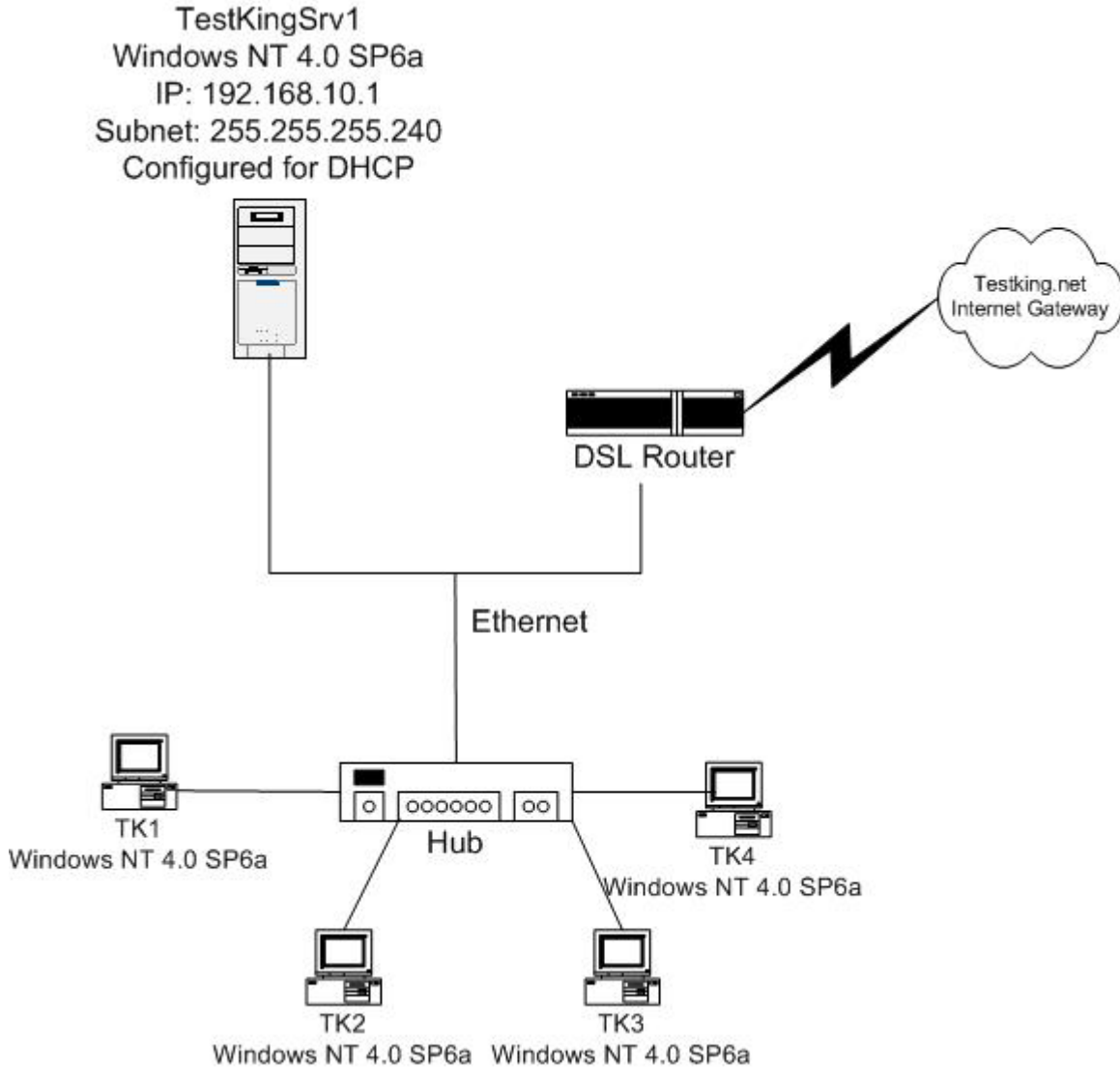
C: Files are not stored at the clients.

Note: Clients generally access a NAS over an Ethernet connection. The NAS appears on the network as a single "node" that is the IP address of the head device.

D:

QUESTION NO: 302

Exhibit:



In the configuration shown in the exhibit, you have just finished building a small home network. You find that you cannot access the Internet. You ping the DSL router successfully. You suspect that the default gateway is not set on the workstation.

Which utility should you use to confirm your diagnosis?

- A. netstat
- B. gateway
- C. ipconfig
- D. winipcfg

Answer: C

Explanation: On Windows NT/Windows 2000/XP systems the IPCONFIG command line utility is used to manage and display IP configuration. We can use it to verify the default gateway settings.

Incorrect Answers

- A:** Netstat is a command-line program that displays information about a TCP/IP computer's current network connections and about the traffic generated by the various TCP/IP protocols. It would not be useful in this scenario.
- B:** There is no Windows utility called gateway.
- D:** Winipcfg is a GUI that is used for IP configuration on only Windows 9x computers.

QUESTION NO: 303

You are connecting a UNIX/Linux workstation to an outside WAN server. Which two steps should you perform to properly configure eth0? (Choose two)

- A. set netmask
- B. set gateway
- C. run ifup eth0
- D. set MAC address

Answer: B; C

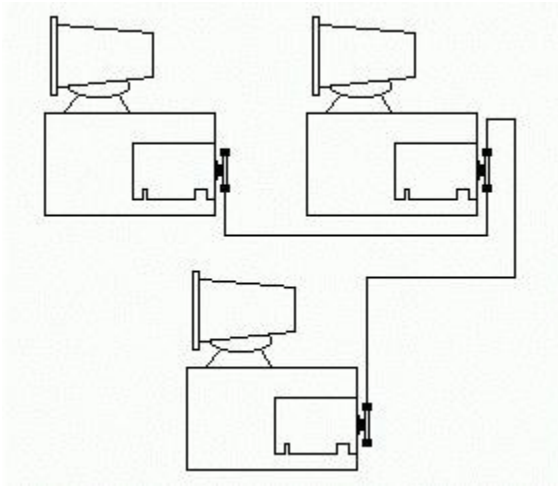
Explanation: In order to access resources outside the local network the default gateway must be properly configured. We should also configure the interface

Incorrect Answers

- A:** The netmask does not need reconfiguration
- D:** MAC addresses are physical addresses, not logical addressing. Physical addresses cannot be changed or reconfigured.

QUESTION NO: 304

Exhibit:



Users complain of slow performance on the network shown in the exhibit. There are also high occurrences of collisions. What is the problem?

- A. Category 3 cabling is used.
- B. There is a loose 50 ohm terminator.
- C. Multimode fiber is used instead of Single-Mode fiber.
- D. A BNC T connector is disconnected from a machine but both cables are still connected to the BNC T.

Answer: B

Explanation: The exhibit reveals the network is a bus topology; more specifically this is a 10Base2 network. 10Base networks must be terminated with 50 ohm terminators at each end. A loose 50 ohm terminator would result in bouncing signals which would slow down the network due to high occurrence of collisions.

Incorrect Answers

- A:** Category 3 cabling is used in a star topology, not in a bus topology.
- C:** Fiber cabling cannot be used in a bus topology 10Base2 network.
- D:** A disconnected T connector in a 10Base2 network would stop all traffic on the network.

QUESTION NO: 305

A Windows NT workstation is moved from one network segment to another within your local network. After the move, the workstation is no longer able to connect to one of the Windows NT servers it previously used. The workstation is configured to use NetBEUI. What is the most likely source of the problem?

- A. The workstation is using routable protocol.

- B. The workstation is using a non-routable protocol.
- C. The router between the segments is blocking port 139.
- D. The router between the segments is blocking port 193.

Answer: B

Explanation: NetBEUI is a non-routable protocol. NetBEUI traffic cannot reach outside the local network segment.

Incorrect Answers

A: NetBEUI is non-routable.

C, D: NetBEUI is a broadcast only protocols and NetBEUI traffic will be blocked by a router.

QUESTION NO: 306

A switch was added to an office to reduce the collision domain. The switch has been up and running for a month. Users have called in from this office today and complaining that the network is slow.

What is the appropriate course of action at this point?

- A. Document the solution.
- B. Implement your solution.
- C. Establish what was changed.
- D. Select the most probable cause.

Answer: C

Explanation: After establishing the symptoms and identifying the affected area we should establish what has changed.

Note: One possible order, within Comptia guidelines, when troubleshooting a network is:

1. Establish the symptoms
2. Identify the affected area.
3. Establish what has changed. (C)
4. Establish the probable cause of the problem. (D)
5. Formulate a solution.
6. Implement a solution. (B)
7. Test the solution.
8. Recognize potential effects of the solution of the solution.
9. Document the problem and solution. (A)
10. Give feedback to the users.

Incorrect Answers

- A:** Documentation is made after the problem is solved.
- B:** Implementation of the problem requires a solution.
- D:** To establish the most probable the cause we must first establish what has changed.

QUESTION NO: 307

Exhibit:

```
C:\ "command" TestKingSrv

"command" to TestKingSrv[10.0.0.33]
1    <101 ms    <101 ms    100 ms    RouterTK1[10.0.0.1]
1    <9 ms       <9 ms      9 ms      RouterTK2[10.0.0.4]
1    <101 ms    <50000 ms  5000 ms   RouterTK3[10.0.0.8]
1    <10 ms     <10 ms     1 ms      TestKingSrv[10.0.0.33]

"command" complete
```

Users have called your help desk complaining of slow response on an application. You want to see if the network is responsible for the slowdown. What does the information in the exhibit convey?

- A. A network delay using tracert
- B. A network delay using ping -w
- C. A network delay using netstat -a
- D. A normal network response using nbstat

Answer: A

Explanation: TRACERT is used to trace routes throughout the network. In this scenario we see the route from a computer to TestKingSrv. The route includes the three routers. We also see that traffic is very slow between RouterTK2 and RouterTK3.

Incorrect Answers

- B:** PING only tests connectivity. PING would not show any information on the route, only on the destination.
- C:** Netstat displays current TCP/IP network connections and traffic generated by the various TCP/IP protocols.
- D:** The nbstat utility displays protocol statistics and current TCP/IP connections using NBT(NetBIOS over TCP/IP).

QUESTION NO: 308

A contractor added a DHCP server to your 200-node network. The contractor was instructed to use the same range of address that was being used previously. You are able to make manual changes to most of the machines, but some machines are in locked areas.

Which error messages should you expect to see on those machines?

- A. IP address conflicts
- B. IPX address conflict
- C. NIC address conflicts
- D. Server address conflicts

Answer: A

Explanation: In this scenario we are migrating a network from static IP addresses to dynamic IP addresses. The same IP address range should be used. If we keep some static addresses the DHCP server could at some point lease an address that already is in use. This would result in an IP address conflict.

Note: A DHCP server automates IP configuration of computers.

Incorrect Answers

B: DHCP is a TCP/IP tool, not a IPX tool.

C: NIC addresses are physical addresses and cannot be configured.

D: On an IP network servers do not have special addressing.

QUESTION NO: 309

A new workstation has been installed in the network. The user regularly uses a Novell 3.11 server. The user cannot access the Internet.

Which protocol is NOT installed on the workstation?

- A. IPX
- B. DLC
- C. TCP/IP
- D. Net/BEUI

Answer: C

Explanation: Internet access required the TCP/IP protocol.

Incorrect Answers

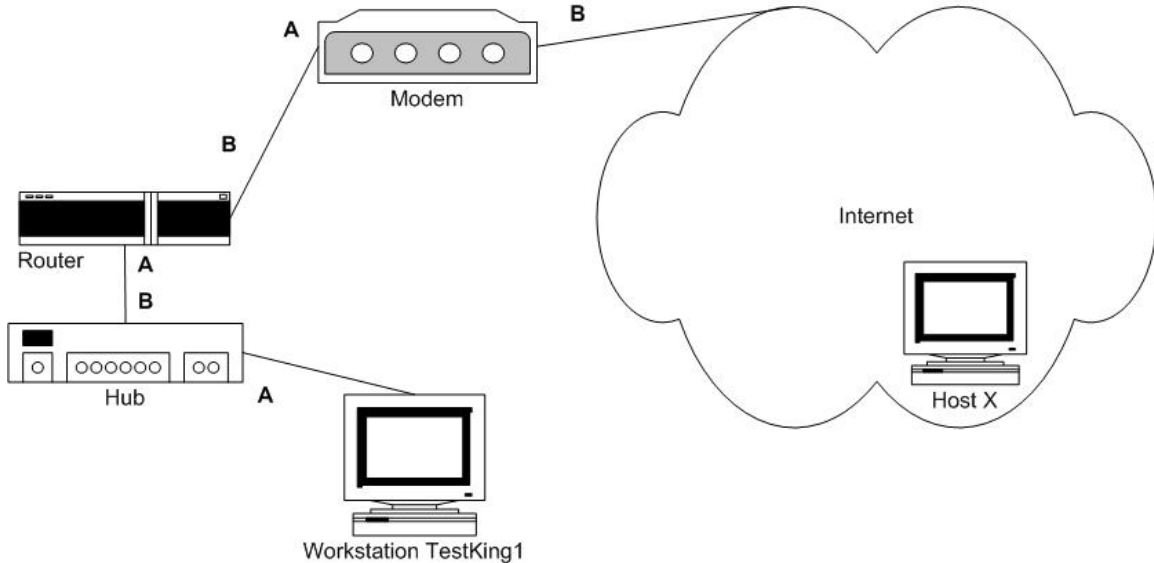
A: IPX is a Novell protocol. It is not used to access Internet.

B: DLC is used with some HP printers and with IBM computers, not to access Internet.

D: NetBEUI is a broadcast protocol which only can be used on a single network segment.

QUESTION NO: 310

Exhibit:



In the configuration shown the exhibit, the workstation is unable to connect to Host X. A visual examination reveals the collision light on the hub is steadily lit. All other link lights are lit.

Which component is the most likely cause of this problem?

- A. A chattering NIC in Host X.
- B. A chattering NIC in the workstation.
- C. A bad cable between the modem and Host X.
- D. A bad cable between the router and the modem.

Answer: B

Explanation: A chattering NIC on the workstation would result in heavy traffic on the trunk between the workstation and the hub. This could result in collisions and network performance would be decreased.

Incorrect Answers

- A:** HostX is not directly connected to the hub.
- C:** The modem or Host X are not directly connected to the hub.
- D:** The segment between the router and the modem is not directly connected to the hub.

QUESTION NO: 311

A user is able to access the Internet and departmental drives, but is unable to see the home directory. You verify that the user directory is located at the appropriate server location?

What is the most probable cause?

- A. The user is not logged in to the domain.
- B. The directory location has been unmapped in the user's profile.
- C. The user has logged on to the network with the wrong password.
- D. The network cable between the user's workstation and the flex point is bad.

Answer: B

Explanation The user has access to the local network as he can access the departmental drives, which most likely are part of the network. Furthermore, the problem is just that he can't see that home directory. We just need to remap it or browse for it.

Incorrect Answers

The user is already accessing network resources, so he is already logged in to the domain with correct password. There is no network connectivity problem.

QUESTION NO: 312

Before being moved to a new network with Internet access, a user was able to log in to the main Windows NT server and access the Internet. The user is now unable to access the Internet or the file server.

What is the problem?

- A. IPX needs to be installed on the workstation.
- B. DLC needs to be installed on the workstation.
- C. DHCP needs to be disabled and a static IP address needs to be assigned.
- D. NetBEUI automatic configuration needs to be disabled and a static NetBEUI address needs to be assigned.

Answer: C

Explanation: Correct IP address assignment is required to gain access to Internet. IP configuration is either obtained dynamically from a DHCP server or configured statically.

Incorrect Answers

A, B, D: The IPX, DLC, or NetBEUI protocols are not used to gain Internet access. Internet uses the TCP/IP protocol.

QUESTION NO: 313

You are assisting your senior technician in extending the Demarc for a new DSL circuit. Which tool should you use?

- A. multimeter
- B. optical tester
- C. punch down tool
- D. bit error rate tester

Answer: C

Explanation: The Demarc is a connection point between the local network and the Telco network. Extending the Demarc is to physically connect the local network with the Telco network. A punch down tool could be of use.

Incorrect Answers

- A:** There would be no need to test Volt, Resistance etc.
- B:** To testi the cable optically we must first connect it.
- D:** We would not be required to test the bit error rate.

QUESTION NO: 314

All users on the network have been unable to connect to the server for the last 15 minutes. The server cannot ping any of the workstations or its own loopback address even after a reboot.

Which statement is true?

- A. The server's NIC has failed.
- B. All clients need to be rebooted.
- C. The DNS server needs to be restarted.
- D. The DHCP server needs to be restarted.

Answer: A

Explanation: The loopback address is used to test the network interface card (NIC). This test has failed and we know that the NIC is the cause of the problems. The NIC could have failed.

Incorrect Answers

B, C; D: The NIC is the source of the problem, not the clients or any network service.

QUESTION NO: 315

Exhibit:

```

Windows 98 IP Configuration

Host Name . . . . . : DELL #14
DNS Servers . . . . . :
Node Type . . . . . : Broadcast
NetBIOS Scope ID . . . . . :
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
NetBIOS Resolution Uses DNS. . . . . : No

0 Ethernet adapter :

Description . . . . . : 3Com EtherLink PCI
Physical Address. . . . . : 00-B0-D0-1D-F5-5B
DHCP Enabled . . . . . : Yes
IP Address . . . . . : 169.254.184.57
Subnet Mask . . . . . : 255.255.0.0
Default Gateway . . . . . :
DHCP Server . . . . . : 255.255.255.255
Primary WINS Server. . . . . :
Secondary WINS Server. . . . . :
Lease Obtained . . . . . : 06 07 01 2:16:31 PM
Lease Expires . . . . . :
    
```

You are troubleshooting a connectivity problem on a Windows 98 workstation attached to a large Ethernet network. All of the other workstations on this segment are working fine. All of the workstations (regardless of OS) have IP configured via a DHCP server.

Based on the information in the exhibit, what is a possible problem?

- A. Microsoft TCP/IP assigned an IP address in the absence of a DHCP server.
- B. NetWare/IP assigned an IP address in the absence of a DHCP server.
- C. Microsoft DNS server assigned an IP address in the absence of a DHCP server.
- D. An Apple Macintosh G3 server assigned an IP address in the absence of a DHCP server.

Answer: A

Explanation: The workstation is using a IP address in the 169.254.xx.xx range. This is a self-configured IP address which is provided by Microsoft’s implementation of TCP/IP. These addresses are also known as APIPA addresses.

Incorrect Answers

- B:** There is no such thing as NetWare/IP in a Windows environment.
- C:** DNS servers are only used to resolve host names, they cannot provide IP address configuration.
- D:** Apple computers are not used to provide IP addresses to Windows clients.

QUESTION NO: 316

You receive a call from a user working from a virtual office at home. The office is connected to the corporate site using ADSL through a local ISP. All of the light on the external DSL modem indicate that it is connected to the CO. A reboot of the modem indicates a normal reconnect to the CO. However, the user is not able to connect to the Internet?

What is the possible DSL problem?

- A. The user's phone line is busy.
- B. The DSL access multiplexer is down.
- C. The DSL filter is connected to the modem.
- D. The ISP connection to the DSL access multiplexer is down.

Answer: D

Explanation: Your ADSL modem has a valid connection to the CO. There must be a problem between the CO and the ISP.

Note: CO (Central Office) is where the other end of your copper phone line goes to. The length of this copper limits your ability to get DSL and at what speed you can connect. The CO is a Building where the phone switching equipment lives.

Incorrect Answers

- A:** The usage of the phone line does not directly affect DSL traffic.
- B:** The cable modem indicates that a connection to the CO is established.
- C:** DSL filters are placed between your existing phones and the wall where they plug in. They will eliminate any small whine you may hear on the phone lines when using the internet. A DSL filter does not affect the connectivity.

QUESTION NO: 317

A remote user has recently been set up to use a NetWare 4.11 server. The user has previously been dialing in to the network to send and receive e-mail and to access the Internet. The user had dialed in to the network and is able to send and receive e-mail, but is not able to connect to the server.

What is the most likely cause of the problem?

- A. The user's connection is too fast.
- B. The user is not connected to the network.
- C. The user's dial-up connection protocols are not configured properly.
- D. The user's modem is not capable of connecting to a NetWare server.

Answer: C

Explanation: The remote client must be configured with the protocol used by the NetWare server, which most likely is IPX/SPX.

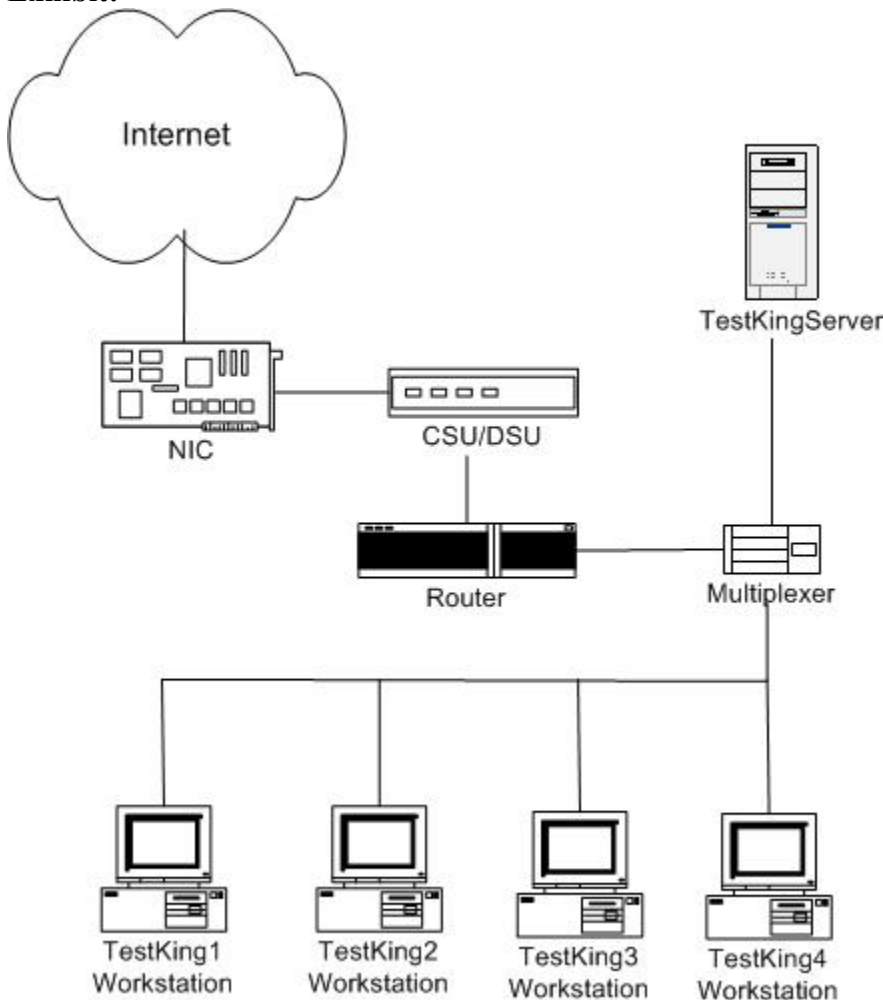
Incorrect Answers

A, B: The user is able to connect to the network and to access the e-mail service.

D: A modem provides remote communication. The type of server is not relevant.

QUESTION NO: 318

Exhibit:



The WAN connection is provided by the Local Exchange Carrier (LEC). The LEC is able to loop and test good to the Network Interface (NIC), but not to the CSU/DSU.

What can cause the LEC to not loop the CSU/DSU?

- A. Router not configured to route.
- B. A bad cable pair from the CSU/DSU to the NIC.
- C. A bad cable pair from the router to the CSU/DSU.
- D. Workstations not configured with a default gateway.

Answer: B

Explanation: The connection between the service provider, which is located at the Internet, and the NIC is good, but the service provider cannot access the CSU/DSU: Some problem occurs between the NIC and the CSU/DSU. A bad cable between them is a possible cause of the problem.

Incorrect Answers

A, C; D: The router or the workstations are not in the path between the service provider and the CSU/DSU. The service provider is located at the Internet.

QUESTION NO: 319

Which two are mail protocols? (Choose two)

- A. IMAP4
- B. SNMP
- C. POP3
- D. POTS

Answer: A, C

Explanation: POP and IMAP are e-mail protocols.

Incorrect Answers

B: Simple Network Monitoring Protocol (SNMP) is used to monitor networks.

D: POTS stands Plain Old Telephone System.

QUESTION NO: 320

A customer needs a 1.5 megabits per second (Mbps) connection to the Internet. Which line should you recommend?

- A. T1
- B. DS0
- C. 56 Kbps
- D. BRI ISDN

Answer: A

Explanation: T1 provides 1.544 Mbps.

Incorrect Answers

B: DS0 only provides 64Kbps.

C: We need 1.5Mbps, which is 27 times faster than 56Kbps.

D: BRI ISDN only provides 128Kbps.

QUESTION NO: 321

**Which two communication protocols use the Routing Information Protocol (RIP)?
(Choose two)**

- A. TCP/IP
- B. NetBEUI
- C. IPX/SPX
- D. AppleTalk

Answer: A, C

Explanation: TCP/IP and IPX/SPX use RIP.

Incorrect Answers

B: NetBEUI is not routable so it does not use any routing protocol.

D: AppleTalk use Apple propriety routing, not standard RIP routing.

QUESTION NO: 322

Which dial-up protocol does not provide addressing, packet type identification, error detection/correction, or compression mechanisms and requires that the device on each end know the other's address?

- A. PPP
- B. SLIP
- C. POTS
- D. TCP/IP

Answer: B

Explanation: SLIP is an old remote access protocol, which only should to connect to legacy servers.

Incorrect Answers

A: PPP is a better remote access protocol. It supports the features listed in this scenario.

C: POTS stands for Plain Old Telephone System.

D: TCP/IP is a network protocol, not a remote access protocol.

QUESTION NO: 323

Which protocol collects network management information?

- A. SGML
- B. SMTP
- C. SNMP
- D. SMDS

Answer: C

Explanation: Simple Network Management Protocol (SNMP) is used to monitor network traffic.

Incorrect Answers

A: SGML (Standard Generalized Markup Language) is a markup language and is not used for network management.

B: Simple Mail Transfer Protocol (SMTP) is used for e-mail.

D: Switched Multimegabit Data Service (SMDS) is a WAN networking technology used for communication over public data networks. It is not used to monitor networks.

QUESTION NO: 324

Which network protocol uses zone to provide interoperability between Macintosh users?

- A. TCP/IP
- B. IPX/SPX
- C. NetBEUI
- D. AppleTalk

Answer: D

Explanation: The AppleTalk protocol use zones to divide the network into segments.

Incorrect Answers

A: TCP/IP uses the network mask to divide the network into segments.

- B: IPX/SPX use network numbers to divide the network into segments.
- C: NetBEUI only use broadcasts.

QUESTION NO: 325

Place each common protocol name next to its associated port number.

Name	Port Number	Select from these
Place here	21	HTTP
Place here	23	SMTP
Place here	25	FTP
Place here	80	POP3
Place here	110	Telnet

Answer:

Name	Port Number	Select from these
FTP	21	
Telnet	23	
SMTP	25	
HTTP	80	
POP3	110	

QUESTION NO: 326

What does a WINS server provide?

- A. Hostname to IP address resolution.
- B. Hostname to IPX address resolution.
- C. NetBIOS name to IP address resolution.
- D. NetBIOS name to IPX address resolution.

Answer: C

Explanation: WINS resolves NetBIOS names to IP addresses.

Incorrect Answers

A: DNS provides hostname to IP address resolution, not WINS.

B, D: WINS only works on Windows system and it does not resolve to IPX addresses.

QUESTION NO: 327

Which method encapsulates standard PPP through a variety of media?

- A. SSL
- B. IPsec
- C. L2TP
- D. Kerberos

Answer: C

Explanation: Layer Two Tunneling Protocol (L2TP) is able to encapsulate standard PPP.

Incorrect Answers

- A:** SSL is used to secure HTTP traffic.
- B:** IPsec is used to encrypt IP traffic.
- D:** Kerberos is an authentication protocol.

QUESTION NO: 328

What is a valid IPv4 address?

- A. 129.22.253.1
- B. 265.35.15.67
- C. 43A6::DA30:0012:00C3:3FA4:0D32:12E2
- D. 43A6.0000.DA30.0012.00C3.3FA4.0D32.12E2

Answer: A

Explanation: A valid IPv4 address consists out of four octets, each with a value between 1 and 255.

Incorrect Answers

- B:** 265 is not a valid octet value
- C, D:** An IP address has only four octets.

QUESTION NO: 329

Which two make up an IPX address? (Choose two)

- A. Subnet mask
- B. Header prefix
- C. MAC address
- D. Network address

Answer: C; D

Explanation: An IPX address contains 80 bits, 32 bits for the network address and 48 bits for the MAC address.

Incorrect Answers

A: TCP/IP uses a subnet mask.

B: Header prefixes are not used by IPX.

QUESTION NO: 330

Which statement describes an SC connector?

- A. A BNC-style connector that uses fiber.
- B. A push-style connector that uses fiber.
- C. A six-position connector that uses UTP.
- D. An eight-position connector that uses UTP.

Answer: B

Explanation: An SC connector is a push-style connector that uses fiber.

Incorrect Answers

A: BNC cabling is used with coaxial cable, not for fiber cabling.

C, D: A SC connector is used for fiber, not with UTP.

QUESTION NO: 331

Which two network technologies use the same media access method? (Choose two)

- A. FDDI
- B. Ethernet
- C. AppleTalk
- D. Token Ring

Answer: A, D

Explanation: Both FDDI and Token Ring use a token that travels around a ring.

Incorrect Answers

B: Ethernet use the CSMA/CD access technology.

C: AppleTalk is a protocol not a network technology.

QUESTION NO: 332

Your company is planning to rebuild its network infrastructure. You are asked to provide a topology that will be scalable and easy to troubleshoot. Which topology should you recommend?

- A. bus
- B. ring
- C. star
- D. mesh

Answer: C

Explanation: A star topology is easy to expand and easy to troubleshoot as well.

Note: One drawback with the star topology is the amount of cabling that must be used.

Incorrect Answers

A: A bus topology does not scale well. It might also be difficult to find troubleshoot a failed bus segment.

B: A ring network does not scale very well.

D: In a mesh topology all network devices are interconnected which it quite un-scalable.

QUESTION NO: 333

Which two devices typically provide hardware data loopback capabilities? (Choose two)

- A. bridges
- B. modems
- C. CSU/DSUs
- D. Ethernet hubs
- E. Wireless access points

Answer: C, D

Explanation: CSU/DSU provide hardware data loopback testing capabilities. Ethernet hubs also typically provide loopback capabilities.

QUESTION NO: 334

Which three devices provide a path between a node on one LAN and a node on another LAN? (Choose three)

- A. hub
- B. router
- C. bridge
- D. switch
- E. managed hub

Answer: B, C, D

Explanation:

B: A router routes traffic between different networks.

C: A bridge connects two networks segment.

D: A switch works like a hub, but it reduces broadcasts and provides better bandwidth.

Note: An unmanaged hub is a black box that has a prescribed job to do and does it according to its design. In general, there is no way to alter its operations through a network interface.

A managed hub has at least alerting capabilities with some type of SNMP or HTTP mechanism that might allow an administrator to change the operation of the hub in some way for instance, to shut down a port connecting to a certain system or device.

Incorrect Answers

A: A hub is used to connect network devices within a LAN.

E: A managed hub is just a hub which can be configured.

QUESTION NO: 335

What is the maximum length of a 100Base-T Ethernet UTP segment?

- A. 100 meters
- B. 185 meters
- C. 325 meters
- D. 550 meters

Answer: A

Explanation: The maximum length of an UTP segment is 100 meters.

QUESTION NO: 336

Which device connects computers with wireless adapters to a network?

- A. hub
- B. router
- C. switch
- D. access point

Answer: D

Explanation: Access points is used to connect wireless computers to the network.

Incorrect Answers

A, B, C: Hubs, routers and switches connects devices with wires.

QUESTION NO: 337

Which medium connects a Small Office-Home Office (SOHO) computer to an external DSL modem?

- A. RG-58 coaxial
- B. Category 5 UTP
- C. RS-232 serial cable
- D. Single-Mode Fiver Optic

Answer: B

Explanation: The computer is connected to the DSL modem with a standard Category 5 UTP cable.

QUESTION NO: 338

Which access method does Gigabit Ethernet use?

- A. ATM
- B. CSMA/CD
- C. Frame Relay
- D. Token passing

Answer: B

Explanation: Ethernet, including Gigabit Ethernet, use the CSMA/CD (Carrier Sense Multiple Access with Collision Detection) access method.

Incorrect Answers

A, C: ATM and Frame Relay are used for WAN connections, not for Ethernet networks.
D: Token ring and FDDI used token passing.

QUESTION NO: 339

Which IEEE 802.x sublayer specifies standards for CSMA/CD?

- A. 802.1
- B. 802.2
- C. 802.3
- D. 802.4
- E. 802.5

Answer: C

Explanation: IEEE 802.3 defines Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications.

Incorrect Answers

A: 802.1 is oriented towards WAN connections.

B: 802.2 defines the Logical Link Control. It is used both by 802.3 and 802.5.

D: 802.4 describes the token bus standard, not a popular implementation.

E: The 802.5 standard defines a Token ring network.

QUESTION NO: 340

Which two connectors should you use with fiber optic cabling? (Choose two)

- A. SC
- B. ST
- C. AUI
- D. BNC
- E. RJ-11
- F. RJ-45

Answer: A, B

Explanation:

Incorrect Answers

A: An SC connector is a push-style connector that uses fiber.

B: The ST connector is used for fiber optic.

C: AUI is used for 10Base5.

- D: BNC is used for 10Base2.
- E: RJ-11 is for the phone socket.
- F: RJ-45 is for UTP and STP cabling.

QUESTION NO: 341

Which TCP/IP port number identifies POP?

- A. 21
- B. 23
- C. 25
- D. 80
- E. 110

Answer: E

Explanation: POP use TCP port 110.

Incorrect Answers

- A:** FTP uses TCP port 21.
- B:** Telnet use TCP port 23.
- C:** SMTP use TCP port 25.
- D:** HTTP uses TCP port 80.

QUESTION NO: 341

Which type of network uses IP addresses created by the local Network Administrator?

- A. Public network
- B. ARCNet network
- C. Private network
- D. Internet network

Answer: C

Explanation: The local network administrator can use IP addresses from the private IP address range.

Incorrect Answers

- B:** ARCNet is just a name of a predecessor to Ethernet. ARCNet networks can use both private and public addresses.
- A, D:** Internet networked LANs or public networks must use registered IP addresses.

QUESTION NO: 342

Which layer of the OSI model is responsible for sequencing?

- A. Physical
- B. Transport
- C. Data Link
- D. Application
- E. Presentation

Answer: C

Explanation: The data link layer combines bits into bytes and bytes into frames, provided access to media using MAC addresses, and error detection. Furthermore, it provides sequencing of frames.

Incorrect Answers

- A:** The physical layer is responsible to move bits between devices and specifies voltage, wire speed and pin-out cables.
- B:** The transport layer provides for both reliable and unreliable delivery and error correction before retransmit.
- D:** The application Layer is where the user/applications access the network.
- E:** The Session Layer controls the establishment the establishing, managing and terminating communications sessions between presentation layers.

QUESTION NO: 343

Which server operating system natively uses domain servers?

- A. Linux
- B. NetWare 5.0
- C. MAC OS 8.0
- D. Windows 2000

Answer: A

Explanation: Domain servers are used in the context of DNS. UNIX and LINUX natively use DNS for name resolution.

Incorrect Answers

- B:** NetWare do not use domain users by default.

- C: MacOS uses Apple proprietary name resolution methods. Domain servers are not used.
- D: Windows 2000 can installed without DNS support.

QUESTION NO: 344

You company has just migrated its Novel NetWare server to Windows NT. Because you are more familiar with the IPX/SPX protocol, you choose to use it instead of TCP/IP. You connect your network to the Internet through am ISDN connection. Which limitations will you encounter?

- A. You must install TCP/IP to access the Internet.
- B. None. IPX/SPX works well in an Internet environment.
- C. You must install NetBEUI to reduce your broadcast overhead and to access the Internet.
- D. IPX/SPX is not a routable protocol and will not allow your network to access the Internet.

Answer: A

Explanation: TCP/IP is required for Internet access.

QUESTION NO: 345

Which networking topology connects computers along a single linear segment?

- A. bus
- B. ring
- C. star
- D. mesh

Answer: A

Explanation: A bus topology connects computers along a single linear segment.

Incorrect Answers

- B:** A ring topology arranges the computers in a ring.
- C:** A star topology has a central hub (or switch) and each computer is directly connected to this hub.
- D:** In a mesh topology all devices are directly connected.

QUESTION NO: 346

What is the maximum length of a Gigabit Ethernet segment using multimode fiber optic cable?

- A. 100 meters
- B. 325 meters
- C. 550 meters
- D. 3 kilometers

Answer: C

Explanation: Gigabit Ethernet support distances of 550m for multimode fiber links. Single mode fiber supports distances of 5 kilometers.

Incorrect Answers

Gigabit Ethernet using Category 5 UTP has the maximum distance of 100 meters.

QUESTION NO: 347

A user wants to place a 10BASE-T network printer at a location in the warehouse. The printer is installed in the warehouse and is connected to the 10BASE-T hub in a nearby administration building. The printer does not function. What is the problem?

- A. The cabling used is not Category 5.
- B. The 10BASE-T hub uses RJ-45 connectors.
- C. The length of the cable is greater than 100 meters.
- D. The printer uses an AUI connector to connect to its 10BASE-T transceiver.

Answer: C

Explanation: The maximum cable distance is 100 meters in a 10BaseT network. A greater distance could cause inoperability.

Incorrect Answers

A: Only Category 5 is required in a 10BaseT network.

B: A 10Base T network printer use UTP/STP cabling and has a RJ-45 connector, just as a 10Base T hub.

D: AUI connectors is only used in 10Base5 network, not in 10BaseT network

QUESTION NO: 348

Given:

- A TCP/IP network environment with multiple subnets.
- A user connects to a Windows NT server named CORPSERV on its local subnet.
- WINS is NOT in use.

A user is moved to another subnet. The user is now unable to login to CORPSERV. What is the problem?

- A. A HOSTS file needs to be configured.
- B. A LMHOSTS file needs to be configured.
- C. A SERVICES file needs to be configured.
- D. A PROTOCOL file needs to be configured.

Answer: B

Explanation: Windows NT use NetBIOS to IP address resolution. This is implemented either through the WINS server or through a LMHOSTS file. Here we would be required to configure a LMHOSTS file.

Incorrect Answers

- A:** A hosts file maps host name to IP address, but Windows NT required NetBIOS to IP address resolution.
- C, D:** There are no such things as a services files or a protocol file in Windows.

QUESTION NO: 349

A user cannot log on to the network. What is your first step to resolve the problem?

- A. Replace the NIC.
- B. Reboot the workstation.
- C. Reinstall the network client software.
- D. Determine of other users can log on.

Answer: D

Explanation: We should try to determine the scope of the problem. We should check if other users have the same problem.

Incorrect Answers

- A:** We should not replace the NIC until we have examined the problem further.
- B:** Rebooting the system is a standard procedure. However, it would be better to check if other users can logon to the network.
- C:** We should wait with re-installing the network client software until we have determined the cause of the problem.

QUESTION NO: 350

A user cannot connect to the network using Windows 95. You instruct the user to check the IP address.

Which command should the user run?

- A. winipcfg
- B. ipconfig
- C. winipconf
- D. ipconfog/all

Answer: A

Explanation: In Windows 9x you use winipcfg to configure and manage IP configuration.

Incorrect Answers

B: Ipconfig has the same functionality but only works on Windows NT/2000/.XP systems.

C, D: There are no Windows utilities named winipconf or ipconfog.