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QUESTION 1

A network technician receives a call from a user who is experiencing network connectivity issues. The network technician questions the user and learns the user brought in a personal wired router to use multiple computers and connect to the network. Which of the following has the user MOST likely introduced to the network?

- A. Rogue DHCP server
- B. Evil twin
- C. VLAN mismatch
- D. Honeypot

Answer: A

QUESTION 2

A technician is setting up a direct connection between two older PCs so they can communicate but not be on the corporate network. The technician does not have access to a spare switch but does have spare Cat 6 cables, RJ-45 plugs, and a crimping tool. The technician cuts off one end of the cable. Which of the following should the technician do to make a crossover cable before crimping the new plug?

- A. Reverse the wires leading to pins 1 and 2
- B. Reverse the wires leading to pins 1 and 3
- C. Reverse the wires leading to pins 2 and 3
- D. Reverse the wires leading to pins 2 and 4

Answer: D

QUESTION 3

An office network consists of one two-port router connected to a 12-port switch. A four-port hub is also connected to the switch. On this particular network, which of the following is the number of collision domain that exist?

- A. 3
- B. 12
- C. 13
- D. 14
- E. 15

Answer: D

QUESTION 4

A network technician wants to remotely and securely access the desktop of a Linux workstation. The desktop is running remote control software without encryption. Which of the following should the technician use to secure the connection?

- A. SSH in tunnel mode
- B. RDP set to console connection
- C. EAP-PEAP
- D. SFTP

Answer: A

QUESTION 5

Which of the following should current network performance be compared against to determine network anomalies?

- A. Baseline
- B. Traffic analysis
- C. Packet capture
- D. Logs

Answer: A

QUESTION 6

A network administrator configures an email server to use secure protocols. When the upgrade is completed, which of the following ports on the firewall should be configured to allow for connectivity? (Choose three.)

- A. TCP 25
- B. TCP 110
- C. TCP 143
- D. TCP 389
- E. TCP 587
- F. TCP 993
- G. TCP 995

Answer: EFG

QUESTION 7

After a server outage, a technician discovers that a physically damaged fiber cable appears to be the problem. After replacing the cable, the server will still not connect to the network. Upon inspecting the cable at the server end, the technician discovers light can be seen through one of the two fiber strands. Which of the following should the technician do FIRST to reconnect the server to the network?

- A. Reverse the fiber strands of the cable and reconnect them to the server
- B. Use a TDR to test both strands of a new replacement cable prior to connecting it to the server
- C. Replace the server's single-mode fiber cable with multimode fiber
- D. Move the fiber cable to different port on the switch where both strands function

Answer: A

QUESTION 8

The backups server connects to a NAS device using block-level storage over Ethernet. The performance is very slow, however, and the network technician suspects the performance issues are network related. Which of the following should the technician do to improve performance?

- A. Utilize UDP to eliminate packet overhead
- B. Turn off MDIX settings on the NAS and server switchports

- C. Enable jumbo frames on the NAS and server
- D. Encapsulate the storage traffic in a GRE tunnel

Answer: C

QUESTION 9

A technician is trying to determine the IP address of a customer's router. The customer has an IP address of 192.168.1.55/24. Which of the following is the address of the customer's router?

- A. 192.168.0.55
- B. 192.168.1.0
- C. 192.168.1.1
- D. 192.168.5.5
- E. 255.255.255.0

Answer: C

QUESTION 10

A network technician is able to connect the switches between offices, but the offices cannot communicate with each other, as each office uses a different IP addressing scheme. Which of the following devices needs to be installed between the switches to allow communication?

- A. Bridge
- B. Access point
- C. Router
- D. Range extender

Answer: C

QUESTION 11

A network technician is working on a proposal for email migration from an on-premises email system to a vendor-hosted email in the cloud. The technician needs to explain to management what type of cloud model will be utilized with the cloud-hosted email. Which of the following cloud models should the technician identify in the proposal?

- A. IaaS
- B. PaaS
- C. SaaS
- D. Maas

Answer: C

QUESTION 12

Which of the following is the correct port number for NTP?

- A. 25
- B. 69
- C. 123
- D. 161

Answer: C

QUESTION 13

A technician is upgrading the firmware on an older KVM switch. The specifications call for a serial port to connect to the computer on one side, and an Ethernet jack to connect to the switch on the other side. Which of the following connectors does the technician need for this cable? (Choose two.)

- A. RG-9
- B. DB-9
- C. RJ-11
- D. DB-25
- E. RJ-45
- F. BNC

Answer: BE

QUESTION 14

An end-user device requires a specific IP address every time it connects to the corporate network; however, corporate policy does not allow the use of static IP addresses. Which of the following will allow the request to be fulfilled without breaking the corporate policy?

- A. DHCP relay
- B. DHCP exclusion
- C. DHCP option
- D. DHCP reservation

Answer: D

QUESTION 15

A technician is planning a remote-access strategy to manage routers and switches on a dedicated management network. The management network is segregated from the production network and uses site-to-site VPN connections. Some of the equipment does not support encryption. Which of the following should the technician choose that all the equipment would support?

- A. Telnet
- B. SSL
- C. SSH
- D. IPSec

Answer: A

QUESTION 16

Which of the following protocols do MOST MITM attacks utilize?

- A. ARP
- B. SIP

- C. FTP
- D. SCP

Answer: A

QUESTION 17

An ISP technician gets a call from a business that just changed equipment but can no longer connect to the Internet. The technician checks the ARP table on the ISP switch, and there is no corresponding MAC address present. Instead, the entry is "Incomplete". Which of the following could cause this condition?

- A. VLAN mismatch
- B. Duplex-Speed mismatch
- C. Duplicate IP address
- D. TX/RX reverse

Answer: B

QUESTION 18

A systems administrator has recently purchased and installed a large electronic signage screen for the company's parking garage. The screen's management software was installed on a server with public IP address to allow remote management. The systems administrator is now troubleshooting an issue with the screen displaying unknown, random, and inappropriate messages. Which of the following is MOST effective in resolving this issue?

- A. Changing the management software's default credentials
- B. Disabling unnecessary services from the server and management software
- C. Changing the management software's default port
- D. Replacing the management software's self-signed certificate with a valid certificate

Answer: A

QUESTION 19

A technician is investigating a server performance issue. The technician has gathered the server utilization statistics. Which of the following should the technician use to determine which statistics are not in the normal range?

- A. Baseline review
- B. Vulnerability scan
- C. System life-cycle report
- D. Archiving logs

Answer: A

QUESTION 20

Which of the following devices, if implemented, would result in decreased administration time of an 802.11 network running centralized authentication services? (Choose two.)

- A. VPN concentrator

- B. Proxy server
- C. Wireless controller
- D. RADIUS server
- E. Multilayer switch

Answer: CD

QUESTION 21

A technician must determine if a web page user's visits are connecting to a suspicious website's IP address in the background. Which of the following tools would provide the information on TCP connections?

- A. netstat
- B. tracert
- C. arp
- D. ipconfig
- E. route

Answer: A

QUESTION 22

An administrator is moving to a new office. There will be several network runs through the ceiling area of the office. Which of the following is the BEST to utilize in these areas?

- A. Single-mode fiber-optic cabling
- B. Cat 5e-rated cabling
- C. Cat 6-rated cabling
- D. Plenum-rated cabling

Answer: D

QUESTION 23

A network technician receives a spool of Cat 6a cable and is asked to build several cables for a new set of Ethernet runs between devices. Which of the following tools are MOST likely needed to complete the task? (Choose three.)

- A. Wire stripper
- B. Cable crimper
- C. RJ-11 connectors
- D. RJ-45 connectors
- E. Multimeter
- F. Punchdown tool
- G. Tone generator

Answer: ABD

QUESTION 24

As part of a transition from a static to a dynamic routing protocol on an organization's internal network, the routing protocol must support IPv4 and VLSM. Based on those requirements, which

of the following should the network administrator use? (Choose two.)

- A. OSPF
- B. IS-IS
- C. RIPv1
- D. BGP
- E. VRRP

Answer: AB

QUESTION 25

A telecommunications provider has just deployed a new OC-12 circuit at a customer site. While the circuit showed no errors from the provider end to the customer's demarcation point, a network administrator is trying to determine the cause of dropped packets and errors on the circuit. Which of the following should the network administrator do to rule out any problems at Layer 1? (Choose two.)

- A. Use a loopback at the demark and router, and check for a link light
- B. Use an OTDR to validate the cable integrity
- C. Use a pinout tester to validate the cable integrity
- D. Use a multimeter to validate the cable integrity
- E. Check for any devices that may be causing EMI on the cable
- F. Clean the cables to be sure they are free of dust and debris

Answer: AB

QUESTION 26

A single PRI can deliver multiple voice calls simultaneously using which of the following Layer 1 technologies?

- A. Time division multiplexing
- B. Analog circuit switching
- C. CSMA/CD
- D. Time division spread spectrum

Answer: A

QUESTION 27

A network technician is diagnosing a time-out issue generated from an end user's web browser. The web browser issues standard HTTP get and post commands to interact with the website. Given this information, the technician would like to analyze the entire TCP handshake of the HTTP requests offline. Which of the following tools would allow the technician to view the handshake?

- A. Packet analyzer
- B. Port analyzer
- C. SNMP traps
- D. Spectrum analyzer

Answer: A

QUESTION 28

A customer cannot access a company's secure website. The company's network security is reviewing the firewall for the server and finds the following output:

Time	Action	Src IP	Src Port	Dst IP	Dst Port
0902	Allow	12.73.15.5	31865	10.5.0.10	80
1005	Deny	12.73.15.5	31866	10.5.0.10	443
1006	Deny	12.73.15.5	31890	10.5.0.10	443

Which of the following changes should be made to allow all customers to access the company's secure website?

- A. Allow any any 10.5.0.10 443
- B. Allow any any 12.73.15.5 443
- C. Allow 10.5.0.10 443 any any
- D. Allow 10.5.0.10 any 10.5.0.10 80

Answer: C

QUESTION 29

Which of the following MUST be implemented to share metrics between routing protocols within the same router?

- A. Routing loop
- B. Routing table
- C. Route redistribution
- D. Dynamic routes

Answer: B

QUESTION 30

An engineer is reviewing the implementation requirements for an upcoming project. The basic requirements identified by the customer include the following:

- WLAN architecture supporting speeds in excess of 150 Mbps
- Clientless remote network access
- Port-based network access control

Which of the following solution sets properly addresses all of the identified requirements?

- A. 802.11a, IPSec VPN, 802.1x
- B. 802.11ac, MPLS, 802.3
- C. 802.11b, PPTP, 802.1x
- D. 802.11g, MS-CHAP, 802.16
- E. 802.11n, SSL-VPN, 802.1x

Answer: E

QUESTION 31

Which of the following would be the MOST efficient subnet mask for a point-to-point link?

- A. /28
- B. /29
- C. /31
- D. /32

Answer: C

QUESTION 32

An office user cannot access local network drives but has full access to the Internet. A technician troubleshoots the issue and observes the following output of the ipconfig command:

Windows IP Configuration

```
Ethernet LAN Adapter: 980GTS
Connection-specific DNS Suffix: ...comptia.net
IPv4 Address: .....10.0.5.99
Subnet Mask: .....255.255.255.0
Default Gateway: ...10.0.5.1

Wireless LAN Adapter: FastWifi 99
Connection-specific DNS Suffix: ...guestwireless.local
IPv4 Address: .....172.16.0.5
Subnet Mask: .....255.255.255.0
Default Gateway: ...172.16.0.254
```

Which of the following would MOST likely allow the network drives to be accessed?

- A. Update the WLAN adapter driver
- B. Disable the WLAN adapter
- C. Check the wireless DHCP configuration
- D. Disable the LAN adapter

Answer: B

QUESTION 33

Ann, a network technician, has just installed a fiber switch in a datacenter. To run the fiber cabling, Ann plans the cable route over the top of the rack using the cable trays, down to the switch, coiling up any excess cable. As Ann configures the switch, she notices several messages in the logging buffer stating the receive signal of the SFP is too weak. Which of the following is MOST likely the cause of the errors in the logging buffer?

- A. Bend radius exceeded
- B. Fiber cable mismatch
- C. Fiber type mismatch
- D. Bad fiber switch

Answer: A

QUESTION 34

Which of the following wireless connection types utilize MIMO on non-overlapping channels?
(Choose two.)

- A. 802.11a
- B. 802.11ac
- C. 802.11b
- D. 802.11g
- E. 802.11n

Answer: BE

QUESTION 35

A network technician is creating a new subnet for 488 host machines. The technician is told to use a class B address scheme when making the subnet and is instructed to leave as much room as possible for additional subnets of the same size. Which of the following subnets would fulfill these requirements?

- A. 10.5.4.0/22
- B. 10.233.2.0/23
- C. 172.16.0.0/22
- D. 172.18.0.0/23
- E. 192.168.25.0/24

Answer: D

QUESTION 36

A network engineer is designing a new IDF in an old building. The engineer determines the equipment will fit in a two-post rack, and there is power available for this equipment. Which of the following would be the FIRST issue to remediate?

- A. Air flow and cooling
- B. UPS capability
- C. Circuit labeling
- D. Power redundancy

Answer: A

QUESTION 37

Which of the following DNS records needs to be configured for SMTP traffic?

- A. MX
- B. CNAME
- C. AAAA
- D. PTR

Answer: A

QUESTION 38

In which of the following ways does a DDoS attack differ from a spoofing attack?

- A. DDoS attacks target multiple networks
- B. Spoofing attacks originate from a single host
- C. DDoS attacks are launched from multiple hosts
- D. Spoofing attacks require physical presence

Answer: C

QUESTION 39

A user checks an IP address using an external website. The address is different than the one the user sees when opening a command prompt and typing in ipconfig/all. The user does not understand why the two tools show different IP addresses. This is BEST explained by the interworking of:

- A. network devices
- B. packet flow
- C. public/private networks
- D. traffic-routing protocols

Answer: C

QUESTION 40

Which of the following communication media can carry many voice, data, and video channels simultaneously over multiple frequencies?

- A. Broadband
- B. Baseband
- C. Analog modem
- D. CSMA

Answer: A

QUESTION 41

To replace a defective UPS, the network administrator must take the switch offline. The administrator wants to be able to perform maintenance UPS in the future without affecting the availability of the attached switch. Which of the following would BEST allow this to happen?

- A. Add a redundant power supply to the switch
- B. Implement stacking on the switches in the rack
- C. Add a second UPS into the rack
- D. Install a power converter for the switch

Answer: A

QUESTION 42

A forensic first responder arrives at the scene where an employee is suspected to have committed a computer-based crime. Which of the following should the first responder do FIRST?

- A. Document the scene
- B. Take pictures upon arrival
- C. Secure the area
- D. Implement chain of custody

Answer: C

QUESTION 43

A small town is attempting to attract tourists who visit larger nearby cities. A network engineer is asked to implement a network encompassing the five-block town center and nearby businesses. The inclusion of smartphones and portable devices is crucial to the plan. Which of the following is the network engineer being asked to implement?

- A. LAN
- B. PAN
- C. MAN
- D. WAN

Answer: C

QUESTION 44

An employee wishes to use a personal cell phone for work-related purposes, including storage of sensitive company data, during long business trips. Which of the following is needed to protect BOTH the employee and the company?

- A. An NDA ensuring work data stored on the personal phone remains confidential
- B. An AUP covering how a personal phone may be used for work matters
- C. A consent to monitoring policy covering company audits of the personal phone
- D. Real-time remote monitoring of the phone's activity and usage

Answer: D

QUESTION 45

Which of the following protocols can be both connection-oriented and connectionless?

- A. 20 FTP
- B. 53 DNS
- C. 67 DHCP
- D. 80 HTTP

Answer: B

QUESTION 46

Which of the following BEST describes the differences between VLAN hopping and session hijacking?

- A. VLAN hopping involves the unauthorized transition from one VLAN to another to gain additional access.
Session hijacking involves overriding a user's web connection to execute commands
- B. VLAN hopping is a brute force attack executed to gain additional access.
Session hijacking involves physically disrupting a network connection
- C. VLAN hopping involves overriding a user network connection to execute malicious commands.
Session hijacking involves compromising a host to elevate privileges
- D. VLAN hopping is the act of exploiting poor VLAN tagging.
Session hijacking is a web-based attack aimed at privilege escalation

Answer: A

QUESTION 47

An analyst is developing a proof of concept of a wireless-based attack as part of a penetration test against an organization's network. As part of the attack, the analyst launches a fake access point matching the SSID of the organization's guest access network. When a user connects to the fake access point, the analyst allows the traffic to flow through the access point to the legitimate site while the data traversing the network is logged for latest analysis and exploitation. Which of the following attacks has the analyst successfully performed in this scenario?

- A. Bluesnarfing
- B. Session hijacking
- C. MAC spoofing
- D. VLAN hopping
- E. Man-in-the-middle

Answer: E

QUESTION 48

A network administrator receives a call from the sales department requesting ports 20 and 21 be opened on the company's firewall to allow customers to retrieve a large file. Which of the following should the administrator perform BEFORE making the needed changes? (Choose two.)

- A. Document the reason for the request
- B. Scan the file for malware to protect the sales department's computers
- C. Follow the company's approval process for the implementation
- D. Install a TFTP server for the customers to use for the transfer
- E. Create a honeypot to store the file on for the customers to use
- F. Write the SLA for the sales department authorizing the change

Answer: AC

QUESTION 49

A user reports that a laptop cannot connect to the Internet despite the fact the wireless Internet was functioning on it yesterday. The user did not modify the laptop in any way, and the wireless Internet is functional on other users' laptops. Which of the following issues should be reviewed to help the user to connect to the wireless network?

- A. Wireless switch toggled off
- B. WAP settings

- C. WLAN IP address out of scope
- D. Wireless controller misconfiguration

Answer: A

QUESTION 50

A network administrator wants to increase the confidentiality of the system by hardening the authentication process. Currently, the users log in using usernames and passwords to access the system. Which of the following will increase the authentication factor to three?

- A. Adding a fingerprint reader to each workstation and providing a RSA authentication token
- B. Adding a fingerprint reader and retina scanner
- C. Using a smart card and RSA token
- D. Enforcing a stronger password policy and using a hand geometry scan

Answer: A

QUESTION 51

A network technician is building a network for a small office. The office currently has cable TV and now requires access to the Internet without adding any cabling other than what is already in place. Which of the following solutions should the technician install to meet these requirements?

- A. DOCSIS modem
- B. Wireless router
- C. DSL modem
- D. Access point

Answer: A

QUESTION 52

A network engineer arrives at work and discovers that many users are having problems when attempting to connect to the company network shared drives. The network operations center (NOC) technician just completed server upgrades the night before. To which of the following documents should the NOC technician refer to determine what potentially caused the connectivity problem?

- A. Network maps
- B. Cable management
- C. Release notes
- D. Change management

Answer: D

QUESTION 53

Which of the following VPN protocols establishes a secure session that can be initiated using a browser?

- A. IPSec
- B. SSL VPN

- C. PTP
- D. PPTP

Answer: B

QUESTION 54

A technician is setting up a public guest network for visitors to access the Internet that must be separate from the corporate network. Which of the following are the BEST steps for the technician to take with minimum overhead configuration? (Choose two.)

- A. Enable SSID broadcasting to identify the guest network
- B. Configure visitor devices to use static IP addresses
- C. Enable two-factor authentication on visitor devices
- D. Configure the access point to use WPA2-AES encryption
- E. Ensure the access point is not running in mixed mode

Answer: AB

QUESTION 55

When choosing a type of storage that integrates with the existing network infrastructure, the storage must be easily configurable to share files and can communicate with all existing clients over TCP/IP. Which of the following is the BEST technology for the network administrator to implement?

- A. iSCSI
- B. Fibre Channel
- C. NAS
- D. DAS

Answer: C

QUESTION 56

A network technician is installing a new network switch and is looking for an appropriate fiber optic patch cable. The fiber optic patch panel uses a twist-style connector. The switch uses a SFP module. Which of the following connector types should the fiber patch cable have?

- A. LC
- B. ST
- C. SC
- D. MTRJ
- E. MTP

Answer: B

QUESTION 57

Which of the following WAN technologies utilizes the concept of virtual circuits and point-multipoint connections?

- A. ISDN

- B. MPLS
- C. PRI
- D. Broadband cable
- E. Frame relay

Answer: E

QUESTION 58

A network administrator wishes to ensure there are no unnecessary open communication paths into a server. Using a port scanner, the administrator finds that ports are reported as closed. Which of the following BEST explains this response?

- A. The ports belong to an active system and are denying requests
- B. The ports are associated with deprecated services
- C. The ports do not belong to a live system
- D. The ports replied with a SYN/ACK response

Answer: B

QUESTION 59

Users are reporting issues with slow connection speeds and a loss of connectivity on the newly installed wireless network. The issues are intermittent but seem to occur most often around midday.

Which of the following is the MOST likely cause?

- A. There is interference from small appliances
- B. The signal coverage area is too small
- C. Not enough DHCP addresses have been allotted
- D. The DNS cache on the users' computers has become corrupt

Answer: C

QUESTION 60

A user reports difficulties connecting a PC to a wired network. The PC connects to an IP phone, which is working correctly. A network technician can verify that other devices successfully connect to the phone. At which of the following layers of the OSI model is the problem MOST likely located?

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

Answer: A

QUESTION 61

Which of the following physical security controls is MOST likely to be susceptible to a false positive?

- A. Identification card
- B. Biometric device
- C. Proximity reader
- D. Video camera

Answer: C

QUESTION 62

An assistant systems analyst reports the following findings of an investigation of slow Internet connections in a remote office to the senior systems analyst:

Device	CPU Utilization	Memory Utilization	Link Status
Router	5%	43%	Good
Firewall	92%	58%	Good
Switch 1	23%	32%	Good
Switch 2	8%	81%	Good

Which of the following devices is causing the issue?

- A. Router
- B. Firewall
- C. Switch 1
- D. Switch 2

Answer: B

QUESTION 63

A small business developed an in-house application that is very sensitive to network latency when communicating between servers. Due to a lack of funds, the business had to build its own network for workstations and servers. Now a network administrator must redesign the network due to performance issues with the application. Which of the following would be the MOST cost effective for the administrator to recommend?

- A. Create Ethernet VLANs
- B. Disable autonegotiation on the servers
- C. Install 10Gb Ethernet NICs in the servers
- D. Install Fibre Channel for the server network

Answer: C

QUESTION 64

A network technician is configuring a firewall access list to secure incoming connections to an email server. The internal address of this email server is 192.168.1.143. The firewall should allow external email servers to send email to the email server. The email server also supports client access via a web browser. Only secure protocols should be used, and only the necessary ports should be open. Which of the following ACL rules should be configured in the firewall's WAN port? (Choose two.)

- A. Permit 192.168.1.143.25

- B. Permit 192.168.1.143.80
- C. Permit 192.168.1.143.110
- D. Permit 192.168.1.143.143
- E. Permit 192.168.1.143.443
- F. Permit 192.168.1.143.587

Answer: EF

QUESTION 65

A network administrator needs to transmit traffic to geographically diverse sites to improve performance. Which of the following devices would BEST direct traffic to the remote sites?

- A. Hub
- B. Bridge
- C. Switch
- D. Router

Answer: D

QUESTION 66

Which of the following should a technician investigate when using a network baseline to troubleshoot?

- A. Tracing a network wire connectivity issue from the datacenter to a host.
- B. Determining if the server performance is degraded.
- C. Changes that have been made to the network configuration.
- D. Location of networking equipment in a rack.

Answer: B

QUESTION 67

A technician needs to upgrade a SOHO wireless router's firmware. The technician resets the router to factory settings and installs the new firmware. The technician enters the DHCP information and sets the SSID. Which of the following configurations would provide the MOST protection from advance hackers?

- A. Disable the broadcasting of the SSID.
- B. Enable WPA2 authentication for all hosts.
- C. Use private addressing for the DHCP scope.
- D. Install unidirectional antennas.

Answer: B

QUESTION 68

A technician notices clients are receiving a 169.254.x.x IP address following the upgrade of a server. Which of the following ports should the technician check on the local server firewall?

- A. ports 20 and 21
- B. ports 67 and 68

- C. ports 80 and 443
- D. port 123 and 8080

Answer: B

QUESTION 69

Which of the following datacenter security methodologies is MOST likely to remain usable during a network outage?

- A. biometric scanners
- B. door locks
- C. video surveillance
- D. motion detectors

Answer: B

QUESTION 70

A network technician is implementing a solution on the network to hide the workstation internal IP addresses across a WAN. Which of the following is the technician configuring?

- A. QoS
- B. DMZ
- C. RIP
- D. NAT

Answer: D

QUESTION 71

Employees want the ability to use personal devices on the guest network while working out at the company gym. In order to meet the request, which of the following policies requires employee adherence?

- A. AUP
- B. SLA
- C. NDA
- D. MOU

Answer: A

QUESTION 72

Which of the following BEST describes the BGP routing protocol?

- A. distance vector
- B. hybrid
- C. static
- D. link state

Answer: B

QUESTION 73

A customer is reporting difficulty connecting some devices after replacing a wireless router with a new wireless 802.11ac router. The SSID, encryption and password are the same as the previous router. A technician goes on-site and notices the devices that are no longer connecting appear to be several years ago. Which of the following is MOST likely the problem?

- A. the password needs to be re-entered.
- B. there is a security type mismatch.
- C. there is insufficient antenna power.
- D. there is a frequency mismatch.
- E. the channel has changed.

Answer: D

QUESTION 74

Which of the following functions would be used to securely monitor and actively manage external connections?

- A. VPN concentrator
- B. HIDS
- C. Load balancer
- D. Packet shaper

Answer: A

QUESTION 75

A technician has replaced the Internet gateway router, and now no users can reach the Internet. The technician can ping the router Ethernet port but not the ISP's router IP address. Which of the following is the MOST likely problem?

- A. Faulty crossover cable
- B. DNS server is down
- C. Switching loop
- D. Outside interface shutdown

Answer: D

QUESTION 76

Which of the following commands will display the associated IP address of a network adapter in Windows and Linux environments? (Select TWO).

- A. dig
- B. nslookup
- C. nbstat
- D. ifconfig
- E. ipconfig

Answer: DE

QUESTION 77

When querying a DNS server for an AAAA record, which of the following is an appropriate response?

- A. 192.168.2.1
- B. 00:f3:82:99:a2:b8
- C. 61.23.168.192.in-addr.arpa
- D. 3ffe:1900:4545:3:200:f8ff:fe21:67cf

Answer: D

QUESTION 78

A computer on VLAN 10 with the IP address of 192.168.1.45/27 cannot ping a computer on VLAN 20 with the IP address of 192.168.1.65/27. Which configuration change will allow the PING to be successful?

- A. Replace the router with a Layer 2 switch that supports VLANs
- B. Change VLAN 20 computers Default Gateway to 192.168.1.127/27
- C. Change VLAN 10 computers Default Gateway to 192.168.1.32/27
- D. Allow ICMP to pass through the Router

Answer: D

QUESTION 79

Which of the following network devices restricts traffic based on words, signatures, and URLs?

- A. Layer 2 switch
- B. Content filter
- C. Load balancer
- D. Traffic analyzer

Answer: B

QUESTION 80

A new firewall was recently installed blocking SMTP traffic. As a result, no one has Internet access.

Which of the following has MOST likely occurred?

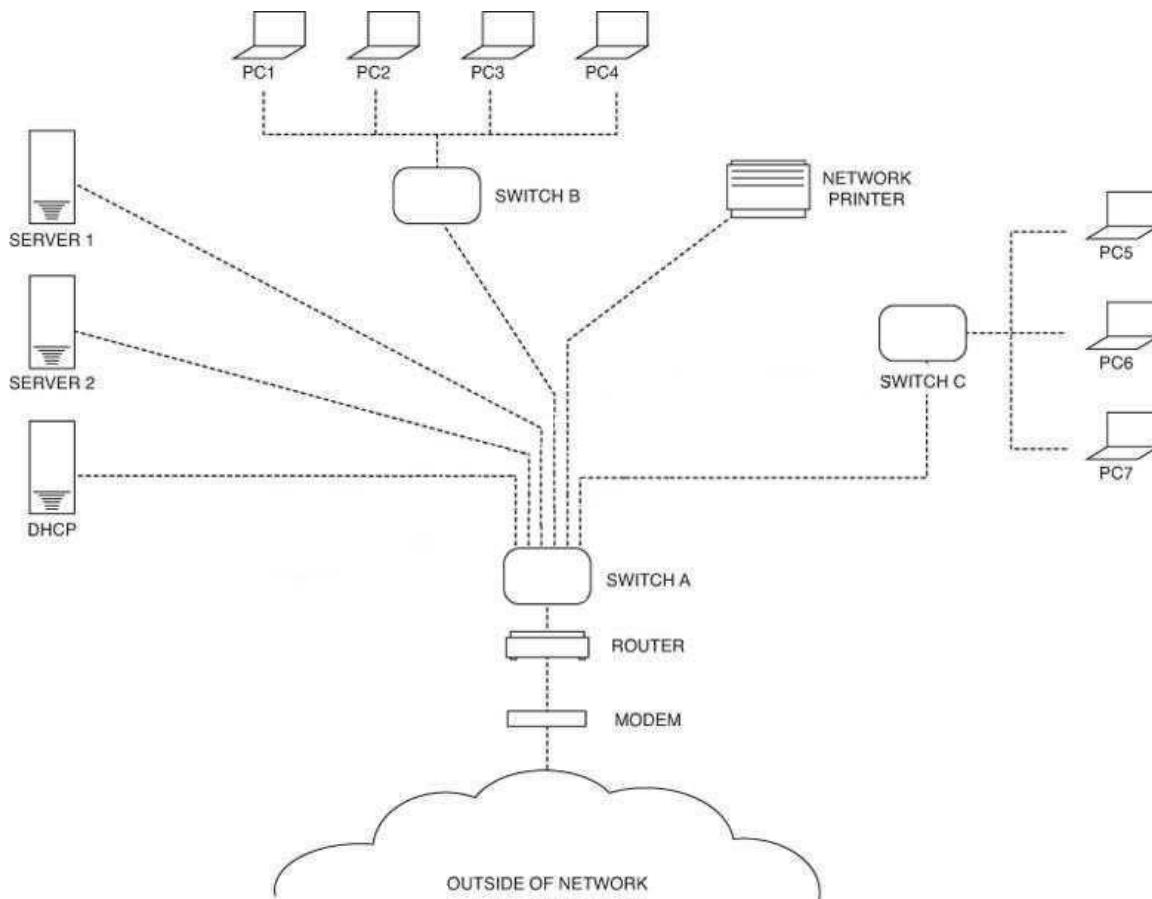
- A. Port security is blocking all traffic.
- B. An IDS is blocking all traffic.
- C. Implicit deny is blocking all traffic.
- D. SMTP is blocking all traffic.

Answer: C

QUESTION 81

Please refer to the attached exhibit.

Which of the following types of configuration management documentation is represented?



- A. Network security policy
- B. Network baseline
- C. Logical network diagram
- D. Wiring schematic

Answer: C

QUESTION 82

A user is unable to open up websites on the Internet from a browser. The administrator determines that the workstation can ping its local gateway, but not the remote web server. At which of the following layers of the OSI model does the problem MOST likely exist?

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

Answer: B

QUESTION 83

Which of the following uses types and codes rather than ports?

- A. EIGRP
- B. ICMP
- C. UDP
- D. IPv6

Answer: B

QUESTION 84

A technician, Joe, visits a site that has reported a network down emergency. He immediately reboots the switches and the router since the network is down. Which of the following network troubleshooting methodology steps should Joe have performed FIRST?

- A. Determine if anything has changed
- B. Once a theory is confirmed determine the next step is to resolve the problem
- C. Implement the solution or escalate as necessary
- D. Question the obvious

Answer: A

QUESTION 85

Which of the following defines an IP address that is NOT routed on the Internet?

- A. Multicast
- B. Public
- C. Private
- D. Classful

Answer: C

QUESTION 86

Matt, an administrator, notices a flood fragmented packet and retransmits from an email server. After disabling the TCP offload setting on the NIC, Matt sees normal traffic with packets flowing in sequence again. Which of the following utilities was he MOST likely using to view this issue?

- A. Spam filter
- B. Protocol analyzer
- C. Web application firewall
- D. Load balancer

Answer: B

QUESTION 87

Which of the following specifications would Sara, an administrator, implement as a network access control?

- A. 802.1q
- B. 802.3
- C. 802.11n
- D. 802.1x

Answer: D

QUESTION 88

Which of the following is characterized by an attacker attempting to map out an organization's staff hierarchy in order to send targeted emails?

- A. Whaling
- B. Impersonation
- C. Privilege escalation
- D. Spear phishing

Answer: A

QUESTION 89

Which of the following defines when Pete, an attacker, attempts to monitor wireless traffic in order to perform malicious activities?

- A. XSS
- B. SQL injection
- C. Directory traversal
- D. Packet sniffing

Answer: D

QUESTION 90

Which of the following provides the MOST protection against zero day attacks via email attachments?

- A. Anti-spam
- B. Anti-virus
- C. Host-based firewalls
- D. Patch management

Answer: A

QUESTION 91

Which of the following access controls enforces permissions based on data labeling at specific levels?

- A. Mandatory access control
- B. Separation of duties access control
- C. Discretionary access control
- D. Role based access control

Answer: A

QUESTION 92

A username provides which of the following?

- A. Biometrics
- B. Identification
- C. Authorization
- D. Authentication

Answer: B

QUESTION 93

Use of group accounts should be minimized to ensure which of the following?

- A. Password security
- B. Regular auditing
- C. Baseline management
- D. Individual accountability

Answer: D

QUESTION 94

Privilege creep among long-term employees can be mitigated by which of the following procedures?

- A. User permission reviews
- B. Mandatory vacations
- C. Separation of duties
- D. Job function rotation

Answer: A

QUESTION 95

Which of the following wireless standards is capable of ONLY operating on 5.8GHz?

- A. 802.11a
- B. 802.11b
- C. 802.11g
- D. 802.11n

Answer: A

QUESTION 96

Which of the following protocols are used to connect devices in a secure manner? (Select TWO).

- A. TELNET
- B. SSH
- C. RDP
- D. HTTP
- E. DNS

F. FTP

Answer: BC

QUESTION 97

Which of the following provides the use of a secure tunnel for telecommuting without manually installing and configuring encryption software?

- A. RDP
- B. SSL VPN
- C. ISAKMP
- D. TLS 2.0

Answer: B

QUESTION 98

Which of the following is based ENTIRELY on using ICMP packets?

- A. Social engineering
- B. NMAP
- C. Buffer overflow attack
- D. Smurf attack

Answer: D

QUESTION 99

Which of the following could be used to stop unknown threats?

- A. DMZ
- B. Signature based IPS
- C. Behavior based IPS
- D. Honeypots

Answer: C

QUESTION 100

Which of the following describes a DNS server?

- A. Translates an IP address to a name
- B. Caches commonly viewed web pages
- C. Assigns IP addresses to network devices
- D. Provides port security for a network

Answer: A

QUESTION 101

A workstation on the network is configured as follows. A user reports that they are unable to print to a device located on a different subnet. Which of the following is the MOST likely problem?

IP address: 172.16.204.12
Subnet Mask: 255.255.0.0
Default Gateway: 172.15.204.254
DNS address: 172.16.204.1
Broadcast address: 172.16.255.255

- A. DNS address
- B. Subnet mask
- C. Default gateway
- D. Broadcast address
- E. IP address

Answer: C

QUESTION 102

A technician recently fixed a computer with several viruses and spyware programs on it and notices the Internet settings were set to redirect all traffic through an unknown proxy. This type of attack is known as which of the following?

- A. Phishing
- B. Social engineering
- C. Man-in-the-middle
- D. Shoulder surfing

Answer: C

QUESTION 103

Which of the following is the BEST way to mitigate security threats on a network?

- A. Social engineering
- B. User training
- C. Incident response
- D. Man-in-the-middle

Answer: B

QUESTION 104

Which of the following devices should be installed on a network to monitor the presence of and actively defend against attacks?

- A. An IPS
- B. A protocol analyzer
- C. A traffic shaper
- D. An IDS

Answer: A

QUESTION 105

Which of the following is an IPv6 address?

- A. 00:14:38:05:7B:E5
- B. 10.10.1.1
- C. 192.168.1.1
- D. 2001:cdba::3257:9652

Answer: D

QUESTION 106

A company has a large number of employees that need VPN access from home. Which of the following is the BEST solution for deploying and managing the remote access?

- A. Site-to-site VPN
- B. Network-based firewall
- C. SSL VPN
- D. Host-based firewall

Answer: C

QUESTION 107

Which of the following is a routed protocol that functions at layer 3 of the OSI model?

- A. IP
- B. Frame relay
- C. PPP
- D. ADSL

Answer: A

QUESTION 108

Something you have, something you are, and something you know are the three tenets of:

- A. Social engineering
- B. Change management
- C. Remote access
- D. Access control

Answer: D

QUESTION 109

A firewall that operates at Layer 7 of the OSI model is known as a(n):

- A. Circuit gateway
- B. Packet filter
- C. Application level
- D. Redundant firewall

Answer: C

QUESTION 110

Which of the following allows a central point to simultaneously address other points without addressing all of them?

- A. Multicast
- B. Subnetting
- C. Unicast
- D. Broadcast

Answer: A

QUESTION 111

Which of the following connector types would Sandy, a network technician, use to connect a serial cable?

- A. RJ-11
- B. BNC
- C. LC
- D. DB-9

Answer: D

QUESTION 112

Which of the following are network topologies? (Select TWO).

- A. Ethernet
- B. Duplex
- C. Star
- D. Circular
- E. Bus

Answer: CE

QUESTION 113

Which of the following MUST be kept synchronized in order for Kerberos to work?

- A. Certificate
- B. Ticket
- C. Time
- D. Token

Answer: C

QUESTION 114

Which of the following MUST be used when securing a VoIP network consisting of private IP addresses?

- A. IPS
- B. Application layer firewall
- C. IDS
- D. An unmanaged switch

Answer: B

QUESTION 115

Which of the following uses certificates as a form of security?

- A. Kerberos
- B. LDAP
- C. PKI
- D. CHAP

Answer: C

QUESTION 116

Which of the following cables will MOST likely be used to connect to a satellite dish?

- A. RG-6
- B. CAT5e
- C. Fiber
- D. CAT6

Answer: A

QUESTION 117

A VoIP line will MOST likely have which of the following connectors?

- A. RJ-11
- B. DB-25
- C. BNC
- D. RJ-45

Answer: D

QUESTION 118

Which of the following is a proprietary routing protocol?

- A. RIP
- B. EIGRP
- C. OSPF
- D. BGP

Answer: B

QUESTION 119

Which of the following is an invalid MAC address?

- A. AA:CE:58:FD:90:08
- B. 44:98:3E:F8:33:23
- C. 56:AD:BX:89:55:54
- D. 94:9E:FE:EE:8C:DF

Answer: C

QUESTION 120

Which of the following network topologies allows only communication to take place from one node at a time by passing a token around the network?

- A. Star
- B. Mesh
- C. Bus
- D. Ring

Answer: D

QUESTION 121

A technician discovers that a malware infection has damaged part of the Windows TCP/IP stack. Which of the following commands can help repair the damage?

- A. netsh lan
- B. netsh interface
- C. netsh wlan
- D. netsh winsock

Answer: D

QUESTION 122

Which of the following devices exist as either hardware or software to assist in routing traffic? (Select TWO).

- A. Cable modem
- B. Layer 2 switch
- C. Router
- D. NIDS
- E. Layer 3 switch

Answer: CE

QUESTION 123

Which of the following operates at OSI layer 2 to forward traffic based on the MAC address?

- A. Switch
- B. Proxy Server
- C. Router

D. VPN Concentrator

Answer: A

QUESTION 124

The Transport Layer of the TCP/IP model corresponds to which of the following layers of the OSI model?

- A. 1
- B. 3
- C. 4
- D. 5

Answer: C

QUESTION 125

Which of the following is used to provide hot standby capabilities using paired routers?

- A. CARP
- B. L2TP
- C. PPTP
- D. ISAKMP

Answer: A

QUESTION 126

Which of the following is used to assign an IP address to a device?

- A. DHCP
- B. NTP
- C. DNS
- D. RADIUS

Answer: A

QUESTION 127

Which of the following protocols is used to transmit outgoing email?

- A. RDP
- B. NTP
- C. POP3
- D. SMTP

Answer: D

QUESTION 128

A network technician is configuring a wireless network. To avoid interference from other wireless networks in the area, the technician should change which setting?

- A. Channel
- B. SSID
- C. Firewall rule
- D. Encryption

Answer: A

QUESTION 129

A user is unable to print to a network printer. Which of following is the FIRST step that a technician should take to troubleshoot the issue?

- A. Identify the problem.
- B. Establish a plan of action to resolve the problem.
- C. Establish a theory of probable cause.
- D. Implement preventative measures.

Answer: A

QUESTION 130

Which of the following is a purpose of a VLAN?

- A. Decreases bandwidth on a network
- B. Segments broadcast traffic
- C. Increases port speed
- D. Allows another connection to the router

Answer: B

QUESTION 131

Which of the following would Sandy, a technician, find in a network map?

- A. QoS standards
- B. MDF/IDFs
- C. System logs
- D. Firewall rules

Answer: B

QUESTION 132

Which of the following protocols would be used to send email to an email server?

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

Answer: D

QUESTION 133

Which of the following default ports would need to be open on a firewall to allow remote desktop access?

- A. 143
- B. 443
- C. 3389
- D. 8080

Answer: C

QUESTION 134

After plugging a cable into a computer, a user reports there is no network access. Which of the following tools would the technician MOST likely check to verify that the cable was crimped correctly?

- A. Punch down tool
- B. Cable certifier
- C. Loopback plug
- D. Toner probe

Answer: B

QUESTION 135

Which of the following DNS records would allow for a website to have more than one FQDN?

- A. TXT
- B. PTR
- C. MX
- D. CNAME

Answer: D

QUESTION 136

A small office home office (SOHO) customer is going to be replacing their switch. The customer also wants to add a WAP in a dropped ceiling; however, there are no power outlets above the drop ceiling, but there is a CAT5e network jack. Which of the following technologies should the new switch have to allow this WAP to be placed where the customer requests, without any other major changes to the environment?

- A. PoE
- B. Layer 3 switching
- C. STP
- D. VLAN

Answer: A

QUESTION 137

Tenants access multiple wireless networks in a building. Users report intermittent connectivity. Which of the following is the MOST likely cause of the problem?

- A. The channels are overlapping with other wireless networks and should be changed.
- B. The SSIDs are incompatible and should be renamed.
- C. The users have incompatible wireless network cards and should upgrade.
- D. The default idle period for logoff is too short and should be changed to a longer limit.

Answer: A

QUESTION 138

Which of the following BEST describes how a layer 2 switch functions?

- A. Switches packets within the same subnet based on MAC addresses
- B. Switches packets between different subnets based on IP addresses
- C. Switches packets between different subnets based on MAC addresses
- D. Switches packets between different subnets based on MAC addresses

Answer: A

QUESTION 139

Jeff, a technician, has been asked to add a subnet to the company's LAN. Which of the following interfaces on the router will be modified?

- A. FastEthernet 0/0
- B. AUX 0
- C. Console 0
- D. Serial 0/0/0

Answer: A

QUESTION 140

Jeff, a network engineer, is troubleshooting an issue where clients are not receiving IP addresses from a new, properly configured DHCP server on another subnet. Statically addressed clients can get onto the same network with no issues. Which of the following is causing the issue?

- A. Incorrect VLAN tagging
- B. Missing helper addresses
- C. Wrong default gateway
- D. Improper routing protocols

Answer: B

QUESTION 141

Which of the following subnet masks would allow for 192.168.0.3 and 192.168.0.240 to be in the same subnet?

- A. 255.255.255.0
- B. 255.255.255.128

- C. 255.255.255.192
- D. 255.255.255.248

Answer: A

QUESTION 142

Jeff, an administrator, has just finished installing a new switch and connected two servers with IPs of 192.168.105.20 and .30. The servers are able to communicate with each other, but are unable to reach the Internet. Jeff sees the following information in the switch configuration:

```
interface VLAN 105  
IP address 192.168.105.5 255.255.255.0
```

Jeff is able to ping the router at 192.168.105.1 from the switch.
Which of the following is the MOST likely cause of the problem?

- A. The subnet mask is incorrect.
- B. A routing loop has occurred.
- C. Jeff used a crossover cable to connect the switch to the gateway.
- D. The server is missing default-gateway information.

Answer: D

QUESTION 143

Kim, a user, took a laptop on vacation and made changes to the configuration in order to use the device at the hotel. She can reach the Internet, but cannot access any internal network resources.

Which of the following is the MOST likely reason?

- A. Incorrect DNS
- B. Incorrect subnet mask
- C. Duplicate IP address
- D. Incorrect SSID

Answer: A

QUESTION 144

Which of the following is the default subnet mask for a Class B address?

- A. 255.0.0.0
- B. 255.255.0.0
- C. 255.255.255.0
- D. 255.255.255.255

Answer: B

QUESTION 145

Which of the following default ports would need to be disabled to block TFTP traffic?

- A. 20
- B. 21
- C. 69
- D. 123

Answer: C

QUESTION 146

Which of the following ports would Zach, a technician, need to open on a firewall to allow SSH on the default port?

- A. 20
- B. 21
- C. 22
- D. 23

Answer: C

QUESTION 147

Which of the following ports is the default telnet port?

- A. 20
- B. 21
- C. 22
- D. 23

Answer: D

QUESTION 148

Which of the following ports would have to be allowed through a firewall to allow SNMP traffic to pass on its default port? (Select TWO).

- A. 22
- B. 23
- C. 143
- D. 161
- E. 162
- F. 8080

Answer: DE

QUESTION 149

Which of the following has a maximum transfer rate of 54Mbps and operates at the 5GHz frequency?

- A. 802.11a
- B. 802.11b
- C. 802.11g

D. 802.11n

Answer: A

QUESTION 150

Kim, a network technician, is installing an 802.11n network. Which of the following should Kim enable to ensure that the network only allows 802.11n clients?

- A. Name the SSID on the 802.11n network only
- B. Limit the DHCP address pool
- C. Disable 802.11b and 802.11g
- D. Only use WPA encryption

Answer: C

QUESTION 151

Zach, a technician, is installing an 802.11n network. Which of the following should he disable to stop broadcasting the network name?

- A. Channel
- B. WEP
- C. SSID
- D. WPA

Answer: C

QUESTION 152

Which of the following default services uses TCP/UDP port 88?

- A. LDAP
- B. IGMP
- C. HTTP
- D. Kerberos

Answer: D

QUESTION 153

Which of the following ports should be allowed through a firewall to allow DNS resolution to occur to an outside DNS server?

- A. 20
- B. 53
- C. 80
- D. 3389

Answer: B

QUESTION 154

Which of the following uses port 53 by default?

- A. RDP
- B. QoS
- C. DHCP
- D. DNS

Answer: D

QUESTION 155

Which of the following ports does DHCP use? (Select TWO).

- A. 22
- B. 23
- C. 67
- D. 68
- E. 69

Answer: CD

QUESTION 156

Lisa, a network administrator, needs to allow all websites to be accessible by the sales team for business purposes. Which of the following ports need to be enabled on the firewall? (Select TWO).

- A. 23
- B. 25
- C. 53
- D. 80
- E. 443

Answer: DE

QUESTION 157

Lisa, a technician, is asked to not allow FTP traffic on a network. Which of the following ports should be blocked on the firewall to achieve this?

- A. 21
- B. 22
- C. 23
- D. 25

Answer: A

QUESTION 158

Which of the following ports are MOST commonly used to interactively configure a networking device? (Select TWO).

- A. 21

- B. 22
- C. 23
- D. 53
- E. 67

Answer: BC

QUESTION 158

A technician is diagnosing an issue with a new T1 connection. The router is configured, the cable is connected, but the T1 is down. To verify the configuration of the router, which of the following tools should the technician use?

- A. Loopback adapter
- B. Cable tester
- C. Tone generator
- D. Multimeter

Answer: A

QUESTION 159

In order to reduce spam email, Kim, a network administrator, changes the standard SMTP port from which of the following port numbers to port number 587?

- A. 20
- B. 21
- C. 23
- D. 25

Answer: D

QUESTION 160

A company would like all HTTP traffic to filter through a proxy server on port 8080. Which of the following port numbers needs to be redirected through the proxy server to accomplish this?

- A. 20
- B. 80
- C. 143
- D. 443

Answer: B

QUESTION 161

A company wants to only allow incoming HTTP and HTTPS traffic on their public wireless network. Which of the following port numbers should be the only allowed open ports on the firewall to accomplish this? (Select TWO).

- A. 20
- B. 80
- C. 143

- D. 443
- E. 8080

Answer: BD

QUESTION 162

An organization has installed a new firewall. Users need to have access to remote websites and must be able to use SSH to retrieve files from remote locations. Which of the following actions should be taken on the new firewall? (Select TWO).

- A. Allow UDP port 21 outbound
- B. Allow UDP port 22 outbound
- C. Allow UDP port 80 outbound
- D. Allow TCP port 21 outbound
- E. Allow TCP port 22 outbound
- F. Allow TCP port 80 outbound

Answer: EF

QUESTION 163

An organization recently installed a firewall on the network. Employees must have access to their work computer from their home computer. In which of the following ways should the firewall be configured?

- A. Allow TCP port 3389 outbound
- B. Allow UDP port 3389 inbound
- C. Allow UDP port 3389 outbound
- D. Allow TCP port 3389 inbound

Answer: D

QUESTION 164

An organization recently installed a firewall on the network. Employees must be able to send and receive email from a POP3 server. In which of the following ways should the firewall be configured? (Select TWO).

- A. Allow TCP port 23
- B. Allow TCP port 25
- C. Allow TCP port 110
- D. Allow UDP port 25
- E. Allow UDP port 110

Answer: BC

QUESTION 165

Which of the following protocols uses port 3389?

- A. IMAP
- B. DHCP

- C. SSH
- D. RDP

Answer: D

QUESTION 166

Kurt, a network technician, has configured a new firewall on the network. Users are reporting errors when attempting to access several websites. Kurt attempts to access several popular websites with no errors, however, he does receive an error when attempting to access a bank website. Which of the following rules would BEST allow access to the bank website?

- A. Allow UDP port 53
- B. Allow TCP port 80
- C. Allow UDP port 340
- D. Allow TCP port 443

Answer: D

QUESTION 167

attempting to access a popular website. Which of the following will MOST likely correct the error?

- A. HTTP uses UDP
- B. DNS port 23 needs to be allowed
- C. HTTP needs port 443 allowed
- D. UDP port 53 needs to be allowed

Answer: D

QUESTION 168

A network technician needs to address bandwidth issues on the wireless network. There are currently four 802.11n access points. The technician would like to increase the bandwidth. Which of the following would be the BEST solution?

- A. Disable SSID
- B. Channel bonding
- C. MIMO
- D. Increase the signal

Answer: B

QUESTION 169

An administrator is receiving reports from an executive that the executive's wireless access point loses the signal frequently, even though the WAP is on the executive's desk. The office contains four other 802.11n access points. Which of the following would MOST likely correct interference problems in the executive's office?

- A. Turn off SSID broadcasting for the executive's access point
- B. Replace the 802.11n access point in the office with an 802.11a access point.
- C. Change the channel on the access point to channel 11.

- D. Turn off as many lights in the executive's office as possible to reduce interference.

Answer: C

QUESTION 170

A network technician needs to install an additional access point to the company's wireless network. The network has two 802.11b access points. Which of the following channels should be used to allow the access point's coverage areas to overlap?

- A. 1, 6, 11
- B. 2, 5, 10
- C. 3, 13, 23
- D. 4, 8, 16

Answer: A

QUESTION 171

Kim, a network administrator, is seeing workstations in building C authenticate to the building A wireless access point. Which of the following would resolve this issue?

- A. Change the security method
- B. Reduce the transmission power
- C. Change the SSID
- D. Change the frequency

Answer: B

QUESTION 172

An 801.11g wireless access point was configured as follows:

- AP encryption forced to WPA2-AES mode only
- MAC address filtering enabled with the following MAC address in the allow list: 00-ab-29-da-c3-40

Which is true about the above configuration?

- A. Any 802.11b/g compatible client can connect to the wireless network if they support TKIP, the MAC address is 00-ab-29-da-c3-40, and the encryption key is known by the client.
- B. An 802.11a compatible client can connect to the wireless network only if its MAC address is 00-ab-29-da-c3-40 and the encryption key is known by the client.
- C. An 802.11n compatible client can connect to the wireless network only if its MAC address is 00-ab-29-da-c3-40 and the encryption key is known by the client.
- D. Any 802.11g compatible client can connect to the wireless network if the encryption key is known by the client.

Answer: C

QUESTION 173

Jeff, a business owner, has discovered that several of the nearby businesses have wireless networks. Jeff wants to implement a unique wireless network inside the business. Which of the

following should be configured on the wireless access point to reduce interference from the other wireless networks?

- A. PPPoE authentication
- B. MAC filtering
- C. WPA encryption
- D. Wireless channel

Answer: D

QUESTION 174

A company only wants preapproved laptops to be able to connect to a wireless access point. Which of the following should be configured?

- A. SSID disable
- B. ACL rules
- C. WPA encryption
- D. MAC filtering

Answer: D

QUESTION 175

company wants the public to be able to connect to the wireless network with minimal security, but not be able to connect to the private internal network. Which of the following firewall rules would BEST accomplish this?

- A. Content filtering on the wireless access point
- B. Allow traffic from the wireless access point
- C. Block traffic from the wireless access point
- D. Packet filtering on the wireless access point

Answer: C

QUESTION 176

Which of the following occurs when antenna gain is increased on an access point?

- A. Connection speeds decrease
- B. Throughput decreases
- C. Cell size increases
- D. Attenuation increases

Answer: C

QUESTION 177

Which of the following technologies allows more than two transceivers with an access point?

- A. MIMO
- B. FIFO
- C. 802.1x

D. WPA

Answer: A

QUESTION 178

Jeff, a customer, has a wireless network and has reported that the network traffic from the wireless access points seems high compared to the limited number of wireless devices used. Jeff believes that other non-employees are using the wireless network to access the Internet. Which of the following could be used to limit the access to the wireless network? (Select TWO).

- A. WPA encryption
- B. Changing wireless channels
- C. MAC filtering
- D. Changing wireless speed standards
- E. SSID disable

Answer: AC

QUESTION 179

Kim, a technician, is configuring an 802.11n access point. Other WAPs on the network use 802.11b. Which of the following will Kim have to setup to make sure these WAPs will be able to communicate?

- A. Enable mixed mode
- B. Disable SSID
- C. Disable encryption
- D. Enable 'n' only mode

Answer: A

QUESTION 180

Lisa, an administrator, has set up an 802.11n wireless network. Users with 802.11n laptops have reported that speeds are slow. After testing, Lisa determines that users max out at 802.11g speeds. Which of the following would MOST likely fix this issue?

- A. Enable wireless multimedia (WMM) for QoS
- B. Use the 40MHz channels in the 2.4GHz band
- C. Enable access point antenna isolation
- D. Limit the clients to 802.11g compatible laptops

Answer: A

QUESTION 181

Zach, a network administrator, needs to purchase a new switch to support VoIP phones and wireless access points in a new building. Which of the following features are the MOST important for the new switch to support?

- A. PoE and QoS
- B. LACP and OSPF

- C. 802.1x and 802.11n
- D. NAT and VTP

Answer: A

QUESTION 182

Which of the following would Kim, a technician, do to monitor remote traffic through an access point?

- A. Enable an SNMP agent
- B. Enable network mapping
- C. Set monitoring SSID
- D. Select WPA2

Answer: A

QUESTION 183

Which of the following solutions will detect and disable a rogue access point?

- A. Port scan
- B. Packet sniffer
- C. IPS
- D. IDS

Answer: C

QUESTION 184

When configuring a wireless access point, Zach, a network administrator, needs to determine the MAC address of a local printer. Which of the following commands would be MOST helpful in determining the MAC address?

- A. ping
- B. arp
- C. route
- D. dig

Answer: B

QUESTION 185

Kim, the client, has requested a cost-effective network solution to accommodate the ability to reconfigure the office space as needed. Which networking solution would provide the BEST solution?

- A. Private IP Addressing
- B. Wireless Access Points
- C. Wide Area Networking
- D. Virtual Local Area Networks

Answer: B

QUESTION 186

A SOHO office recently installed a wireless network for employees to use during lunch breaks. As such, the access point was placed in the kitchen area by the microwave. Employees have been reporting intermittent connectivity when using the wireless network. Which of the following would BEST improve connectivity?

- A. Disable SSID broadcast
- B. Increase the signal strength
- C. Move the access point
- D. Change the broadcast channel

Answer: C

QUESTION 187

A SOHO with ten Wi-Fi equipped laptops needs a new network installed. Which of the following items would be used to setup the office using a new DSL line? (Select TWO).

- A. Router
- B. Wi-Fi Access point
- C. Cable modem
- D. Ten WiMAX adapters
- E. Ten CAT6 patch cables

Answer: AB

QUESTION 188

Which of the following security threats relies primarily on user deception and misinformation?

- A. Rogue access points
- B. DoS attacks
- C. Man-in-the-middle attacks
- D. Phishing

Answer: D

QUESTION 189

Which of the following is the prefix for a link-local IPv6 address?

- A. FE80::/10
- B. FF00::/8
- C. 2FFE::/16
- D. FEEF:/12

Answer: A

QUESTION 190

Which of the following could be used to estimate RTT across a router?

- A. Dig
- B. Traceroute
- C. Arp
- D. Uptime

Answer: B

QUESTION 191

Which of the following does the IP address 169.254.222.10 indicate?

- A. No DHCP server connectivity
- B. The DNS server is unavailable
- C. Firewall issue
- D. Duplicate IP addresses are found

Answer: A

QUESTION 192

A network administrator notices that all of the company switches are running at capacity on a given day, which is abnormal according to network baselines taken recently. Which tool would BEST allow the administrator to inspect what type of traffic is on the network?

- A. Wire tap
- B. Network sniffer
- C. Load balancing appliance
- D. NIPS

Answer: B

QUESTION 193

A supervisor requests that a technician downloads a MIB for a particular server. Which of the following protocols requires MIBs?

- A. IPSec
- B. SSL
- C. ISAKMP
- D. SNMP

Answer: D

QUESTION 194

When configuring a WAP for a SOHO, which parameter will BEST limit access to the office area?

- A. Signal strength
- B. SSID enable
- C. Encryption
- D. Password hardening

Answer: A

QUESTION 195

Which of the following should be implemented in a networked environment carrying teleconferencing packets?

- A. L2TP
- B. SSH
- C. QoS
- D. SNMP

Answer: C

QUESTION 196

Lisa, a network technician, needs to introduce a few more cables to the existing patch panel. Which of the following tools would she use?

- A. OTDR
- B. Multimeter
- C. Punch down tool
- D. Temperature monitor

Answer: C

QUESTION 197

A network technician is installing a simple SOHO router with wireless functionality. Which of the following wireless encryption standards would be BEST suited for the HIGHEST level of security?

- A. WPA2
- B. WPA
- C. WEP64
- D. WEP128

Answer: A

QUESTION 198

A technician notices that network access is becoming increasingly slow. All of the activity lights, on the only network layer 2 switch, are blinking at steadily increasing rates. Which of the following is the MOST likely cause of the increased traffic?

- A. STP blocking
- B. IP addresses
- C. MTU mismatch
- D. Switching loop

Answer: D

QUESTION 199

A user wants a SOHO network to be protected from unauthorized users hacking their network. Which of the following should be implemented to aide in this matter?

- A. VPN
- B. Throughput tester
- C. Firewall
- D. OC3

Answer: C

QUESTION 200

Zach, a technician, suspects a duplicate IP address assignment on the network. Which of the following resources can be used to verify this problem?

- A. Network map
- B. Environmental monitor
- C. Placement map
- D. Syslog

Answer: D

QUESTION 201

Which of the following protocols are used for accessing a command line terminal session for management purposes? (Select TWO).

- A. Telnet
- B. FTP
- C. SNMP
- D. SSH
- E. RDP

Answer: AD

QUESTION 202

A user is getting very weak signals while trying to connect to the wireless. Which of the following should the user do to help with signal strength?

- A. Call the wireless provider and ask for a T3 circuit.
- B. Move the wireless router to a better location where line of sight is obtained.
- C. Reinstall the operating system to the PC to ensure the newest patches are installed.
- D. Install a hub to ensure there is a clear path for the cables to run.

Answer: B

QUESTION 203

Lisa, a consultant, is inspecting an office that reports frequent wireless issues. Upon scanning the network broadcasting in the vicinity of the office, seven SSIDs are found. The company's Wi-Fi network and three others all share channel six. Which of the following is MOST likely causing the issue?

- A. Frequency interference
- B. Low signal strength
- C. Standard mismatch
- D. Incorrect channel

Answer: A

QUESTION 204

Kim, a user, cannot access the network using wireless.
Which of the following is MOST likely the cause?

- A. TXRX is reversed
- B. Faulty crossover cable
- C. Incorrect WEP key
- D. A short in the cable pairs

Answer: C

QUESTION 205

A network administrator wants to monitor traffic by deploying MIBs. Which of the follow network monitoring resources would be used?

- A. SCTP
- B. Packet sniffer
- C. DCCP
- D. SNMP

Answer: D

QUESTION 206

Kim, a technician, is installing a switch that does not feature auto-negotiation. Which of the following characteristics would need to be manually configured? (Select TWO).

- A. MAC addressing
- B. IP addressing
- C. Port speed
- D. IPv6 addressing
- E. Duplex

Answer: CE

QUESTION 207

Zach, a technician, discovers a switch is not communicating with the other switches in a stack.
Which of the following is the MOST likely cause?

- A. Both T568A and T568B standards are being used.
- B. STP is disabled.
- C. The cable is not a crossover.

- D. The port is not trunked.

Answer: C

QUESTION 208

Which of the following technologies allows for redundant links within a Layer 2 segment?

- A. OSPF
- B. RIP
- C. Port Mirroring
- D. Spanning Tree

Answer: D

QUESTION 209

A company has attempted to introduce a new major network segment to allow growth in capacity. On the core switch, a GBIC was used to interconnect with a newly placed downstream distribution switch for the first time. Soon after this implementation, a network flood and an outage occurred between the core and new distribution network modules. Which of the following should the network administrator troubleshoot FIRST in order to rectify the issue?

- A. Check for switching loops between core and distribution switches.
- B. Check whether an incorrect VLAN has been assigned to the new distribution switch.
- C. Check for inconsistent or missing routes between the core and distribution switches.
- D. Check whether the GBIC was set to multi-mode instead of single-mode SFP.

Answer: A

QUESTION 210

Which of the following is used to create a secure connection between a client and a host?

- A. VLAN
- B. Proxy server
- C. IIS server
- D. VPN

Answer: D

QUESTION 211

A user reports a network failure on a computer. The technician determines that the computer and NIC are operating properly. Which of the following tools can the technician use to trace the network cabling back to the punch down block?

- A. Protocol analyzer
- B. Multimeter
- C. Punch down tool
- D. Toner probe

Answer: D

QUESTION 212

Several users from the same building are reporting connectivity issues. The SFP at that building's IDF switch is showing a link light, but there is no link light to the corresponding switch's SFP at the MDF.

Which of the following is the MOST likely cause?

- A. A crossover cable is being used.
- B. DB loss is too high on all strands.
- C. Only TX or RX strand is working.
- D. TX and RX are reversed.

Answer: C

QUESTION 213

Which of the following is the correct representation of an IPv6 address?

- A. ::
- B. 0:0:0:0:0:0:0:1
- C. 1:2:3:4:AB:CD:EF
- D. 2001::4860:800f::

Answer: A

QUESTION 214

Which of the following 802.11n features allows for the use of multiple simultaneous frequencies in order to increase usable bandwidth?

- A. Channel bonding
- B. MIMO
- C. Spartial reuse
- D. 20MHz channel spacing

Answer: A

QUESTION 215

Kim, a network administrator, should consult which documentation sources FIRST to determine the cause of recent network issues?

- A. Network map
- B. Cable management
- C. Change management
- D. Asset management

Answer: C

QUESTION 216

The network optimization process used to allow reasonable use of data, voice, and video on the

same network infrastructure is called:

- A. CARP
- B. QoS
- C. Traffic shaping.
- D. Fault tolerance.

Answer: B

QUESTION 217

A network administrator is troubleshooting an intermittent network issue between devices that have a particularly long cable run. The issue was escalated to a network designer who alluded to potential attenuation issues. Which of the following BEST describes what the network designer was referring to?

- A. Bad connectors
- B. Cross-talk
- C. EMI / Interference
- D. dB loss

Answer: D

QUESTION 218

An analog POTS voice line is no longer working and Kim, the technician, is tasked to verify if a dial tone is present at the IDF. Which of the following tools would be used?

- A. Protocol analyzer
- B. Butt set
- C. OTDR
- D. Toner probe

Answer: B

QUESTION 219

A network technician is troubleshooting intermittent issues with VoIP call quality. A throughput tester can help assess the functionality of which of the following?

- A. LLDP
- B. VLAN tagging
- C. QoS
- D. SIP trunking

Answer: C

QUESTION 220

Lisa, a user, reports increased delays and timeouts when trying to reach several Internet sites. Which of the following would MOST likely be used when investigating the problem at Lisa's workstation?

- A. nslookup
- B. route
- C. nbtstat
- D. arp

Answer: A

QUESTION 221

Which of the following utilities would a technician use to determine the location of lost packets on a routed network?

- A. ping
- B. nslookup
- C. route
- D. tracert

Answer: D

QUESTION 222

A DSL modem connects to the provider's network using which of the following authentication techniques?

- A. PoE
- B. MS-CHAP
- C. PPPoE
- D. EAP

Answer: C

QUESTION 223

Jeff, a user, is having a problem with a POTS line. Which of the following tools would Jeff use to make sure the phone lines have a dial tone?

- A. Loopback plugs
- B. Butt set
- C. Cable certifier
- D. Toner probe

Answer: B

QUESTION 224

169.254.0.100 is an IP address which would MOST likely come from which of the following?

- A. CIDR
- B. DHCP
- C. APIPA
- D. DNS

Answer: C

QUESTION 225

Zach, a technician, is checking newly installed CAT5e cabling, and suspects that some of the ends were not properly terminated. Which of the following tools will verify this?

- A. Cable tester
- B. Toner probe
- C. OTDR
- D. Loopback plug

Answer: A

QUESTION 226

Which of the following DNS records allows for reverse lookup of a domain?

- A. PTR
- B. AAAA
- C. A
- D. MX

Answer: A

QUESTION 227

Which of the following is an example of two factor authentication?

- A. Password, device certificate and PIN
- B. SSL web server certificate and password
- C. User password and administrator password
- D. Password and hardware token OTP

Answer: D

QUESTION 228

Which of the following IP addresses would be classified as private?

- A. 10.100.200.0
- B. 169.253.10.20
- C. 172.168.5.0
- D. 200.100.25.0

Answer: A

QUESTION 229

A network technician wants to baseline traffic flows on a specific network. Which of the following will provide the GREATEST level of detail?

- A. Network flow information
- B. SNMP traps

- C. Debug level syslog
- D. Protocol analyzer

Answer: D

QUESTION 230

Which of the following will prevent switching loops by selectively shutting down switch ports?

- A. RIP
- B. IGP
- C. STP
- D. VLAN

Answer: C

QUESTION 231

When using high bandwidth applications over multiple WAN connections, which of the following should be used?

- A. Static IP addressing
- B. Half-duplex
- C. PoE devices
- D. Load balancing

Answer: D

QUESTION 232

A network technician is trying to terminate CAT5 modular jacks. Which of the following tools would be MOST appropriate for this scenario?

- A. Crimper
- B. OTDR
- C. Throughput tester
- D. Punch down tool

Answer: D

QUESTION 233

Which of the following media types can carry a standard Ethernet signal for network connectivity?

- A. USB
- B. PArallel
- C. Serial
- D. CAT6

Answer: D

QUESTION 234

There is suspected virus activity on the network. Which of the following would Lisa, a technician, use to study network traffic?

- A. Protocol analyzer
- B. Cable tester
- C. Cable certifier
- D. Environmental monitor

Answer: A

QUESTION 235

Zach, a network technician, is configuring several switches to be managed remotely. Which of the following must be configured to connect via SSH to each of those devices, as well as to retrieve various parameters?

- A. PoE settings and VTP configuration
- B. SNMP configuration only
- C. IP address and SNMP configuration
- D. QoS and PoE settings

Answer: C

QUESTION 236

A Windows server has a problem after booting up. Kim, a technician, should immediately check the:

- A. history logs.
- B. cron logs.
- C. application logs.
- D. system logs.

Answer: D

QUESTION 237

A user has no network connectivity. Jeff, the network technician, is unable to locate the CAT5e cable from the user at the IDF. Which of the following tools would be used to assist Jeff in locating the CAT5e cable?

- A. Butt set
- B. Punch down tool
- C. Toner probe
- D. Protocol analyzer

Answer: C

QUESTION 238

An administrator is setting up a secure wireless network. The administrator decides to support 802.11n and 802.11g with a WPA2 pre-shared key. Users are given the SSID with the pre-shared key, but the administrator has disabled the SSID broadcast and MAC filtering. Some users have

reported connection issues. Which of the following would MOST likely resolve the users' connection issues?

- A. Limit the devices to 802.11n only.
- B. Enable the SSID broadcast.
- C. Enable MAC filtering.
- D. Use a WEP 128-bit key.

Answer: B

QUESTION 239

Which of the following protocols is used to securely connect to a multi-layer switch?

- A. HTTP
- B. SMTP
- C. SSH
- D. Telnet

Answer: C

QUESTION 240

The software in a virtualized environment that controls resource allocation and allows multiple operating system guests to run on the same physical platform is known as the:

- A. hypervisor.
- B. LPAR.
- C. broker.
- D. VDI.

Answer: A

QUESTION 241

A new monitoring device is installed in the network that uses ping to determine whether critical network Internet routers are up. After three missing pings, the alarm reports the device is down. The device is now constantly reporting alarms, yet there are no reported Internet problems from users.

Which of the following is the MOST likely cause?

- A. A missing route on the alarm device.
- B. Incorrect VLAN assignment on the router.
- C. A missing route on the network routers.
- D. Incorrect speed/duplex setting on the alarm device.

Answer: D

QUESTION 242

A customer wishes to network several computers throughout a large warehouse containing numerous metal shelves and concrete walls. The computers are at least 175 meters (574 feet) apart. Which of the following media types should be recommended for the customer using only a

single switch?

- A. Fiber optic
- B. Wireless
- C. CAT5e
- D. CAT3

Answer: A

QUESTION 243

A network administrator suspects an employee of using the company's Internet connection to download illegal content. Which of the following can be used to inspect ongoing network traffic?

- A. Syslog server
- B. Toner probe
- C. OTDR
- D. Packet sniffer

Answer: D

QUESTION 244

A technician is setting up a firewall on the network that would show a public IP address out to the Internet and assign private IP addresses to users inside the network. Which of the following processes should be set up?

- A. Port security
- B. MAC filtering
- C. ACL
- D. NAT

Answer: D

QUESTION 245

Two WAPs are positioned with overlapping coverage, but seamless roaming across them is not working. Which of the following should be checked?

- A. WPA should be enabled
- B. PKI should be turned off
- C. WAP SSIDs are matching
- D. WAPs are transmitting on same channel

Answer: C

QUESTION 246

No link lights on a switch's SFP are functioning, so the network technician re-terminates the end. After testing the cable, the tester is showing a db loss of -9. Which of the following types of cable is MOST likely being tested?

- A. Fiber

- B. CAT3
- C. CAT5e
- D. CAT6a

Answer: A

QUESTION 247

An administrator has received a recommendation against deploying WEP as a wireless encryption protection scheme. Which of the following is MOST likely the reason?

- A. WEP's IV is too small.
- B. WEP uses RC4 which is easily accessible and not secure.
- C. WEP uses plain text.
- D. WEP is not well supported.

Answer: A

QUESTION 248

Jeff, a network technician, is installing a wireless router. Which of the following should Jeff consider to get the BEST signal strength?

- A. WAP placement
- B. PoE devices
- C. MAC filtering
- D. Encryption type

Answer: A

QUESTION 249

Which of the following devices can be used to offload outbound web server SSL encryption overhead?

- A. NIPS
- B. Proxy server
- C. Content filter
- D. VPN connectator

Answer: B

QUESTION 250

A user snapped the retention tab off of a network cable. Which of the following tools would Jeff, a technician, use to replace the RJ-45 connector?

- A. Wire tester
- B. Punch down
- C. Crimper
- D. Multimeter

Answer: C

QUESTION 251

Which of the following methods for network performance optimization is used to distribute traffic among similar devices?

- A. Fault tolerance
- B. QoS
- C. Proxy server
- D. Load balancing

Answer: D

QUESTION 252

A user is unable to connect to a server in another building. A technician is troubleshooting the issue and determines the following:

- 1) Client PC 1 has an IP address of 192.168.10.25/25
- 2) PC 1 can successfully ping its gateway of 192.168.10.1/25 which is an interface of router A
- 3) Server A is named 'BLDGBFILESRVR01' and has an IP address of 192.168.10.145/25
- 4) PC 2 with an IP address of 192.168.10.200/25 can successfully ping server A

However, when PC 1 pings server A, it receives a destination host unreachable response. Which of the following is the MOST likely cause?

- A. Link from router A to PC 1 are on different subnets
- B. Link from router A to server A is down
- C. Link from PC 1 to router A has duplex issues
- D. Link from server A to PC 2 is down

Answer: A

QUESTION 253

A technician needs to limit the amount of broadcast traffic on a network and allow different segments to communicate with each other. Which of the following options would satisfy these requirements?

- A. Add a router and enable OSPF.
- B. Add a layer 3 switch and create a VLAN.
- C. Add a bridge between two switches.
- D. Add a firewall and implement proper ACL.

Answer: B

Explanation:

We can limit the amount of broadcast traffic on a switched network by dividing the computers into logical network segments called VLANs.

A virtual local area network (VLAN) is a logical group of computers that appear to be on the same LAN even if they are on separate IP subnets. These logical subnets are configured in the network switches. Each VLAN is a broadcast domain meaning that only computers within the same VLAN

will receive broadcast traffic.

To allow different segments (VLAN) to communicate with each other, a router is required to establish a connection between the systems. We can use a network router to route between the VLANs or we can use a 'Layer 3' switch. Unlike layer 2 switches that can only read the contents of the data-link layer protocol header in the packets they process, layer 3 switches can read the (IP) addresses in the network layer protocol header as well.

QUESTION 254

A technician is connecting a router directly to a PC using the G1/0/1 interface. Without the use of auto-sensing ports, which of the following cables should be used?

- A. Straight-through
- B. Console
- C. Rollover
- D. Crossover

Answer: D

QUESTION 255

A company finds that many desktops are being reported as missing or lost. Which of the following would BEST assist in recovering these devices?

- A. Asset tracking tags
- B. Motion detectors
- C. Security guards
- D. Computer locks

Answer: D

QUESTION 256

A company is experiencing accessibility issues reaching services on a cloud-based system. Which of the following monitoring tools should be used to locate possible outages?

- A. Network analyzer
- B. Packet analyzer
- C. Protocol analyzer
- D. Network sniffer

Answer: A

Explanation:

A network analyzer is a useful tool, helping you do things like track traffic and malicious usage on the network.

QUESTION 257

A network administrator has created a virtual machine in the cloud. The technician would like to connect to the server remotely using RDP.

Which of the following default ports needs to be opened?

- A. 445
- B. 3389

- C. 5004
- D. 5060

Answer: B

QUESTION 258

Which of the following cloud infrastructure designs includes on premise servers utilizing a centralized syslog server that is hosted at a third party organization for review?

- A. Hybrid
- B. Public
- C. Community
- D. Private

Answer: A

QUESTION 259

An administrator hosts all of the company's virtual servers internally. In the event of total server failure, the server images can be restored on a cloud provider and accessed through the VPN. Which of the following cloud services is the administrator using?

- A. Community PaaS
- B. Public IaaS
- C. Hybrid SaaS
- D. Private IaaS

Answer: B

QUESTION 260

Which of the following should be performed to verify that unnecessary services are disabled on all switches in an environment?

- A. packet capturing
- B. port scanning
- C. Log scanning
- D. Baseline review

Answer: B

QUESTION 261

A technician is assigned to secure a basic wireless network. Which of the following authentication protocol should the technician use to perform this task (select TWO).

- A. RDP
- B. SNMP
- C. WPA2
- D. EAP SSL

Answer: C

QUESTION 262

A technician is sent to a remote office to set up a device to connect to the internet. The company Standard document requires stateful inspection.

Which of the following should the technician install?

- A. ROUTER
- B. Multilayer switch
- C. Firewall
- D. Bridge

Answer: C

QUESTION 263

A system administrator receives report from users of odd behavior in regard to recently installed server. While reviewing the server network configuration, the systems administrator does both a forward and a reverse DNS lookup on the host, along with the network adapter configuration.

```
$ host server.company.com
server.company.com has address 129.168.0.100
server.company.com is handled by 100 mail.company.com
$ host 192.168.0.100
100.0.168.192.in-addr.arpa domain name pointer web.company.com
$ host web.company.com
server.company.com has address 129.168.0.50
server.company.com is handled by 100 mail.company.com
$ ifconfig -a
eth0Link encap:Ethernet HWaddr 00:30:48:9D:06:73
Inet addr:192.168.0.100 Bcast:192.168.0.255 Mask:255.255.255.0
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
lo0Link encap:Local Loopback
inet addr:127.0.0.1 Mask:255.0.0.0
UP LOOPBACK RUNNING MTU:16436 Metric:1
```

Which of the following is the problem identified in the output above?

- A. There is no reverse DNS entry for this host.
- B. The server IP address is incorrectly configured.
- C. The DNS lookup entry is incorrectly configured.

Answer: C

QUESTION 264

A technician is investigating the cause of a network outage. Which of the following documents should be checked to rule out configuration issues?

- A. charge management records

- B. inventory management
- C. Network log files
- D. Logical diagrams

Answer: D

QUESTION 265

A junior network technician receives a help desk ticket from an end user who is having trouble accessing a web application that was working the previous day. After talking with the end user and gathering information about issue, which of the following would be the most likely course of action for the technician to perform next?

- A. Establish a theory of probable cause.
- B. Escalate the ticket to a senior technician.
- C. Implement the solution.
- D. Document the findings and outcomes.

Answer: A

QUESTION 266

Which of the following storage network technologies inherently leverages block-level storage?

- A. NAS
- B. SAN
- C. FCoE
- D. iSCSI
- E. FTP

Answer: A

QUESTION 267

A network administrator wants to employ a username and password authentication system for guest WiFi. Which of the following is the BEST option to provide this type of authentication?

- A. port security
- B. MAC filtering
- C. Network access control
- D. Captive portal

Answer: D

QUESTION 268

Multiple users are reporting that they are unable to access the network. The ENTIRE network is shown in the diagram. PCs are not statically assigned IP addresses. The following devices will display settings:

- WorkstationA
- WorkstationB
- WorkstationC

- WorkstationD
- WorkstationE
- WorkstationF
- WorkstationG
- Laptop1
- Laptop2
- DHCP server1
- DHCP server2

Review the settings and select the box in the diagram that identifies the device causing the issue. Only one device can be selected at a time.

After checking the device that is causing the issue, select the second tab in the lower left hand corner. Identify the reason as to why some users are unable to access the network.

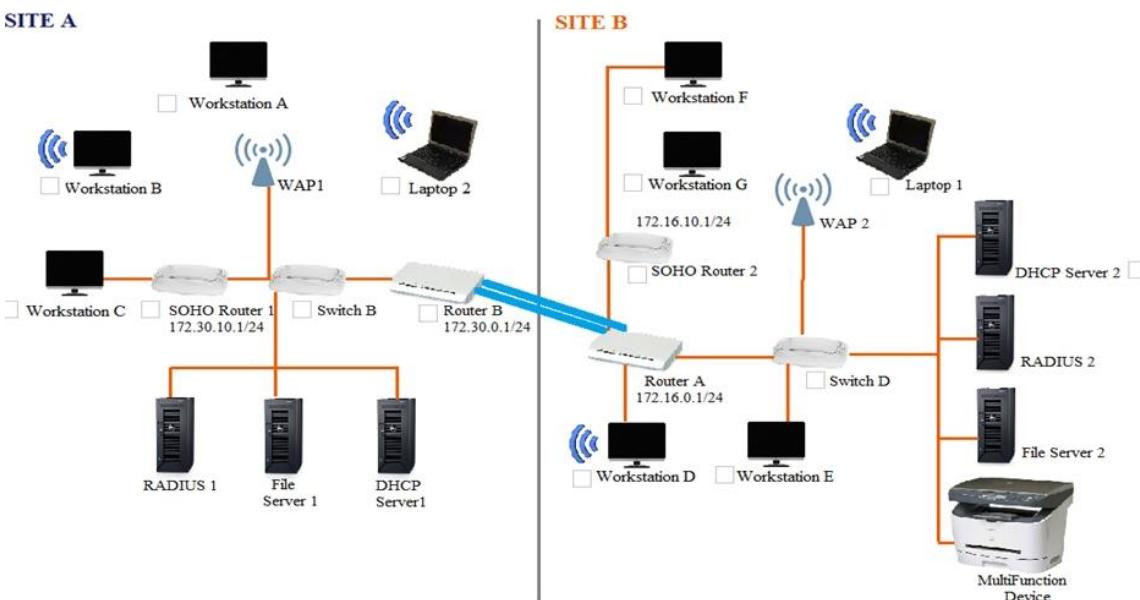
Instructions:

When the simulation is complete, select the Done button to submit.

Part 1

Site A and B Network Diagram

Instructions: Only one device can be selected at a time. Please ensure you complete Part 1 and Part 2 of the simulation.



WORKSTATION A

IP Address	172.30.0.10
Netmask	255.255.255.0
Gateway	172.30.0.1

OK**WORKSTATION B**

IP Address	172.30.0.14
Netmask	255.255.255.0
Gateway	172.30.0.1

OK**WORKSTATION C**

IP Address	169.254.200.67
Netmask	255.255.255.0
Gateway	

OK**WORKSTATION D**

IP Address	172.16.0.221
Netmask	255.255.255.0
Gateway	172.16.0.1

OK**WORKSTATION E**

IP Address	172.16.0.21
Netmask	255.255.255.0
Gateway	172.16.0.1

OK

WORKSTATION F

IP Address	172.16.10.43
Netmask	255.255.255.0
Gateway	172.16.10.1

OK**WORKSTATION G**

IP Address	172.16.10.120
Netmask	255.255.255.0
Gateway	172.16.10.1

OK**LAPTOP 1**

IP Address	172.16.0.220
Netmask	255.255.255.0
Gateway	172.16.0.1

OK**LAPTOP 2**

IP Address	172.30.0.12
Netmask	255.255.255.0
Gateway	172.30.0.1

OK

DHCP SERVER 1	
IP Address	172.30.0.5
Netmask	255.255.255.0
Gateway	172.30.0.1
DHCP Scope	172.30.0.10-250
Gateway	172.30.0.1
DNS Servers	10.200.2.20, 10.200.3.20
DHCP Lease Time	8 days

OK

DHCP SERVER 2	
IP Address	172.30.0.5
Netmask	255.255.255.0
Gateway	172.16.0.1
DHCP Scope	172.16.0.10-250
Gateway	172.16.0.1
DNS Servers	10.200.2.20, 10.200.3.20
DHCP Lease Time	8 days

OK

Part 2

Identify the reason as to why some users are unable to access the network.

- A. Workstation(s) are plugged into switch ports configured with half duplex
- B. The site-to-site router was configured with the incorrect ACL
- C. DHCP server scope is full and is not providing IP addresses
- D. WAN and LAN ports are reversed on the router
- E. STP has disabled some of the ports on the switch
- F. The NIC driver is not installed
- G. A wireless client is unable to associate to the AP

Answer: G

QUESTION 269

A UTM is deployed on the external edge of the main corporate office. The office connects to the WAN port of the edge router. The edge router at the main office connects to the remote offices using GRE IPSec tunnels. A network administrator notices that a worm that was not detected by the UTM has spread from the remote sites into the corporate network. The UTM currently has traffic rules applied that should block the port used by the worm. Which of the following steps would MOST likely correct this issue?

- A. Move the UTM onto the LAN side of the network
- B. Enable TLS inspection on the UTM
- C. Enable stateful inspection on the UTM
- D. Configure the UTM to deny encrypted files from being transferred

Answer: C

QUESTION 270

A technician has racked a new access switch and has run multimode fiber to a new location. After installing an extended-range 10Gb SFP in the core switch, the technician installed a 10Gb SFP in the access switch and connected the port to the new extension with a fiber jumper. However, the link does not display, and the technician cannot see light emitting from the core switch. Which of the following solutions is MOST likely to resolve the problem?

- A. Swap the fiber pairs in one of the SFPs
- B. Replace the jumpers with single-mode fiber
- C. Set the correct MTU on the new interface
- D. Install an optic that matches the fiber type

Answer: B

QUESTION 271

A network technician has implemented ACLs to limit access to cloud-based file storage. Which of the following security mechanisms has the technician enforced?

- A. DLP
- B. IDS
- C. WAF
- D. WPA
- E. TPM

Answer: C

QUESTION 272

A network technician receives a call from a user in the accounting department stating that Internet connectivity has been lost after receiving a new workstation. No other users in accounting are reporting similar issues. The network technician is able to ping the machine from the accounting department's router, but is not able to ping the machine from the IT network. Which of the following is MOST likely the cause?

- A. Incorrect default gateway
- B. Duplicate IP address
- C. Misconfigured OSPF
- D. Improper VLAN assignment

Answer: A

QUESTION 273

A firewall administrator is implementing a rule that directs HTTP traffic to an internal server listening on a non-standard socket. Which of the following types of rules is the administrator implementing?

- A. NAT
- B. PAT
- C. STP
- D. SNAT
- E. ARP

Answer: B

QUESTION 274

A technician is installing a new wireless badging system on a hospital network. The requirements of the badging system are for it to have its own SSID and low power levels. The badging system has to cover 99.9% of the hospital. Which of the following is the BEST action to take to meet the system requirements?

- A. Install additional WAPs
- B. Install external antennas
- C. Move the WAPs closer to the more populated area
- D. Change the antenna types

Answer: A

QUESTION 275

A technician attempts to replace a switch with a new one of similar model from the same vendor. When the technician moves the fiber and SFP plug, the switch does not completely boot up. Considering that the config files are the same, which of the following is the MOST likely cause of the failure?

- A. Damaged fiber
- B. Corrupted operating system
- C. VLAN mismatch
- D. Bad port

Answer: B

QUESTION 276

A company has hundreds of nodes on a single subnet and has decided to implement VLANs. Which of the following BEST describes the benefit of this approach?

- A. It segments broadcast domains in the network infrastructure
- B. It provides a faster port to all servers
- C. It provides multiple collision domains on one switchport
- D. It provides multiple broadcast domains within a single collision domain

Answer: A

QUESTION 277

Which of the following uses eight groups of characters for addressing?

- A. MAC
- B. IPv4
- C. IPv6
- D. DHCP

Answer: C

QUESTION 278

A pest control contractor attempts to gain access to the datacenter; however, the manager on duty notes that a pest control inspection was not on the schedule. Which of the following attacks is in progress?

- A. Phishing
- B. Social engineering
- C. Man-in-the-middle
- D. Smurfing

Answer: B

QUESTION 279

Which of the following is the MOST economical way for Sandy, a technician, to implement 10-Gigabit Ethernet at a datacenter?

- A. 10GBaseLR
- B. 10GBaseSR
- C. 10GBaseX
- D. 10GBaseT

Answer: D

QUESTION 280

Which of the following is the network topology in which computers connect in a closed circle?

- A. Bus
- B. Mesh
- C. Ring
- D. Star

Answer: C

QUESTION 281

Which of the following protocols would Kurt, a technician, use to synchronize local date and time of a client workstation to that of a server?

- A. RTP
- B. NTP
- C. TFTP
- D. ARP

Answer: B

QUESTION 282

An administrator is replacing an existing WAP because the customer is reporting that the connection speeds are too slow. Which of the following should be installed?

- A. 802.11a
- B. 802.11b
- C. 802.11g
- D. 802.11n

Answer: D

QUESTION 283

Which of the following cables has the MOST twists per inch?

- A. CAT3
- B. CAT5
- C. CAY5e
- D. CAT6

Answer: D

QUESTION 284

Which of the following is true about an IP address if the first bit is a one and the second bit is a zero?

- A. The address is a Class A address.
- B. The address is a Class B address.
- C. The address is a Class C address.
- D. The address is a Class D address.

Answer: B

QUESTION 285

Which of the following cables is MOST likely to be terminated into a patch panel?

- A. Serial
- B. RG-6
- C. RG-59
- D. CAT6

Answer: D

QUESTION 286

Which of the following security mechanisms dynamically assigns a Layer 2 address and restricts traffic only to that Layer 2 address?

- A. Sticky MAC
- B. 802.1x
- C. ACL
- D. NAC

Answer: A

QUESTION 287

Which of the following is a vulnerable system designed to detect and log unauthorized access?

- A. SIEM
- B. Honeypot
- C. DMZ
- D. Proxy server

Answer: B

QUESTION 288

According to the OSI model, at which of the following layers is data encapsulated into a packet?

- A. Layer 2
- B. Layer 3
- C. Layer 4
- D. Layer 5
- E. Layer 6

Answer: B

QUESTION 289

Which of the following WAN technologies is MOST preferred when developing a VoIP system with 23 concurrent channels?

- A. DSL
- B. POTS
- C. T1
- D. DOCSIS

Answer: C

QUESTION 290

A junior network technician is setting up a new email server on the company network. Which of the following default ports should the technician ensure is open on the firewall so the new email server can relay email?

- A. 23
- B. 25
- C. 110
- D. 143

Answer: B

QUESTION 291

Which of the following policies would Joe, a user, have to agree to when he brings in his personal tablet to connect to the company's guest wireless Internet?

- A. NDA
- B. IRP
- C. BYOD
- D. SLA

Answer: C

QUESTION 292

In a service provider network, a company has an existing IP address scheme. Company A's network currently uses the following scheme:

Subnet 1: 192.168.1.0/26
Subnet 2: 192.168.1.65/26

Company b uses the following scheme:

Subnet 1: 192.168.1.50/28

The network administrator cannot force the customer to update its IP scheme.

Considering this, which of the following is the BEST way for the company to connect these networks?

- A. DMZ
- B. PAT
- C. NAT
- D. VLAN

Answer: C

QUESTION 293

A technician is troubleshooting a problem with a network printer. The technician thinks the

network printer is out of paper and ink. Which of the following should the technician do NEXT?

- A. Implement the solution
- B. Question users
- C. Test the theory
- D. Escalate the problem

Answer: C

QUESTION 294

A company has just installed wireless in their office. In one corner of the office building users are not able to establish a connection. Which of the following can be changed on the AP to help resolve this issue?

- A. SSID
- B. Channels
- C. Signal strength
- D. Encryption

Answer: C

QUESTION 295

Which of the following cable types have a rated MAXIMUM bandwidth of 100Mbps?

- A. CAT3
- B. CAT5
- C. CAT5e
- D. CAT6

Answer: B

QUESTION 296

A company has installed an access point and configured it to broadcast at 802.11n only. Some users are stating that they cannot connect to this access point. Which of the following is the MOST likely reason some users cannot connect?

- A. Incorrect channel
- B. Weak encryption
- C. Incompatible NICs
- D. Incorrect SSID

Answer: C

QUESTION 297

Which of the following will allow multiple frequencies to be combined?

- A. WiMAX
- B. MPLS
- C. MIMO

- D. Channel bonding

Answer: D

QUESTION 298

Which of the following technologies is required to allow all ports of a single private IP to be publically accessible via a single public IP?

- A. NAT
- B. RIP
- C. PAT
- D. ACL

Answer: C

QUESTION 299

Which of the following allows a technician to gather information about the operating system?

- A. Domain services
- B. Fingerprinting
- C. Countermeasures
- D. Reconnaissance

Answer: B

QUESTION 300

Which of the following is indicative of an FTP bounce?

- A. Arbitrary IP address
- B. Reverse DNS lookups
- C. Same Port Number
- D. File Transfer Success

Answer: A

QUESTION 301

The software that allows a machine to run multiple operating systems at once is called the:

- A. Server manager
- B. Hypervisor
- C. Boot loader
- D. Partition manager

Answer: B

QUESTION 302

Which of the following routing protocols relies on hop count as its ONLY metric?

- A. BGP
- B. EIGRP
- C. OSPF
- D. RIP

Answer: D

QUESTION 303

A company has completed construction of a new datacenter, and the IT staff is now planning to relocate all server and network equipment from the old site to the new site. Which of the following should the IT staff reference to determine the location of the equipment being moved?

- A. Rack diagrams
- B. Network topology
- C. Standard operating procedures
- D. Wiring documentation

Answer: A

QUESTION 304

Which of the following would allow a device to maintain the same IP address lease based on the physical address of the network card?

- A. MAC address reservation
- B. Static IP address
- C. IP address exclusion
- D. Custom DNS server entry

Answer: A

QUESTION 305

A technician wants to prevent an unauthorized host from connecting to the network via Ethernet. Which of the following is a Layer 2 access control the technician should implement?

- A. Access control lists
- B. Captive portal
- C. WPA2
- D. Port security

Answer: D

QUESTION 306

A network engineer is configuring wireless access for guests at an organization. Access to other areas in the organization should not be accessible to guests. Which of the following represents the MOST secure method to configure guest access to the wireless network?

- A. Guests should log into a separate wireless network using a captive portal
- B. Guests should log into the current wireless network using credentials obtained upon entering the facility

- C. The existing wireless network should be configured to allow guest access
- D. An additional wireless network should be configured to allow guest access

Answer: A

QUESTION 307

The server team has just installed an application across three different servers. They are asking that all requests to the application are spread evenly across the three servers. Which of the following should the network team implement to fulfil the request?

- A. Proxy server
- B. UTM appliance
- C. Content filter
- D. Load balancer

Answer: D

QUESTION 308

A network technician is deploying mobile phones for a company's sales staff. Salespeople frequently travel nationally and internationally to meet with clients, and often have to roam or switch cellular providers. Which of the following standards is the BEST option to fit the requirements?

- A. GSM
- B. TDM
- C. CDMA
- D. PSTN
- E. MIMO

Answer: A

QUESTION 309

A network administrator has been given a network of 172.16.85.0/21 and wants to know the usable range of IP addresses on that subnet. Which of the following indicates the correct IP address range?

- A. 172.16.80.0-172.16.85.254
- B. 172.16.80.0-172.16.88.255
- C. 172.16.80.1-172.16.87.254
- D. 172.16.80.1-172.16.85.255

Answer: C

QUESTION 310

A network technician is troubleshooting wireless network issues in a crowded office complex and suspects there is interference from nearby wireless networks. Which of the following should the technician perform to discover possible interference?

- A. Site survey

- B. Vulnerability scanning
- C. Wardriving
- D. Checking logical diagram
- E. Bandwidth test

Answer: A

QUESTION 311

A network technician is troubleshooting an issue and has established a theory of probable cause. Which of the following steps should the network technician take NEXT?

- A. Test the possible solution
- B. Question the users
- C. Determine what has changed
- D. Document the theory

Answer: A

QUESTION 312

Which of the following is the number of broadcast domain that are created when using an unmanaged 12-port switch?

- A. 0
- B. 1
- C. 2
- D. 6
- E. 12

Answer: B

QUESTION 313

A network engineer wants to segment the network into multiple broadcast domains. Which of the following devices would allow for communication between the segments?

- A. Layer 2 switch
- B. Layer 3 switch
- C. Bridge
- D. Load balancer

Answer: B

QUESTION 314

The Chief Information Officer (CIO) has noticed the corporate wireless signal is available in the parking lot. Management requests that the wireless network be changed so it is no longer accessible in public areas, without affecting the availability inside the building. Which of the following should be changed on the network?

- A. Power levels
- B. Overcapacity

- C. Distance limitations
- D. Channel overlap

Answer: A

QUESTION 315

A network technician is assisting the security team with some traffic captures. The security team wants to capture all traffic on a single subnet between the router and the core switch. To do so, the team must ensure there is only a single collision and broadcast domain between the router and the switch from which they will collect traffic. Which of the following should the technician install to BEST meet the goal?

- A. Bridge
- B. Crossover cable
- C. Hub
- D. Media converter

Answer: C

QUESTION 316

Based on networks 10.8.16.0/22 and 10.8.31.0/21, which of the following is the BEST summarized CIDR notation?

- A. 10.8.0.0/16
- B. 10.8.0.0/19
- C. 10.8.0.0/20
- D. 10.0.0.0/24

Answer: A

QUESTION 317

A technician discovers that multiple switches require a major update. Which of the following policies should be followed?

- A. Change management policy
- B. Remote access policy
- C. Acceptable use policy
- D. Memorandum of understanding

Answer: A

QUESTION 318

A technician is troubleshooting a point-to-point fiber-optic connection. The technician is at a remote site and has no connectivity to the main site. The technician confirms the switch and the send-and-receive light levels are within acceptable range. Both fiber SFPs are confirmed as working. Which of the following should the technician use to reveal the location of the fault?

- A. OTDR
- B. Light meter

- C. Tone generator
- D. CSU/DSU

Answer: A

QUESTION 319

A Chief Information Officer (CIO) wants to move some IT services to a cloud service offering. However, the network administrator still wants to be able to control some parts of the cloud service's networking components. Which of the following should be leveraged to complete this task?

- A. IaaS
- B. PaaS
- C. SaaS
- D. DaaS

Answer: B

QUESTION 320

Client PCs are unable to receive addressing information from a newly configured interface on a router. Which of the following should be added to allow the clients to connect?

- A. DHCP lease me
- B. IP helper
- C. TTL
- D. DNS record type

Answer: B

QUESTION 321

When enabling jumbo frames on a network device, which of the following parameters is being adjusted?

- A. Speed
- B. Duplex
- C. MTU
- D. TTL

Answer: C

QUESTION 322

A technician logs onto a system using Telnet because SSH is unavailable. SSH is enabled on the target device, and access is allowed from all subnets. The technician discovers a critical step was missed. Which of the following would allow SSH to function properly?

- A. Perform file hashing
- B. Generate new keys
- C. Update firmware
- D. Change default credentials

Answer: B

QUESTION 323

A network administrator wants to ensure sensitive data is not exfiltrated from the system electronically. Which of the following should be implemented?

- A. DLP
- B. AUP
- C. NDA
- D. SLA

Answer: A

QUESTION 324

A network technician configures a firewall to block only certain IP addresses from accessing the Internet. All users are reporting that they are unable to access the Internet.

Which of the following is the MOST likely reason?

- A. Incorrectly configured ACL
- B. Implicit allow statement
- C. SMTP requests are being denied
- D. All protocols are being allowed in

Answer: A

QUESTION 325

A technician wants to connect a new wireless router to a main network switch. Which of the following cable types would MOST likely be used to establish this connection?

- A. Telephone
- B. Parallel
- C. Serial
- D. CAT6

Answer: D

QUESTION 326

Zach, a technician, wants to test a laptop's NIC for functionality but has no other networking equipment to attach it to.

Which of the following would allow him to test basic functionality of the NIC?

- A. Loopback plug
- B. Protocol analyzer
- C. Smart jack
- D. Coupler

Answer: A

QUESTION 327

A new user is reporting connectivity issues. Zach, the network technician, notices that there is no link light on the user's NIC. Which of the following would be used to verify the wiring back to the patch panel?

- A. Butt set
- B. Cable certifier
- C. Toner probe
- D. Snips

Answer: B

QUESTION 328

Zach, a network technician, is unable to remotely manage or ping certain layer 2 switches. To manage those devices remotely, which of the following will MOST likely need to be configured?

- A. IP address on the native VLAN interface
- B. Port security
- C. Port forwarding
- D. IP address on the fiber interface

Answer: A

QUESTION 329

Which of the following devices is used to distribute network traffic equally over multiple links?

- A. Content filter
- B. DNS server
- C. Load balancer
- D. Proxy server

Answer: C

QUESTION 330

Lisa, a technician, has configured a new switch that is remotely accessed using SSH. The switch is working properly but cannot be accessed remotely. Which of the following items is MOST likely missing in the configuration?

- A. Port speed
- B. Cryptokey
- C. Data VLAN
- D. NAT/PAT

Answer: B

QUESTION 331

Zach, a technician, needs to terminate a CAT5e Ethernet cable to a 110 block. Which of the following tools should he use?

- A. Toner probe
- B. Punch down
- C. Wire tester
- D. Crimper

Answer: B

QUESTION 332

Which of the following protocols is used for remote management of devices?

- A. SNMP
- B. TFTP
- C. Syslog
- D. SMTP

Answer: A

QUESTION 333

A mobile user is no longer able to access network resources. Jeff, the network technician, is unable to ping the user's workstation. Which of the following commands would MOST likely be used on that workstation to verify its current network settings?

- A. net share
- B. hostname
- C. ipconfig
- D. tracert

Answer: C

QUESTION 334

Which of the following methods limits access to a network based on characteristics of the network card?

- A. IP filtering
- B. MAC filtering
- C. Port filtering
- D. Encryption

Answer: B

QUESTION 335

A company has contracted with an outside vendor to perform a service that will provide hardware, software, and procedures in case of a catastrophic failure of the primary datacenter. The Chief Information Officer (CIO) is concerned because this contract does not include a long-term strategy for extended outages. Which of the following should the CIO complete?

- A. Disaster recovery plan
- B. Business continuity plan

- C. Service level agreement
- D. First responder training

Answer: B

QUESTION 336

A typical cell tower will have microwave and cellular antennas. Which of the following network topologies do these represent? (Choose two.)

- A. Point-to-multipoint
- B. Bus
- C. Point-to-point
- D. Mesh
- E. Peer-peer
- F. Ring

Answer: CD

QUESTION 337

A network administrator has a monitoring system in place that is currently polling hundreds of network devices at regular intervals. The continuous polling is causing high CPU utilization on the server. Which of the following tasks should the administrator perform to resolve the CPU issue while maintaining full monitoring capabilities?

- A. Remove SNMP polling and configure SNMP traps on each network device
- B. Remove SNMP polling and implement snmpwalk on each network device
- C. Upgrade SNMP to the latest version to mitigate vulnerabilities
- D. Modify SNMP polling to poll only during business hours

Answer: A

QUESTION 338

A contractor is setting up and configuring conference rooms for a convention. The contractor sets up each room in the conference center to allow wired Internet access going to individual tables. The contractor measured the distance between the hotel's patch panel to the jack, and the distance is within Cat 5e specifications. The contractor is concerned that the room will be out of specification if cables are run in each room from the wall jacks. Which of the following actions should the contractor take to ensure the cable runs meet specifications and the network functions properly?

- A. Place a switch at the hotel's patch panel for connecting each room's cables
- B. Place a switch on each table to ensure strong connectivity
- C. Place repeaters between the patch panel and the rooms
- D. place a switch at the wall jack and run the cables in the room from there

Answer: A

QUESTION 339

Users are reporting their network is extremely slow. The technician discovers pings to external

host have excessive response times. However, internal pings to printers and other PCs have acceptable response times. Which of the following steps should the technician take NEXT?

- A. Determine if any network equipment was replaced recently
- B. Verify malware has not disabled the users' PC firewalls
- C. Replace users' network cables with known-good network cables
- D. Power cycle the web server

Answer: A

QUESTION 340

Which of the following is a system of notation that uses base 16 rather than base 10?

- A. Hex
- B. Octal
- C. Binary
- D. CIDR

Answer: A

QUESTION 341

A network administrator would like to collect information from several networking devices using SNMP. Which of the following SNMP options should a network administrator use to ensure the data transferred is confidential?

- A. authpriv
- B. SHA
- C. MD5
- D. Authentication passphrase

Answer: A

QUESTION 342

The IT manager at a small firm is in the process of renegotiating an SLA with the organization's ISP. As part of the agreement, the organization will agree to a dynamic bandwidth plan to provide 150Mbps of bandwidth. However, if the ISP determines that a host on the organization's internal network produces malicious traffic, the ISP reserves the right to reduce available bandwidth to 1.5 Mbps. Which of the following policies is being agreed to in the SLA?

- A. Session hijacking
- B. Blocking
- C. Throttling
- D. Data usage limits
- E. Bandwidth quotas

Answer: C

QUESTION 343

A network technician has just configured NAC for connections using Cat 6 cables. However, none

of the Windows clients can connect to the network.

Which of the following components should the technician check on the Windows workstations?
(Choose two.)

- A. Start the Wired AutoConfig service in the Services console
- B. Enable IEEE 802.1q Authentication in Network Interface Card Properties
- C. Enable IEEE 802.1x Authentication in Network Interface Card Properties
- D. Start the Wireless AutoConfig service in the Services console
- E. Enable IEEE 802.3 Ethernet IPv6 in Network Interface Card Properties

Answer: AC

QUESTION 344

A network technician has discovered a rogue access point under an empty cubicle desk. Which of the following should the technician perform to ensure another cannot be placed on the network?

- A. Disable unused ports on switches
- B. Enable DHCP guard to detect rogue servers
- C. Configure WPA2 on all access points
- D. Use TACACS+ authentication

Answer: B

QUESTION 345

Which of the following provides the ability to deploy consistent access point configurations from a central location?

- A. Wireless controller
- B. AAA server
- C. WiFi-protected setup
- D. Proxy server
- E. VPN concentrator

Answer: A

QUESTION 346

A network technician is configuring a wireless network at a branch office. Users at this office work with large files and must be able to access their files on the server quickly. Which of the following 802.11 standards provides the MOST bandwidth?

- A. a
- B. ac
- C. g
- D. n

Answer: B

QUESTION 347

A network administrator configures a router with the following IP address information:

Gigabit Ethernet 1 Interface: 10.10.0.1/24
Serial 0 Interface: 10.10.0.253/30

Clients are connected to a switch on the gigabit Ethernet interface; the ISP is connected to the Serial 0 interface.

When the router configuration is complete and client devices are reconfigured, all clients report that they are unable to connect to the Internet.

Which of the following is the MOST likely reason?

- A. The router was configured with an incorrect IP address
- B. The router was configured with an incorrect default gateway
- C. The router was configured with an incorrect subnet mask
- D. The router was configured with an incorrect loopback address

Answer: C

QUESTION 348

A penetration tester has been tasked with reconnaissance to determine which ports are open on the network. Which of the following tasks should be done FIRST? (Choose two.)

- A. Network scan
- B. Banner grab
- C. Tracert
- D. DHCP server check
- E. Brute-force attack

Answer: AC

QUESTION 349

Users are reporting Internet connectivity issues. The network administrator wants to determine if the issues are internal to the company network or if there is an issue with the ISP. Which of the following tools should be used to BEST determine where the outage is occurring?

- A. traceroute
- B. ping
- C. nslookup
- D. netstat

Answer: A

QUESTION 350

A network engineer is designing a new network for a remote site. The remote site consists of ten desktop computers, ten VoIP phones, and two network printers. In addition, two of the desktop computers at the remote site will be used by managers who should be on a separate network from the other eight computers. Which of the following represents the BEST configuration for the remote site?

- A. One router connected to one 24-port switch configured with three VLANs: one for the manager's computers and printer, one for the other computers and printer, and one for the VoIP phones

- B. Two routers with each router connected to a 12-port switch, with a firewall connected to the switch connected to the manager's desktop computers, VoIP phones, and printer
- C. One router connected to one 12-port switch configured for the manager's computers, phones, and printer, and one 12-port switch configured for the other computers, VoIP phones, and printer
- D. One router connected to one 24-port switch configured with two VLANs: one for the manager's computers, VoIP phones, and printer, and one for the other computers, VoIP phones, and printer

Answer: A

QUESTION 351

Which of the following BEST describes the difference between layer 2 switching and layer 2 routing?

- A. Switching moves packets between hosts on different subnets, and routing moves packets between hosts on the same subnet.
- B. Routing moves packets between hosts on different subnets, and switching moves packets between hosts on the same subnet.
- C. Both routing and switching move packets between hosts on the same subnet, but routing does so at a faster pace.
- D. Both routing and switching move packets between hosts on different subnets, but switching does so at a faster pace.

Answer: B

QUESTION 352

Which of the following problems is MOST likely to arise when configuring an IPv6 over IPv4 tunnel?

- A. Routing loop
- B. MTU black hole
- C. Framing errors
- D. SYN flood

Answer: B

QUESTION 353

Kim, a technician, needs to locate a cable in an unorganized wiring closet. Which of the following tools will help her locate the cable?

- A. Protocol analyzer
- B. Cable tester
- C. Toner probe
- D. Punch down tool

Answer: C

QUESTION 354

Which of the following separates broadcast domains?

- A. Port mirroring
- B. Router
- C. Convergence
- D. Switch

Answer: B

QUESTION 355

A national cable company providing TV, telephone, and Internet service to home users over its IP network, has been tracking a large increase of network bandwidth due to P2P file sharing. Which of the following should the company deploy to ensure excellent TV and telephone service?

- A. QoS
- B. Load balancing
- C. High availability
- D. Fiber optics

Answer: A

QUESTION 356

Jeff, a technician, is charged with setting up network monitoring for critical devices in the network. It is important the information be sent securely to the monitoring station. Which of the following protocols will support secure transmission of the data?

- A. SNMP v2
- B. VPN
- C. SYSLOG
- D. SMTP

Answer: A

QUESTION 357

Keeping an authoritative and timely record of network devices and their settings is a key activity of which of the following?

- A. Project management
- B. Quality of service
- C. Configuration management
- D. Bandwidth shaping

Answer: C

QUESTION 358

Which of the following technologies could be implemented to improve call clarity when using VoIP technology?

- A. Static IP addressing
- B. Caching engines
- C. QoS

- D. Port forwarding

Answer: C

QUESTION 359

A customer has not been using security on a wireless network and has recently received many attacks through this vector.

Which of the following would be the MOST secure way to harden this wireless network?

- A. Disable the SSID
- B. WPA encryption
- C. VLAN implementation
- D. WEP encryption

Answer: B

QUESTION 360

Which of the following needs to be configured on a switch to use a packet sniffer?

- A. Port trunking
- B. Port mirroring
- C. Tagged VLAN
- D. Untagged VLAN

Answer: B

QUESTION 361

A network technician is connecting two switches together. Which of the following protocols should the technician use to increase speed and fault tolerance?

- A. SIP
- B. BGP
- C. LACP
- D. LLDP

Answer: C

QUESTION 362

A company has a web-based application that is used by many different departments. The company has experienced some overload of resources on the database server. The network administrator implements a network device in between the servers and the database. Which of the following BEST describes the purpose of this device?

- A. Content filtering and network analysis
- B. Load balancing and providing high availability
- C. Port sniffing and protocol analysis
- D. Clustering and NIC teaming

Answer: B

QUESTION 363

A technician is replacing a switch at a branch office and discovers the existing backbone cable does not fit in the new switch. The fiber patch panel has circular connections. The new switch has a transceiver that accepts a smaller square adapter of two strands. Which of the following patch cables would the technician need to complete the installation?

- A. LC to SC
- B. SC to ST
- C. LC to ST
- D. ST to ST
- E. SC to SC

Answer: C

QUESTION 364

A computer lab on a campus network was recently reconfigured using recycled network cables. One of the 24 computers in the lab is unable to connect to the network after the upgrade. A network technician successfully uses the cable in question to connect directly to another computer. Which of the following is MOST likely issue with the cable?

- A. The cable is a crossover cable
- B. The cable is rollover cable
- C. The cable has bent pins
- D. The cable is a Cat 5 cable

Answer: A

QUESTION 365

Which of the following is a reason why a business may be hesitant to move sensitive data to a SaaS cloud service?

- A. Decreased performance of internal network
- B. Loss of full control over data resources
- C. Increased malware exposure
- D. Incompatibility with the current network

Answer: B

QUESTION 366

Users have been experiencing slow network response times, and management has asked the network technician to provide evidence of network improvement. After optimizing the network, which of the following would be required?

- A. IDF/MDF documentation
- B. Change management
- C. Performance baseline
- D. Physical diagram

Answer: C

QUESTION 367

A network technician has created a network that consists of a router, a firewall, a switch, and several PCs. Which of the following physical network topologies was created?

- A. Star
- B. Mesh
- C. Ring
- D. Bus

Answer: D

QUESTION 368

A technician is setting up a branch office on a point-to-point connection. Which of the following IP network blocks is the MOST efficient use of IP address space for the router connections between the two sites?

- A. /24
- B. /25
- C. /30
- D. /32

Answer: C

QUESTION 369

At which of the following layers of the OSI model do packets exist?

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

Answer: A

QUESTION 370

A company is having a new T1 line installed. Which of the following will the connection MOST likely terminate to?

- A. Core switch
- B. MDF
- C. Ethernet router
- D. IDF

Answer: B

QUESTION 371

A network technician performs several switch commands to enable various advanced features on

the switch in the accounting department. During the configuration changes, several users from this department report connectivity issues. Which of the following logs would the network technician need to analyze to troubleshoot the connectivity issues?

- A. Router logs
- B. History logs
- C. Startup/bootup config logs
- D. Event Viewer logs

Answer: B

QUESTION 372

A technician needs to test the length of a newly installed cable run because it is believed that it exceeds the maximum specification length. Which of the following tools should be used?

- A. Cable certifier
- B. Toner probe
- C. Cable tester
- D. Protocol analyzer

Answer: A

QUESTION 373

Which of the following layers of the OSI model is between the Data Link and Transport layers?

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

Answer: C

QUESTION 374

An administrator is troubleshooting analog telephony issues on the punch down block. Which of the following tools would be MOST useful in this scenario?

- A. T1 loopback
- B. Butt set
- C. Multimeter
- D. Protocol analyzer

Answer: B

QUESTION 375

Which of the following protocols is used to allow multiple hosts to share a common IP address?

- A. HTTPS
- B. ARP
- C. CARP

D. NAT

Answer: D

QUESTION 376

Which of the following tools can the technician use to analyze TCP/IP packets when trying to determine a connection problem within a subnet?

- A. Wire mapper
- B. Protocol analyzer
- C. Cable tester
- D. SYSLOG server

Answer: B

QUESTION 377

Which of the following is used to classify network data for the purpose of providing QoS?

- A. STP
- B. VLANs
- C. SIP
- D. DSCP

Answer: D

QUESTION 378

A network technician needs to separate a web server listening on port 80 from the internal LAN and secure the server from the public Internet. The web server should be accessible to the public Internet over port 80 but not the private LAN. Currently, the network is segmented with a network-based firewall using the following IP addressing scheme on each interface:

Zone	Interface	IP Address
Public	eth0	10.0.0.1/24
DMZ	eth1	10.0.1.1/24
Private	eth2	10.0.2.1/24

Which of the following ones should the technician use to place the web server and which of the following firewall rules should the technician configure?

- A. Place the web server in the public zone with an inbound rule from eth0 interface to accept traffic over port 80 designated to the web server
- B. Place the web server in the DMZ with an inbound rule from eth0 interface to eth1 to accept traffic over port 80 designated to the web server
- C. Place the web server in the private zone with an inbound rule from eth2 interface to eth1 to accept traffic over port 80 designated to the web server
- D. Place the web server in the DMZ with an inbound rule from eth1 interface to eth0 to accept traffic

over port 80 designated to the web server

Answer: B

QUESTION 379

A company recently upgraded all of its printers to networked multifunction devices. Users can print to the new devices, but they would also like the ability to scan and fax files from their computers. Which of the following should the technician update to allow this functionality?

- A. Device software
- B. Printer drivers
- C. Printer firmware
- D. NIC drivers

Answer: C

QUESTION 380

A disgruntled employee executes a man-in-the-middle attack on the company network. Layer 2 traffic destined for the gateway is redirected to the employee's computer. This type of attack is an example of:

- A. ARP cache poisoning
- B. IP spoofing
- C. amplified DNS attack
- D. evil twin

Answer: A

QUESTION 381

The process of attempting to exploit a weakness in a network after being given permission by the company is known as:

- A. penetration testing
- B. vulnerability scanning
- C. reconnaissance
- D. social engineering

Answer: A

QUESTION 382

The security manager reports that individual systems involved in policy or security violations or incidents cannot be located quickly. The security manager notices the hostnames all appear to be randomly generated characters. Which of the following would BEST assist the security manager identifying systems involved in security incidents?

- A. Enforce port security to require system authentication
- B. Implement a standardized UNC
- C. Label existing systems with current hostnames
- D. Forward the DHCP logs to the security manager every day

Answer: B

QUESTION 383

A building is equipped with light sensors that turn off the fluorescent lights when natural light is above a certain brightness. Users report experiencing network connection issues only during certain hours. The west side of the building experiences connectivity issues in the morning hours and the east side near the end of the day. At night the connectivity issues affect the entire building. Which of the following could be the cause of the connectivity issues?

- A. Light sensors are interfering with the network
- B. EMI from the lights is interfering with the network cables
- C. Network wiring is run perpendicular to electrical conduit
- D. Temperature changes are causing attenuation in copper cabling

Answer: C

QUESTION 384

A network technician configures a firewall's ACL to allow outgoing traffic for several popular services such as email and web browsing. However, after the firewall's deployment, users are still unable to retrieve their emails. Which of the following would BEST resolve this issue?

- A. Allow the firewall to accept inbound traffic to ports 25, 67, 179, and 3389
- B. Allow the firewall to accept inbound traffic to ports 80, 110, 143, and 443
- C. Set the firewall to operate in transparent mode
- D. Allow the firewall to accept inbound traffic to ports 21, 53, 69, and 123

Answer: B

QUESTION 385

A network security technician observes multiple attempts to scan network hosts and devices. All the attempts originate from a single host on the network. Which of the following threats is MOST likely involved?

- A. Smurf attack
- B. Rogue AP
- C. Compromised system
- D. Unintentional DoS

Answer: C

QUESTION 386

A network technician is troubleshooting an end-user connectivity problem. The network technician goes to the appropriate IDF but is unable to identify the appropriate cable due to poor labeling. Which of the following should the network technician use to help identify the appropriate cable?

- A. Tone generator
- B. Multimeter
- C. OTDR

- D. Loopback adapter

Answer: A

QUESTION 387

A network technician notices the site-to-site VPN and Internet connection have not come back up at a branch office after a recent power outage. Which of the following is an out-of-band method the technician would MOST likely utilize to check the branch office's router status?

- A. Use a modem to console into the router
- B. Walk a user through troubleshooting the connection
- C. Travel to the branch office
- D. Hire a contractor to go on-site

Answer: A

QUESTION 388

A network technician is considering opening ports on the firewall for an upcoming VoIP PBX implementation. Which of the following protocols is the technician MOST likely to consider? (Choose three.)

- A. SIP
- B. NTP
- C. H.323
- D. SMB
- E. ICMP
- F. RTP
- G. IPSec
- H. RDP

Answer: ACF

QUESTION 389

A device operating at Layer 3 of the OSI model uses which of the following protocols to determine the path to a different network?

- A. STP
- B. RTP
- C. RIP
- D. NTP
- E. SIP

Answer: C

QUESTION 390

Lisa, a technician, is tasked to monitor various analog POTS lines for voice activity. Which of the following hardware tools would be used?

- A. Butt set

- B. Toner probe
- C. Wire mapper
- D. Cable certifier

Answer: A

QUESTION 391

An organization wants to perform maintenance on any of its web servers without affecting the service availability during a scheduled change window. Which of the following network devices would be required to provide this functionality?

- A. Router
- B. Forward proxy
- C. Load balancer
- D. Firewall

Answer: C

QUESTION 392

Which of the following communication modes has the LOWEST overhead necessary to support streaming protocols such as RTP?

- A. Connectionless
- B. Stateful
- C. Full Duplex
- D. Quality of Service

Answer: A

QUESTION 393

Which of the following diagnostic commands relies on proper forwarding of ICMP ECHO packets?

- A. ipconfig
- B. ping
- C. route
- D. nbstat

Answer: B

QUESTION 394

A technician replaces a customer's router, and is now unable to ping the ISP's gateway. Which of the following should the technician check?

- A. The arp table of the new customer's router.
- B. The route table of the next-hop router.
- C. The route table of the new customer's router.
- D. The arp table of a network user.

Answer: C

QUESTION 395

When Jeff, a technician, is troubleshooting a problem, which of the following is the NEXT step after verifying full system functionality?

- A. Establish a plan of action to resolve the problem and identify potential effects.
- B. Implement the solution.
- C. Establish a theory of probable cause.
- D. Document findings, actions, and outcomes.

Answer: D

QUESTION 396

A technician needs to verify an Ethernet run is functioning properly. Which of the following tools should be used?

- A. Protocol analyzer
- B. Crimper
- C. Cable tester
- D. Punch down tool

Answer: C

QUESTION 397

A network administrator is testing connectivity at a new corporate site. The site has a wireless guest as well as a wired employee network. After verifying connectivity, the administrator checks link speeds by using a speed testing website. The speed testing website shows lower download and upload speeds for the wired network than the wireless network. Which of the following is the MOST likely explanation?

- A. There is less local congestion on the wireless network
- B. The testing server for the wired network was farther away
- C. The firewall is configured to throttle traffic to specific websites
- D. The wireless access points were misconfigured

Answer: B

QUESTION 398

A technician replaces a failed router with a spare that has been in inventory for some time. After attempting to enable HTTPS on the spare router, the technician discovers the feature is unavailable. The support office was able to connect to the previous router. Which of the following actions should the technician perform to enable HTTPS access for the support team?

- A. Reboot the router
- B. Enable HTTP on the router
- C. Update the firmware of the spare router
- D. Perform a factory reset on the router

Answer: C

QUESTION 399

A technician is trying to configure a previously owned WAP. The technician successfully logs into the administrative console and attempts to input the IP address on the WAP. However, the WAP is not accepting the command. Which of the following is causing the problem?

- A. The WAP antenna is damaged
- B. The WAP transmitter light is dim
- C. The terminal emulation software is misconfigured
- D. The LWAPP image is installed on the WAP

Answer: C

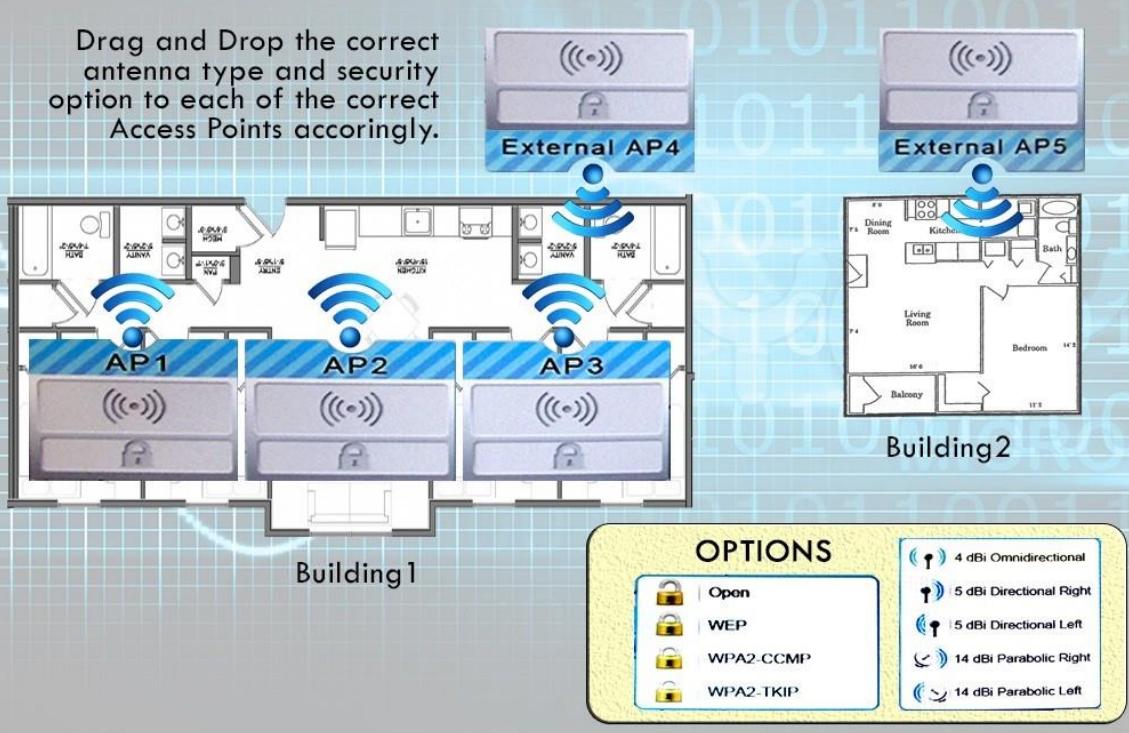
QUESTION 400

Drag and Drop Question

Your company recently purchased a new building down the street from the existing office. For each of the tasks below, select the appropriate antenna type and encryption object for all wireless access point (AP).

1. Create an encrypted wireless connection between the two buildings that BEST controls signal propagation, while maximizing security.
2. Restrict the wireless signal generated by the access points (AP's) inside Building 1, so that it minimizes broadcast beyond the building.
3. Maximize wireless coverage inside Building 1.
4. Building 1's internal wireless network is for visitors only and must not require any special configuration on the visitor's device to connect.

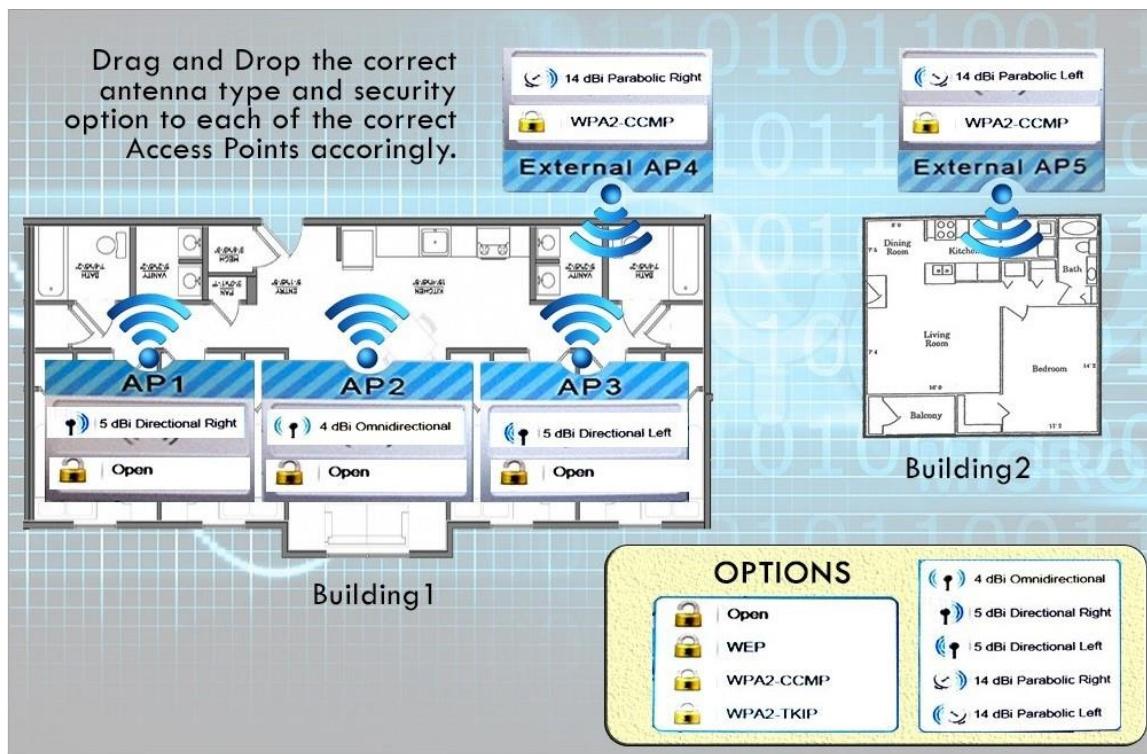
Drag and Drop the correct antenna type and security option to each of the correct Access Points accordingly.



OPTIONS

- 4 dBi Omnidirectional
- 5 dBi Directional Right
- 5 dBi Directional Left
- 14 dBi Parabolic Right
- 14 dBi Parabolic Left

Answer:



QUESTION 401

A technician has installed a Linux server in the tax office. The server can access most of the resources on the network, but it cannot connect to another server that has a share for backup. The technician learns that the target server is on a different subnet. Which of the following tools should the technician use to ensure the Linux server can reach the backup location?

- A. netstat
- B. traceroute
- C. route
- D. dig
- E. ifconfig

Answer: B

QUESTION 402

Which of the following WAN technologies provides a guaranteed throughput rate?

- A. DSL
- B. T-1
- C. Cable broadband
- D. Dial-up

Answer: B

QUESTION 403

Which of the following is the SHORTEST way to write 2001:0000:0d58:0000:0000:0095:7565:0001 in proper IPv6 shorthand?

- A. 2001::d58::95:7565:1
- B. 2001:0:d58:0:0:95:7565:1
- C. 2001:0:d58::95:7565:1
- D. 2001:0:0d58::95:7565:1

Answer: C

QUESTION 404

Which of the following WAP security features offers the STRONGEST encryption?

- A. WPA
- B. WPA2
- C. WEP
- D. Hidden SSID

Answer: B

QUESTION 405

Which of the following standards can operate at both the 2.4GHz and 5GHz frequencies?

- A. 802.11a
- B. 802.11b
- C. 802.11g
- D. 802.11n

Answer: D

QUESTION 406

Which of the following mediums is circuit switched?

- A. PSTN
- B. ATM
- C. Frame relay
- D. MPLS

Answer: A

QUESTION 407

Which of the following is true about tunneling and encryption?

- A. SIP encrypts all data going through the tunnel.
- B. PPTP creates a secure tunnel.
- C. SSL VPN provides a secure tunnel.
- D. RAS is a secure way to create a tunnel.

Answer: C

QUESTION 408

Which of the following is a secure way to connect to a device?

- A. RSH
- B. TFTP
- C. SNMPv2
- D. SFTP

Answer: D

QUESTION 409

A network administrator is setting up a web-based application that needs to be continually accessible to the end users. Which of the following concepts would BEST ensure this requirement?

- A. High availability
- B. Snapshots
- C. NIC teaming
- D. Cold site

Answer: A

QUESTION 410

Which of the following devices should a network administrator configure on the outermost part of the network?

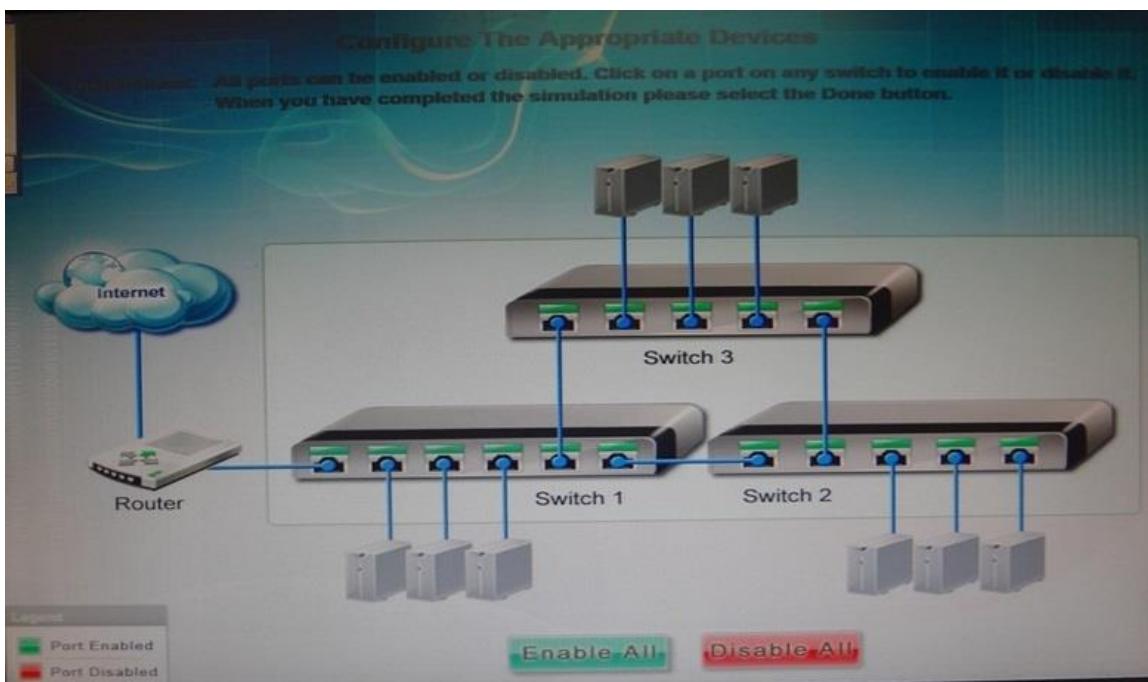
- A. Media converter
- B. Switch
- C. Modem
- D. Firewall

Answer: D

QUESTION 411

Lab Simulation

Workstations are unable to access the internet after a recent power outage. Configure the appropriate devices to ensure All workstations have internet connectivity.

**Answer:**

The switches are not connected properly.

Connect Switch 1 to switch three on the last port and then connect the last port of the switch 3 to the first port of switch 2. In this way the switches will be connected properly. Click Enable All to enable the switches.

QUESTION 412**Lab Simulation**

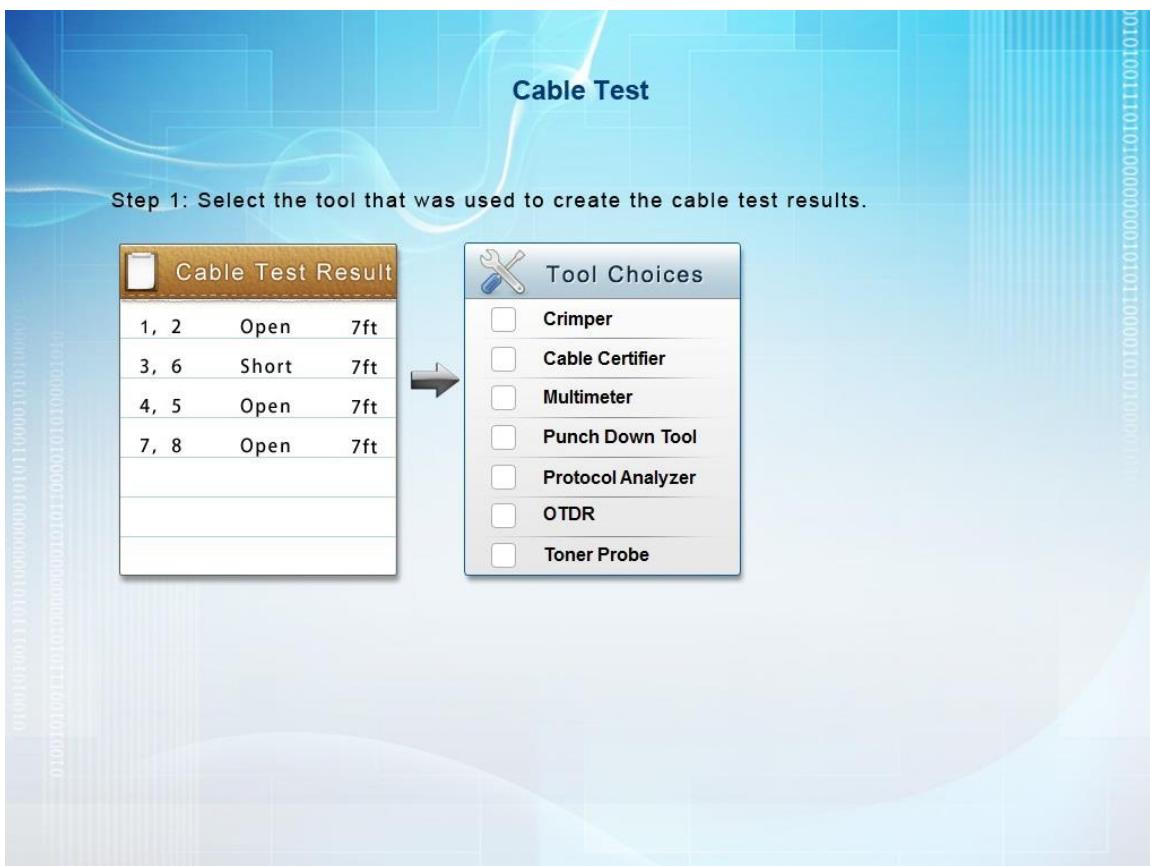
You have been tasked with testing a CAT5e cable.

A summary of the test results can be found on the screen.

Step 1: Select the tool that was used to create the cable test results.

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.



Cable Test

Step 1: Select the tool that was used to create the cable test results.

Cable Test Result		
1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

Tool Choices

- Crimper
- Cable Certifier
- Multimeter
- Punch Down Tool
- Protocol Analyzer
- OTDR
- Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

Correctly crimped cable
 Incorrectly crimped cable

Submit Cable Test Analysis

Cable Test

Step 1: Select the tool that was used to create the cable test results.

Cable Test Result		
1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

Tool Choices

- Crimper
- Cable Certifier
- Multimeter
- Punch Down Tool
- Protocol Analyzer
- OTDR
- Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

Correctly crimped cable
 Incorrectly crimped cable

Submit Cable Test Analysis

Cable Test

Step 1: Select the tool that was used to create the cable test results.

Cable Test Result		
1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

→

Tool Choices	
<input type="checkbox"/>	Crimper
<input type="checkbox"/>	Cable Certifier
<input checked="" type="checkbox"/>	Multimeter
<input type="checkbox"/>	Punch Down Tool
<input type="checkbox"/>	Protocol Analyzer
<input type="checkbox"/>	OTDR
<input type="checkbox"/>	Toner Probe

Step 2: Interpret the test results and select the option that explains the results.
After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

Correct voltage on the cable
 Incorrect voltage on the cable

Submit Cable Test Analysis

Cable Test

Step 1: Select the tool that was used to create the cable test results.

Cable Test Result		
1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

→

Tool Choices	
<input type="checkbox"/>	Crimper
<input type="checkbox"/>	Cable Certifier
<input type="checkbox"/>	Multimeter
<input checked="" type="checkbox"/>	Punch Down Tool
<input type="checkbox"/>	Protocol Analyzer
<input type="checkbox"/>	OTDR
<input type="checkbox"/>	Toner Probe

Step 2: Interpret the test results and select the option that explains the results.
After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

Correctly punched cable
 Incorrectly punched cable

Submit Cable Test Analysis

Cable Test

Step 1: Select the tool that was used to create the cable test results.

Cable Test Result		
1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

→

Tool Choices	
<input type="checkbox"/>	Crimper
<input type="checkbox"/>	Cable Certifier
<input type="checkbox"/>	Multimeter
<input type="checkbox"/>	Punch Down Tool
<input checked="" type="checkbox"/>	Protocol Analyzer
<input type="checkbox"/>	OTDR
<input type="checkbox"/>	Toner Probe

Step 2: Interpret the test results and select the option that explains the results.
After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

Correct captured packets
 Incorrect captured packets

Submit Cable Test Analysis

Cable Test

Step 1: Select the tool that was used to create the cable test results.

Cable Test Result		
1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

→

Tool Choices	
<input type="checkbox"/>	Crimper
<input type="checkbox"/>	Cable Certifier
<input type="checkbox"/>	Multimeter
<input type="checkbox"/>	Punch Down Tool
<input type="checkbox"/>	Protocol Analyzer
<input checked="" type="checkbox"/>	OTDR
<input type="checkbox"/>	Toner Probe

Step 2: Interpret the test results and select the option that explains the results.
After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

Correct length cable
 Incorrect length cable

Submit Cable Test Analysis

Cable Test

Step 1: Select the tool that was used to create the cable test results.

	Cable Test Result
	1, 2 Open 7ft
	3, 6 Short 7ft
	4, 5 Open 7ft
	7, 8 Open 7ft



	Tool Choices
	<input type="checkbox"/> Crimper
	<input type="checkbox"/> Cable Certifier
	<input type="checkbox"/> Multimeter
	<input type="checkbox"/> Punch Down Tool
	<input type="checkbox"/> Protocol Analyzer
	<input type="checkbox"/> OTDR
	<input checked="" type="checkbox"/> Toner Probe

Step 2: Interpret the test results and select the option that explains the results.
 After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

Correctly toned cable
 Incorrectly toned cable

Submit Cable Test Analysis

Answer: Cable certifier - incorrectly crimped cable

Explanation:

A Cable Certifier provides "Pass" or "Fail" information in accordance with industry standards but can also show detailed information when a "Fail" occurs. This includes shorts, the wire pairs involved and the distance to the short. When a short is identified, at the full length of the cable it means the cable has not been crimped correctly.

QUESTION 413

Drag and Drop Question

Wireless network users recently began experiencing speed and performance issues after access point 2 (AP2) was replaced due to faulty hardware. The original network was installed according to a consultant's specifications and has always worked without a problem.

You a network technician, have been tasked with evaluating the situation and resolving the issues to improve both performance and connectivity.

Refer to the following exhibits and perform any necessary changes to the wireless and wired infrastructure by adjusting devices.

Note: Adjust the LEAST number of devices needed to fix the issue.



OPTIONS

Note: Adjust the LEAST number of devices needed to fix the issue.

IP Addresses:

192.168.100.151	192.168.100.152
192.168.100.153	192.168.100.1

Wireless Name: CorpNET
New Router password: 123456789b

Available WiFi Channels: 01 02 03 04 05 06 07 08 09 10 11

CIDR Options: 24 25 26 27 28 29 30 WiFi Mode: A B G N

Speed Duplex
Auto 100 1000 Auto Half Full

Available Security Types: Submit?
OPEN WEP WPA WPA2 (Save)

Access Point 1	Access Point 2	Access Point 3
IP Address: 192.168.100.151	IP Address: 192.168.100.152	IP Address: 192.168.100.153
Subnet CIDR: 24	Subnet CIDR: 24	Subnet CIDR: 24
Gateway: 192.168.100.1	Gateway: 192.168.100.1	Gateway: 192.168.100.1
SSID: CorpNET	SSID: CorpNET	SSID: CorpNET
Wireless Channel: 01	Wireless Channel: 01	Wireless Channel: 11
Speed: 100	Speed: Auto	Speed: 100
Duplex: Full	Duplex: Auto	Duplex: Full
Wireless Mode: G	Wireless Mode: B	Wireless Mode: G
Security Setting: WPA	Security Setting: WPA	Security Setting: WPA
Password: 123456789b	Password: 123456789b	Password: 123456789b

Answer:



OPTIONS

Note: Adjust the LEAST number of devices needed to fix the issue.

IP Addresses:

192.168.100.151	192.168.100.152
192.168.100.153	192.168.100.1

Wireless Name: CorpNET
New Router password: 123456789b

Available WiFi Channels: 01 02 03 04 05 07 08 09 10 11

CIDR Options: 24 25 26 27 28 29 30 WiFi Mode: A B N

Speed Duplex
Auto 1000 Auto Half

Available Security Types: Submit?
OPEN WEP WPA WPA2 ()

Access Point 1	Access Point 2	Access Point 3
IP Address: 192.168.100.151	IP Address: 192.168.100.152	IP Address: 192.168.100.153
Subnet CIDR: 24	Subnet CIDR: 24	Subnet CIDR: 24
Gateway: 192.168.100.1	Gateway: 192.168.100.1	Gateway: 192.168.100.1
SSID: CorpNET	SSID: CorpNET	SSID: CorpNET
Wireless Channel: 01	Wireless Channel: 06	Wireless Channel: 11
Speed: 100	Speed: 100	Speed: 100
Duplex: Full	Duplex: Full	Duplex: Full
Wireless Mode: G	Wireless Mode: G	Wireless Mode: G
Security Setting: WPA	Security Setting: WPA	Security Setting: WPA
Password: 123456789b	Password: 123456789b	Password: 123456789b

Explanation:

After you fix AP2, you must click on the switch, which will bring up the switch interface. Type in the two commands that they show there, to prove the fix. Do not worry that interface 4 is down, there is no interface 4 for you to do.

QUESTION 414

Lab Simulation

Wireless network users recently began experiencing speed and performance issues after access point 2 (AP2) was replaced due to faulty hardware.

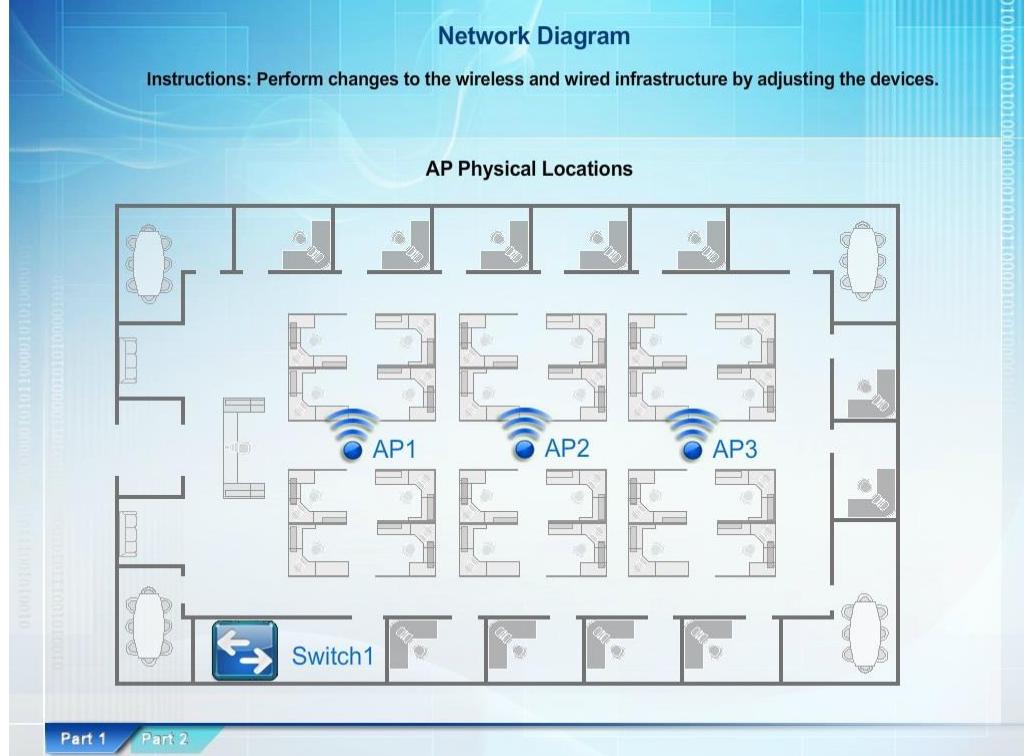
The original network was installed according to a consultant's specifications and has always worked without a problem.

You, a network technician, have been tasked with evaluating the situation and resolving the issues to improve both performance and connectivity.

Refer to the following diagram and perform any NECESSARY changes to the wireless and wired infrastructure by adjusting devices.

Note: Adjust the LEAST number of devices needed to fix the issue, all blue icons in the image are clickable.

When you feel the simulation is complete please select the Done button.



Wireless AP1 Settings

http://ap1.setup.do

Wireless AP Configuration Settings

Basic Configuration

Access Point Name: AP1
IP Address: 192.168.100.151 / 24
Gateway: 192.168.100.1
SSID: CorpNET
SSID Broadcast: Yes No

Wireless

Mode: G
Channel: 1

Wired

Speed: AUT 10 100
Duplex: AUT Half Full

Security

Security Settings: None WEP WPA
Key or Passphrase: 123456789b

Reset Submit

Wireless AP2 Settings

Wireless AP Configuration Settings

Basic Configuration

Access Point Name:	AP2
IP Address:	192.168.100.152 / 24
Gateway:	192.168.100.1
SSID:	CorpNET
SSID Broadcast:	<input checked="" type="radio"/> Yes <input type="radio"/> No

Wireless

Mode:	B
Channel:	1

Wired

Speed:	<input checked="" type="radio"/> AUT <input type="radio"/> 10 <input type="radio"/> 100
Duplex:	<input checked="" type="radio"/> AUT <input type="radio"/> Half <input type="radio"/> Full

Security

Security Settings:	<input type="radio"/> None <input type="radio"/> WEP <input checked="" type="radio"/> WPA
Key or Passphrase:	123456789b

Reset Submit

Wireless AP3 Settings

Wireless AP Configuration Settings

Basic Configuration

Access Point Name:	AP3
IP Address:	192.168.100.153 / 24
Gateway:	192.168.100.1
SSID:	CorpNET
SSID Broadcast:	<input checked="" type="radio"/> Yes <input type="radio"/> No

Wireless

Mode:	G
Channel:	11

Wired

Speed:	<input type="radio"/> AUT <input checked="" type="radio"/> 10 <input type="radio"/> 100
Duplex:	<input type="radio"/> AUT <input type="radio"/> Half <input checked="" type="radio"/> Full

Security

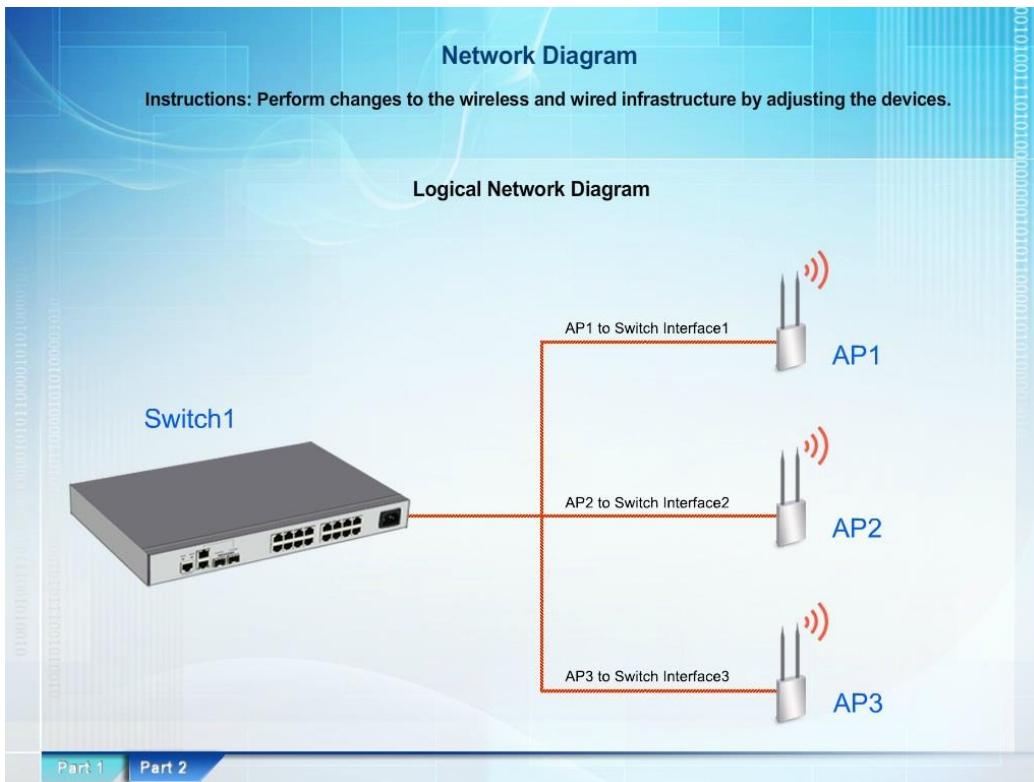
Security Settings:	<input type="radio"/> None <input type="radio"/> WEP <input checked="" type="radio"/> WPA
Key or Passphrase:	123456789b

Reset Submit

SWITCH 1

```
SW1# help
sh[ow] int[erfaces]
sh[ow] run[ning] int[erfaces]

SW1# -
```



Answer:

- Change the speed and duplex settings on AP2 only to 100 and full.
- Change the mode to G on AP2
- Change the channel to 6 on AP2

Explanation:

Since we know that the network was running perfectly before replacing AP2 we should start by looking at this new device that was used to replace the old one. Here we see that the other AP's have hard coded the speed and duplex settings to 100/full, while AP2 is set to auto/auto.

Also, the other AP's have been configured to use 802.11G, while AP2 is using 802.11B.

Finally the channel that AP2 is using overlaps with AP1 which can cause problems.

Channels 1, 6, and 11 are spaced far enough apart that they don't overlap.

On a non-MIMO setup (i.e. 802.11 a, b, or g) you should always try to use channel 1, 6, or 11.

Since AP1 is using 1, and AP3 is using 11, AP2 should be using 6.

QUESTION 415

Drag and Drop Question

Drag and drop the fiber cable connection types to the appropriate image.


FC
LC (single)
LC (duplex)
SC
ST**Answer:**



QUESTION 416

Drag and Drop Question

A customer's email server is not sending emails. Arrange the troubleshooting steps in the order the technician should perform them:

1	Implement the solution
2	Verify full system functionality
3	Establish a theory of probable cause
4	Determine if any recent changes have been made to the server
5	Document findings, actions, and outcomes
6	Establish a plan of action to resolve the problem
7	Test the theory to determine cause
8	Implement preventative measures

Answer:

- 1** Determine if any recent changes have been made to the server
- 2** Establish a theory of probable cause
- 3** Test the theory to determine cause
- 4** Establish a plan of action to resolve the problem
- 5** Implement the solution
- 6** Verify full system functionality
- 7** Implement preventative measures
- 8** Document findings, actions, and outcomes

QUESTION 417

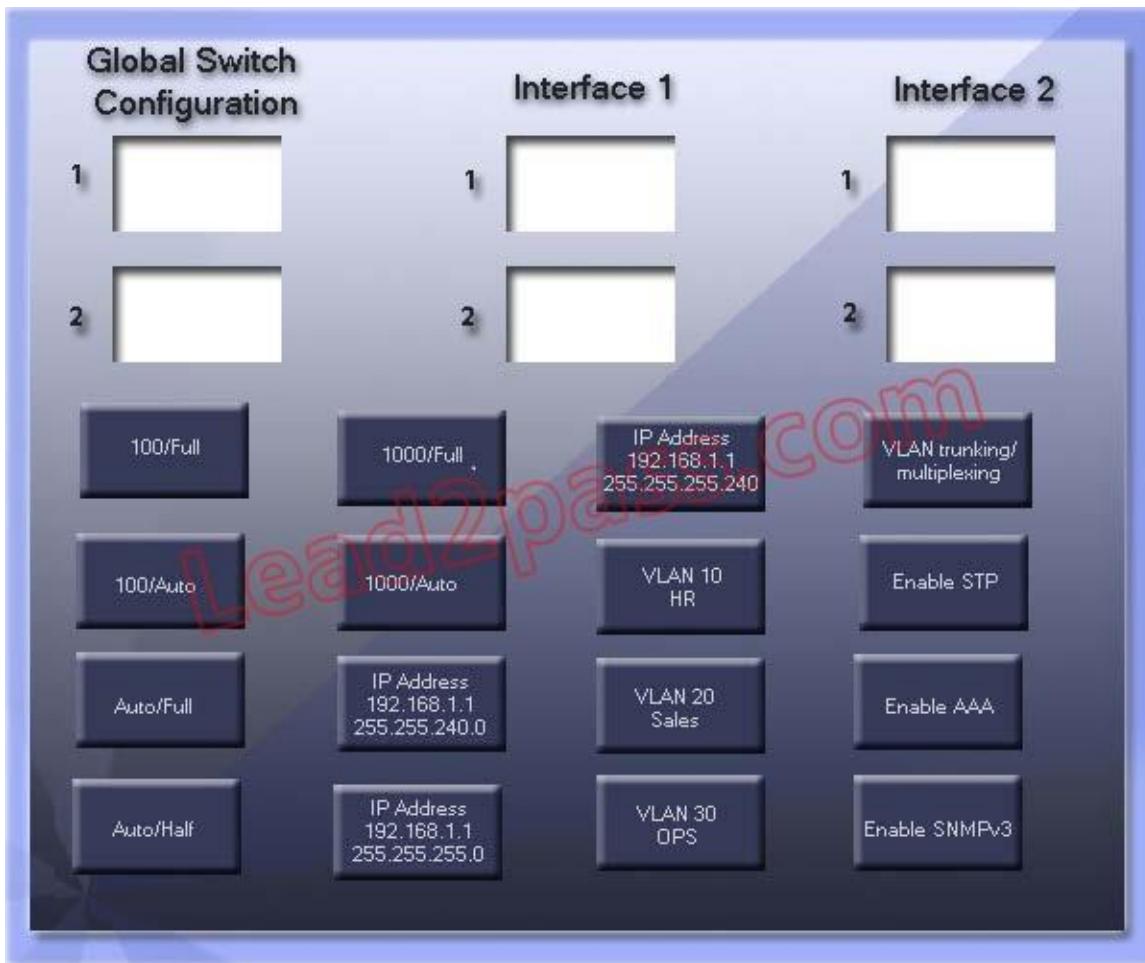
Drag and Drop Question

GigSwitch1 is currently configured with a speed of 100 and Duplex is set to Auto on all interfaces. Interface 2 will be connected to GigSwitch2 which is used for all departments. Interface 1 will be used for HR traffic only.

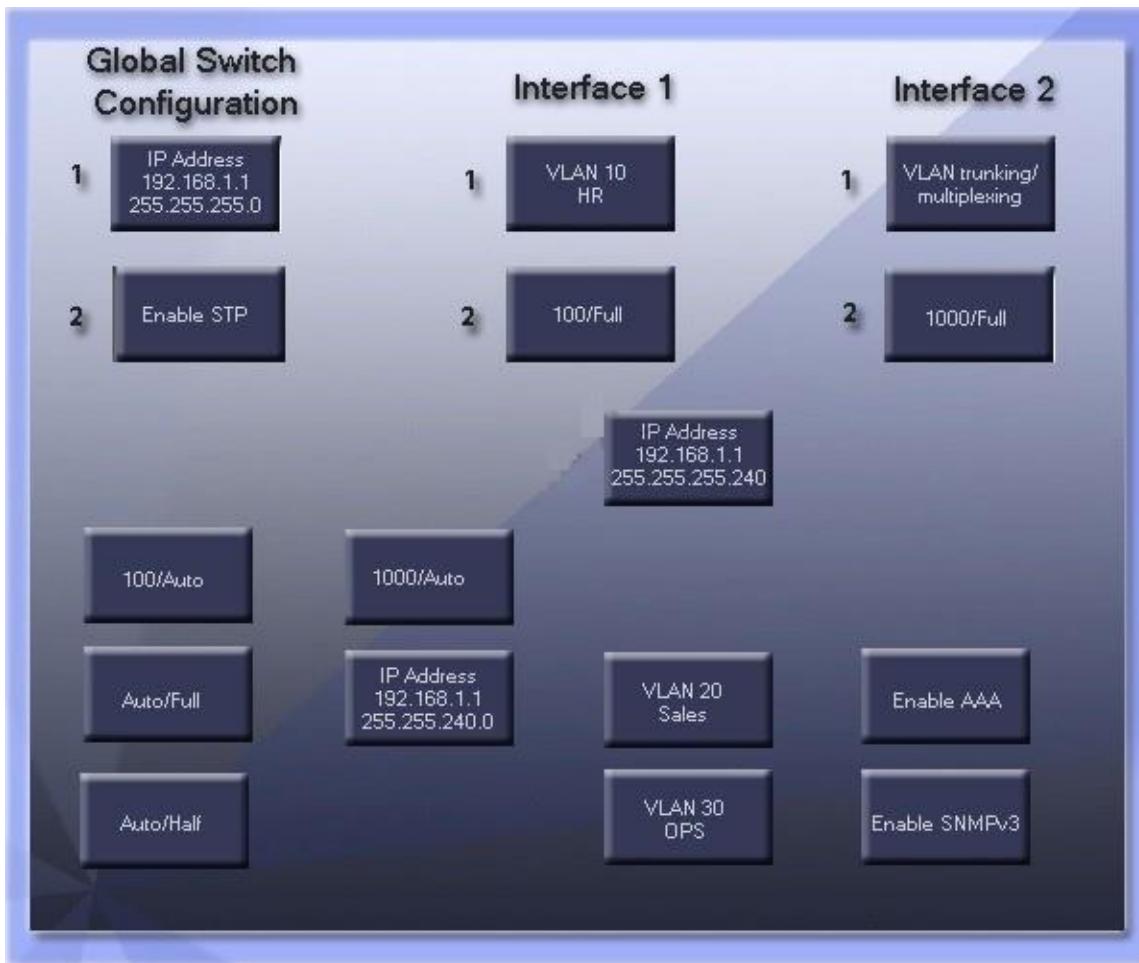
GigSwitch1 needs to be configured with the following parameters:

- * Configure the necessary protocol to prevent switching loops
- * Configure GigSwitch1 with a /24 IP address for management
- * Traffic across Interface 1 needs to be forced to accept and receive up to 100Mbps data at the same time
- * Traffic across Interface 2 needs to be forced to use Gigabit speeds and maximum performance

Drag and drop the appropriate configurations to their corresponding requirements.
All placeholders must be filled. Not all configurations will be used.

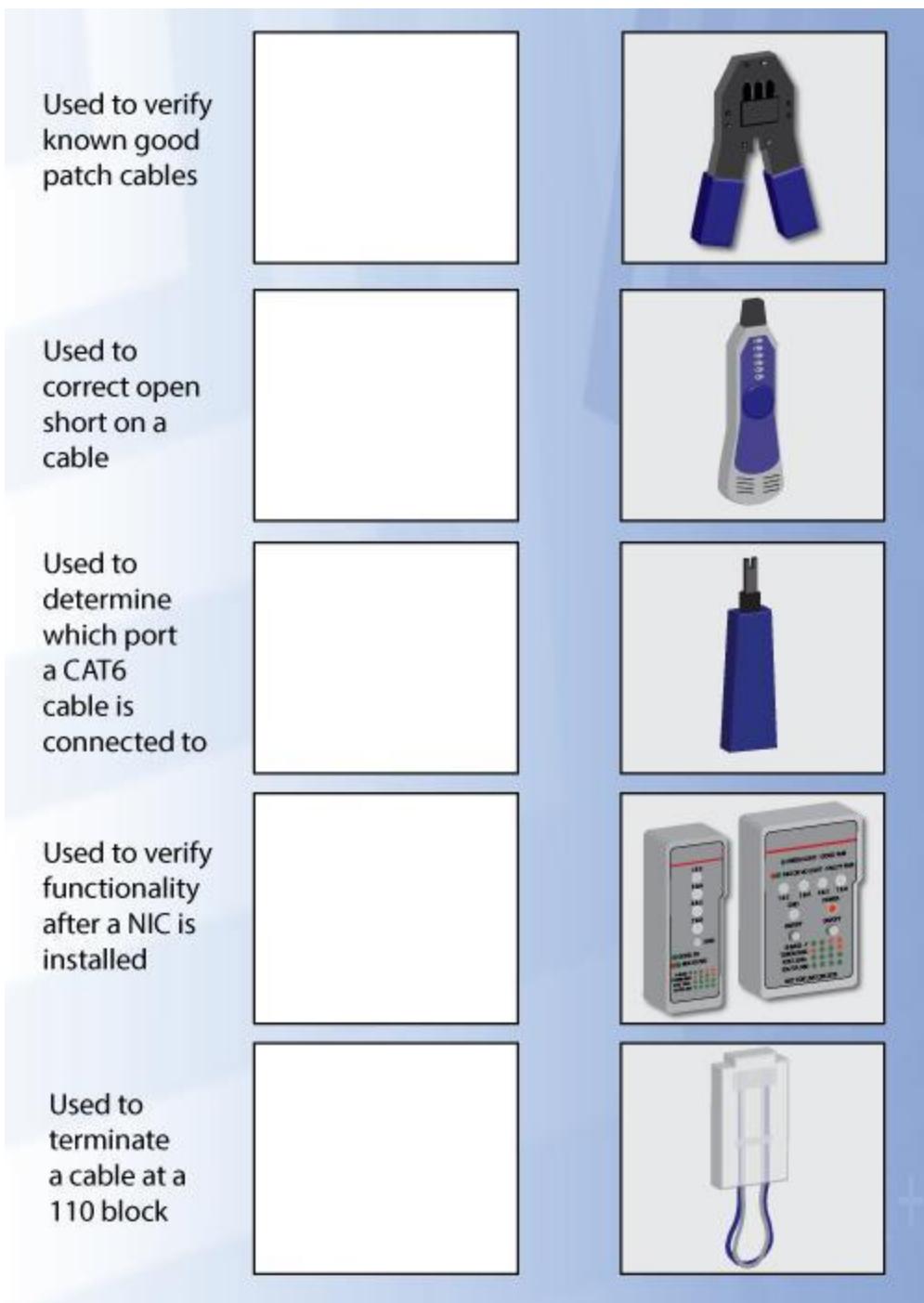


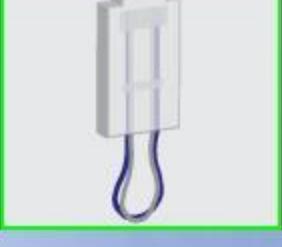
Answer:


QUESTION 418

Drag and Drop Question

Drag and drop each networking tool to the MOST appropriate descriptor. Each tool may only be used once.

**Answer:**

Used to verify known good patch cables		
Used to correct open short on a cable		
Used to determine which port a CAT6 cable is connected to		
Used to verify functionality after a NIC is installed		
Used to terminate a cable at a 110 block		

QUESTION 419

Drag and Drop Question

Drag and drop the following maximum speeds to their corresponding wireless standards.
Tokens can be used more than once.

Wireless Standard	Maximum Speed
802.11a	10Mbps
802.11b	11Mbps
802.11g	54Mbps
802.11n	56Mbps
	>100Mbps

Answer:

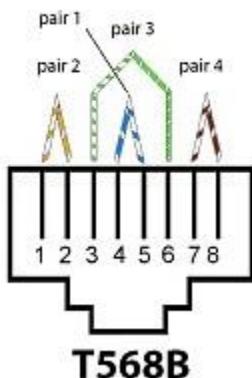
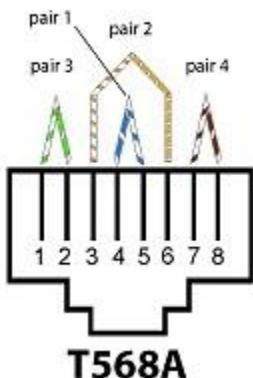
Wireless Standard	Maximum Speed
802.11a	54Mbps
802.11b	11Mbps
802.11g	54Mbps
802.11n	>100Mbps
	10Mbps
	11Mbps
	54Mbps
	56Mbps
	>100Mbps

QUESTION 420

Crimp out a T568B.

Answer:

White/Orange, Orange, White/Green, Blue, White/Blue, Green, White/Brown, Brown.

T568A and T568B Wiring Assignments:**Wiring Standards**

Pin #	T568B	T568A
1	White/Orange	White/Green
2	Orange	Green
3	White/Green	White/Orange
4	Blue	Blue
5	White/Blue	White/Blue
6	Green	Orange
7	White/Brown	White/Brown
8	Brown	Brown

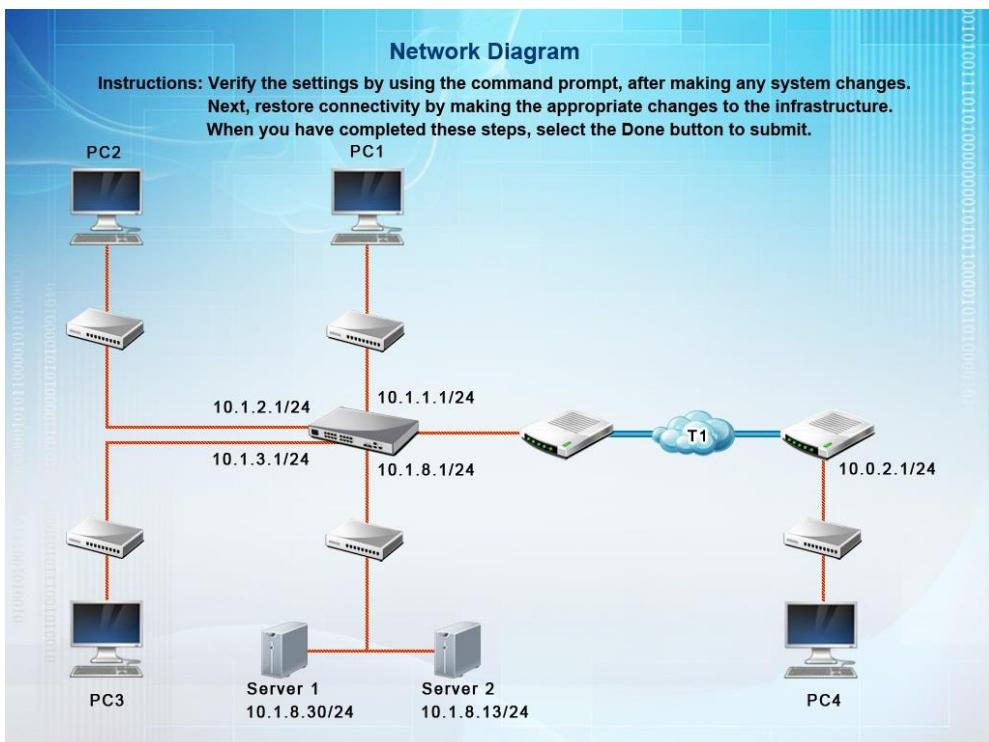
QUESTION 421**Lab Simulation**

Alter recent changes to the pictured network, several users are unable to access the servers. Only PC1, PC2, PC3, and PC4 are clickable and will give you access to the command prompt and the adapter configuration tabs.

Instructions: Verify the settings by using the command prompt, after making any system changes.

Next, restore connectivity by making the appropriate changes to the infrastructure.

When you have completed these steps, select the Done button to submit.



ADAPTER CONFIGURATION COMMAND PROMPT PC 1 X

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically
 Use the following IP address

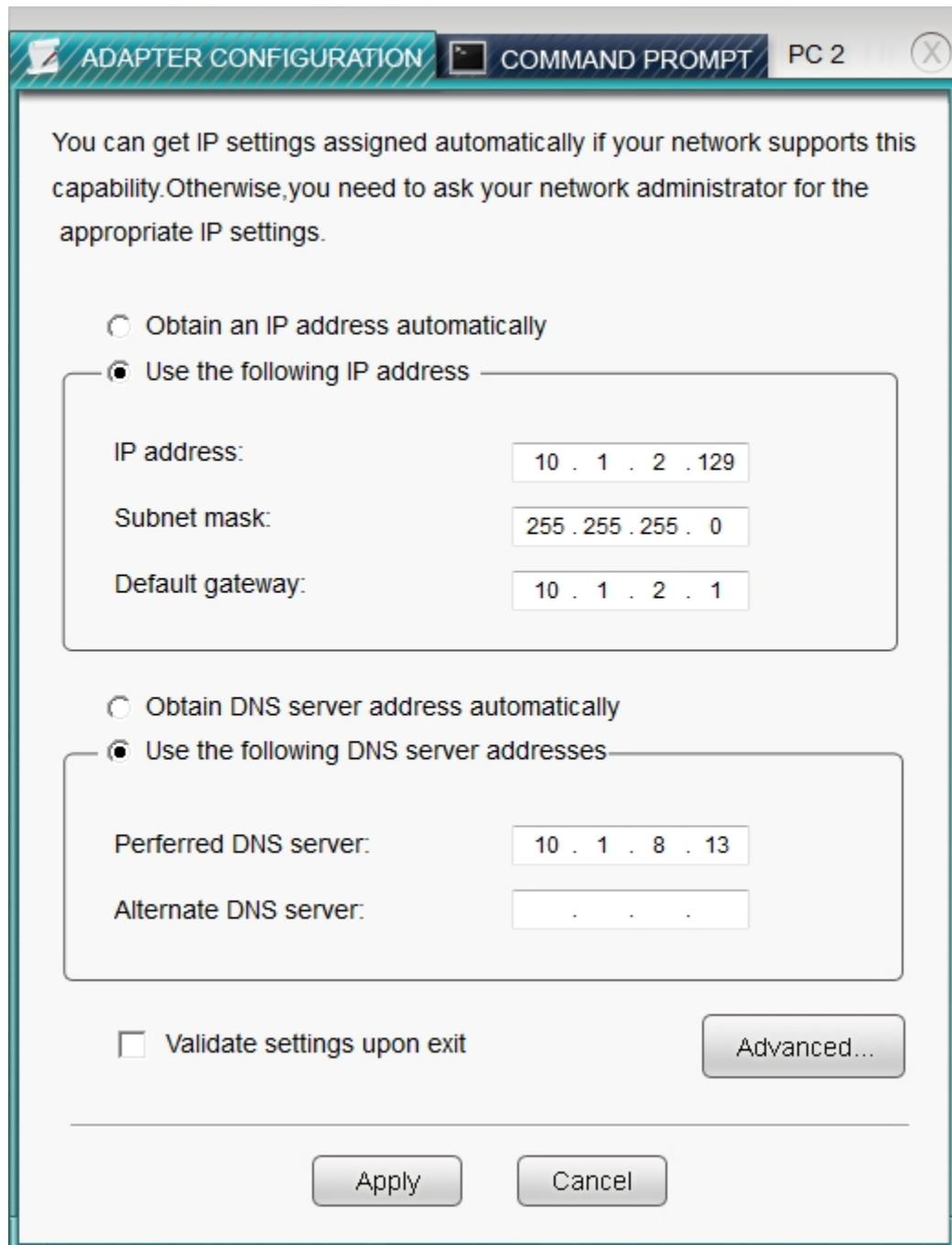
IP address:	10 . 1 . 1 . 129
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	10 . 1 . 1 . 1

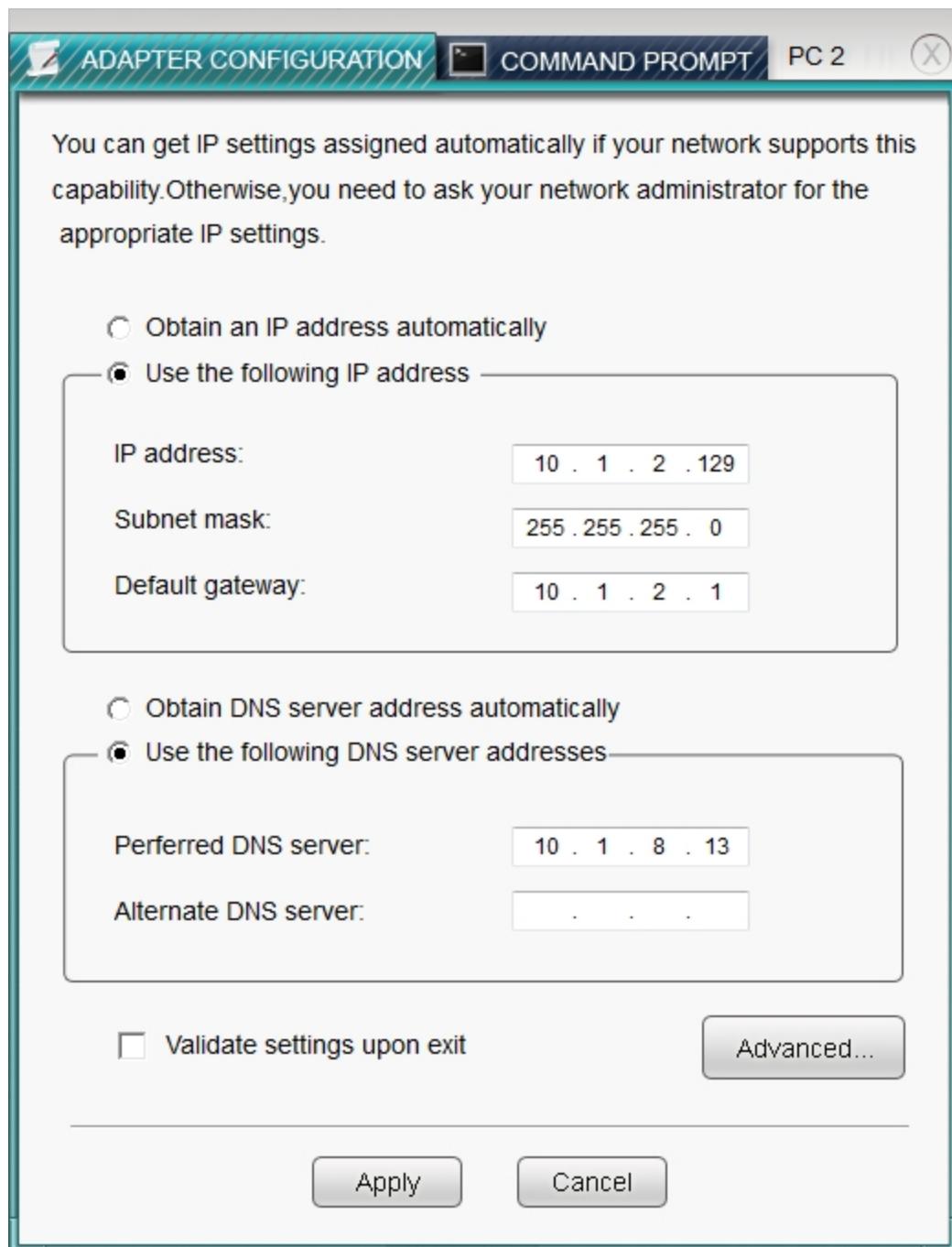
Obtain DNS server address automatically
 Use the following DNS server addresses

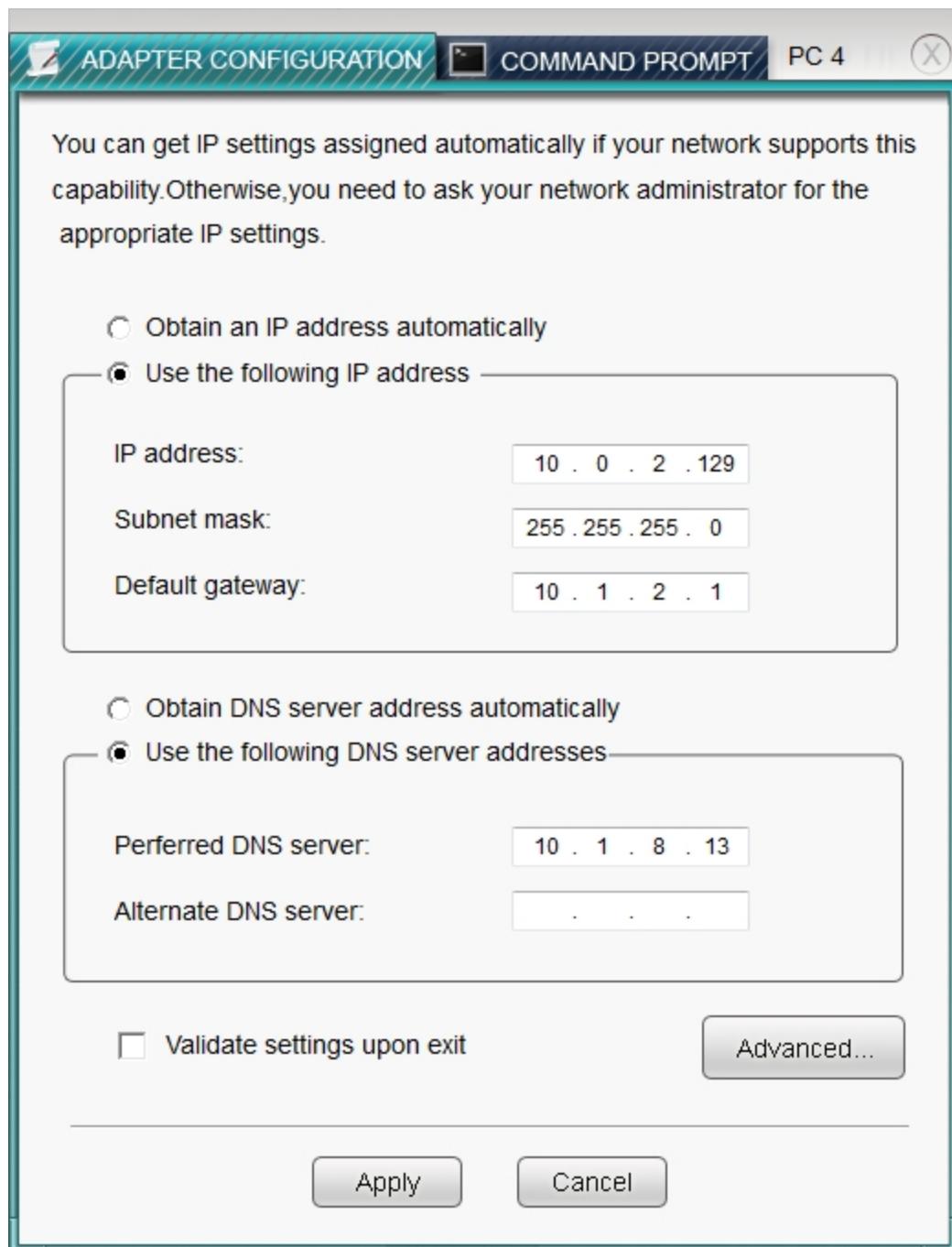
Preferred DNS server:	10 . 1 . 8 . 13
Alternate DNS server:	. . .

Validate settings upon exit Advanced...

Apply Cancel





**Answer:**

On PC3, change the subnet mask to 255.255.255.0.

When it is set to 255.255.255.128, then the PC with a .129 address will not be on the same subnet as the default gateway which is .1 On PC4, change the default gateway to 10.0.2.1. It has been incorrectly set as 10.1.2.1.

QUESTION 422

Hotspot Question

Corporate headquarters provided your office a portion of their class B subnet to use at a new office location.

Allocate the minimum number of addresses (using CIDR notation) needed to accommodate each department.

Range Given: 172.30.232.0/24

- Sales 57 devices
- HR 23 devices
- IT 12 devices
- Finance 32 devices
- Marketing 9 devices

After accommodating each department, identify the unused portion of the subnet by responding to the question on the graphic.

All drop downs must be filled.

Instructions: When the simulation is complete, please select the Done button to submit.

CIDR Notation

Instructions: When the simulation is complete, please select the Done button to submit.

Which of the following would represent the **LARGEST** possible contiguous block of remaining addresses?

CIDR Notation

Instructions: When the simulation is complete, please select the Done button to submit.

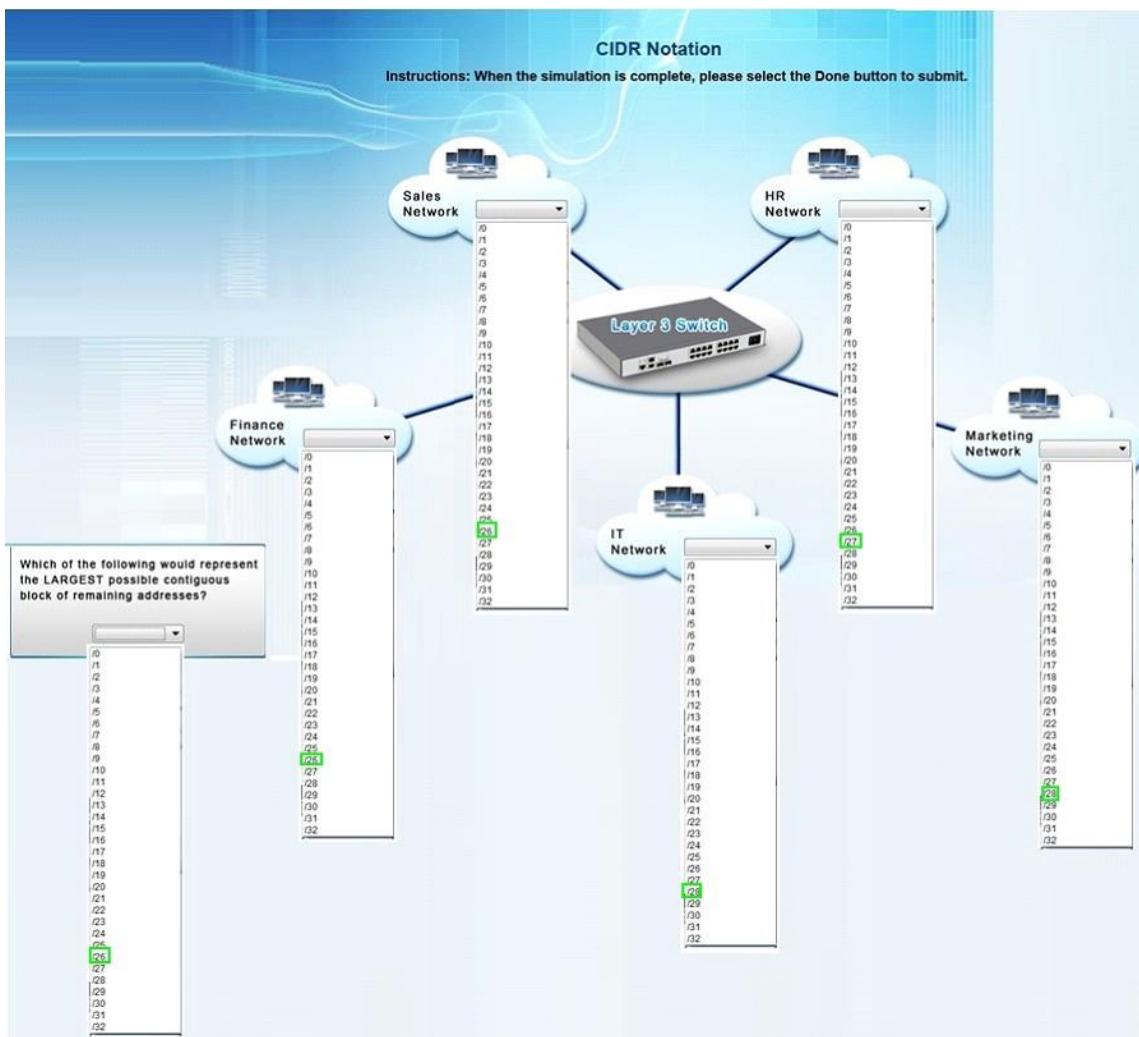
Which of the following would represent the **LARGEST** possible contiguous block of remaining addresses?

/0
/1
/2
/3
/4
/5
/6
/7
/8
/9
/10
/11
/12
/13
/14
/15
/16
/17
/18
/19
/20
/21
/22
/23
/24
/25
/26
/27
/28
/29
/30
/31
/32



All Networks have the range form /0 to /32

Answer:



Explanation:

Sales network - /26 - This will provide up to 62 usable IP addresses (64-2 for subnet and broadcast IP)

HR network - /27 - This will provide for up to 30 usable IP's (32-2)

IT - /28 - This will provide for up to 14 usable IP's (16-2)

Finance - /26 - Note that a /27 is 32 IP addresses but 2 of those are reserved for the network and broadcast IP's and can't be used for hosts.

Marketing - /28

If we add up how many IP blocks are used that is $64+32+16+64+16=192$.

A /24 contains 256 IP addresses, so $256-192=64$.

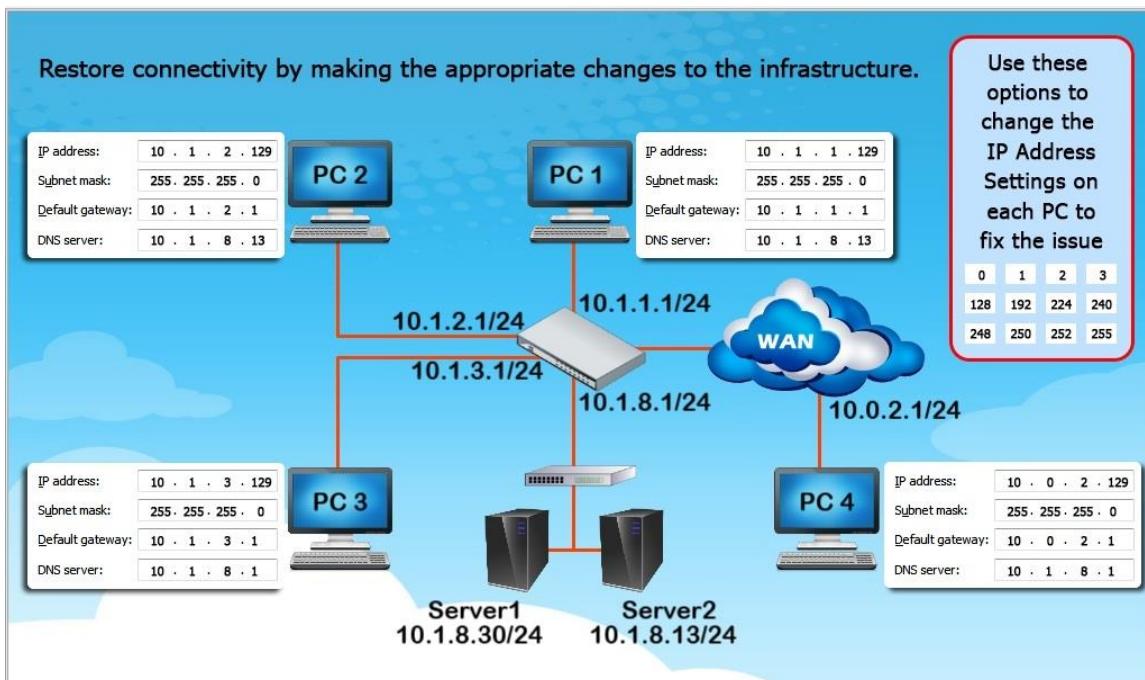
So the last unused box should be a /26, which equates to 64 addresses

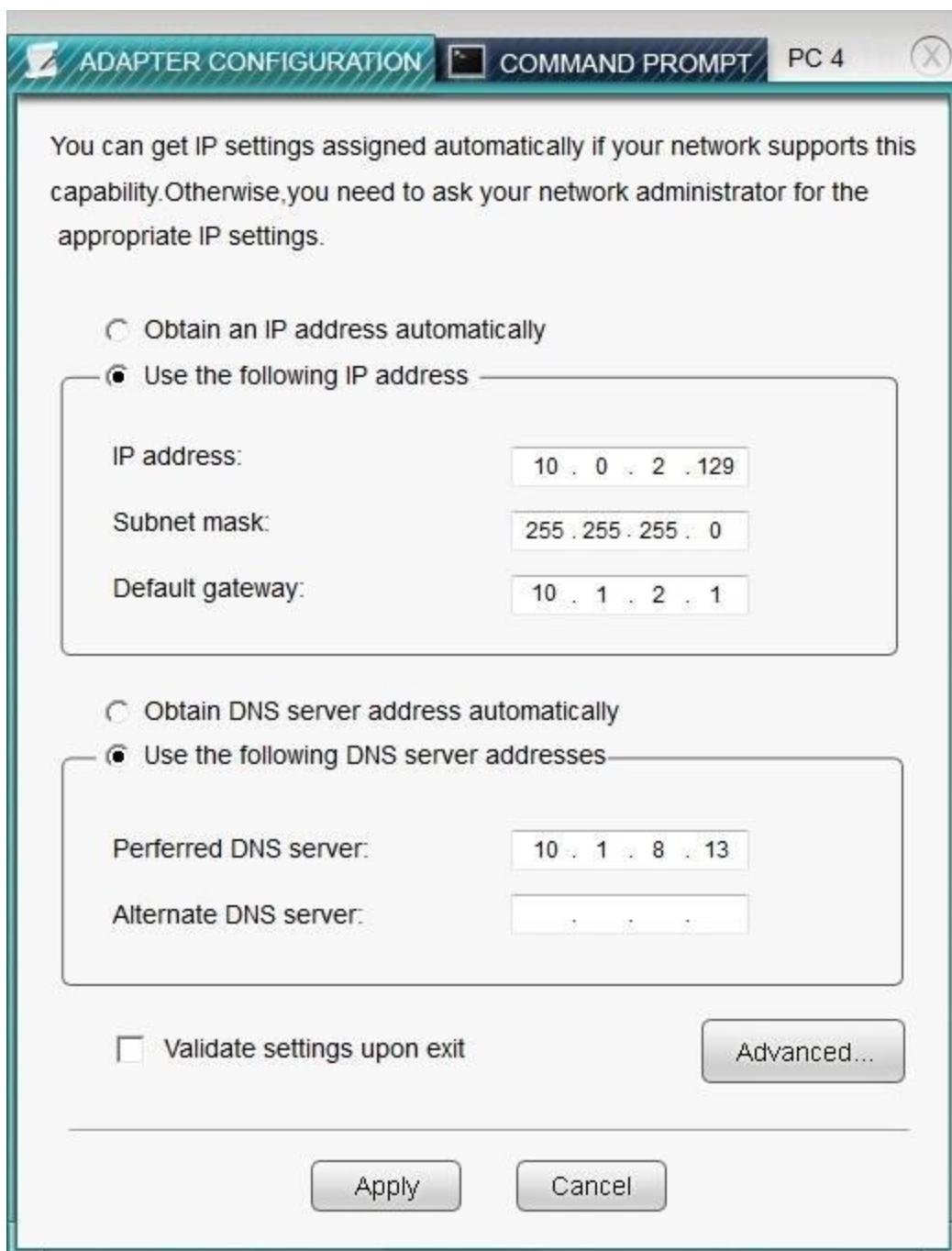
QUESTION 423

Lab Simulation

After recent changes to the pictured network, several users are unable to access the servers.

Only PC1, PC2, PC3, and PC4 are configurable. You can only change the adapter configurations to each PC.



**Answer:**

On PC3, change the subnet mask to 255.255.255.0. When it is set to 255.255.255.128, then the PC with a .129 address will not be on the same subnet as the default gateway which is .1

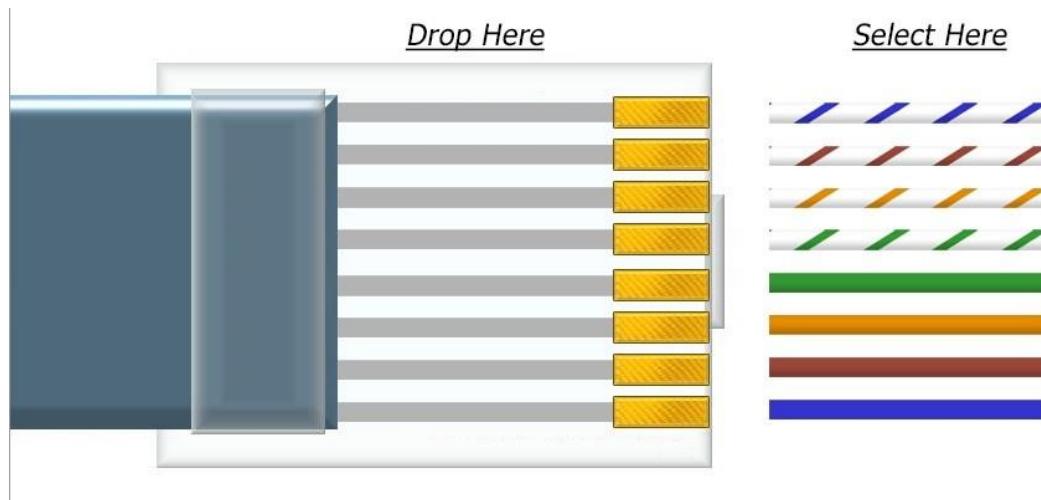
On PC4, change the default gateway to 10.0.2.1. It has been incorrectly set as 10.1.2.1.

On this simulation, you will be asked to test connectivity after fixing the issues.

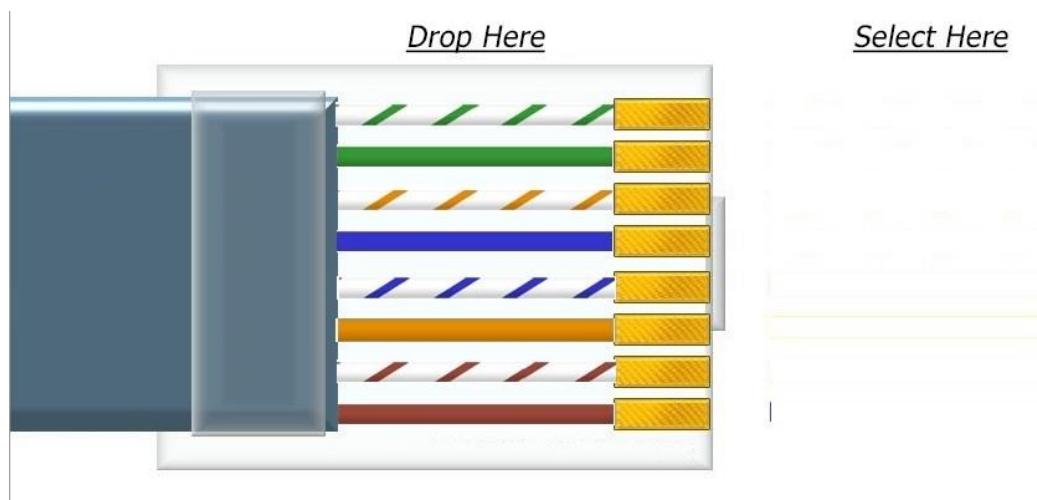
You MUST ping the other three computers on EACH computer (i.e. from PC1, ping PC2, PC3, PC4, and from PC2, ping PC1, PC3 and PC4, etc)

QUESTION 424

Drag and Drop Question
Build a T-658A Connection

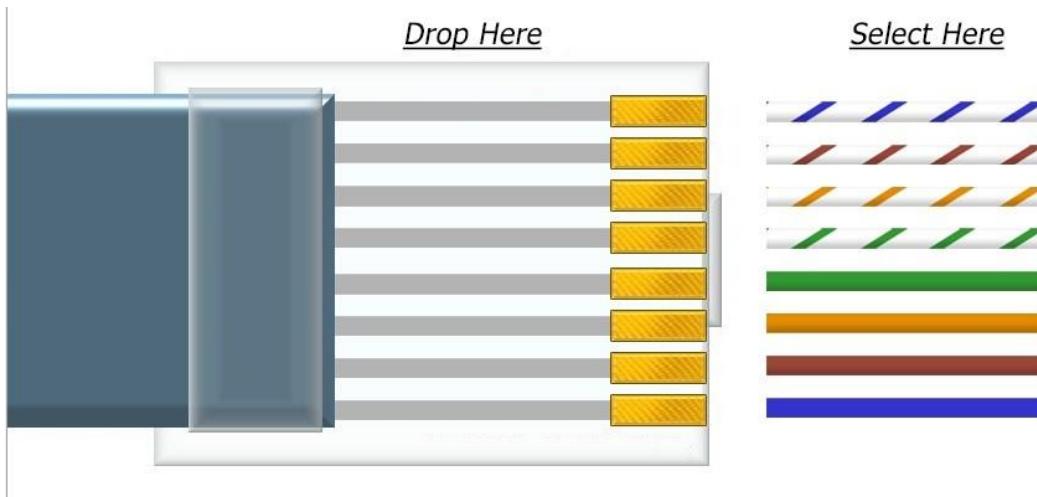


Answer:

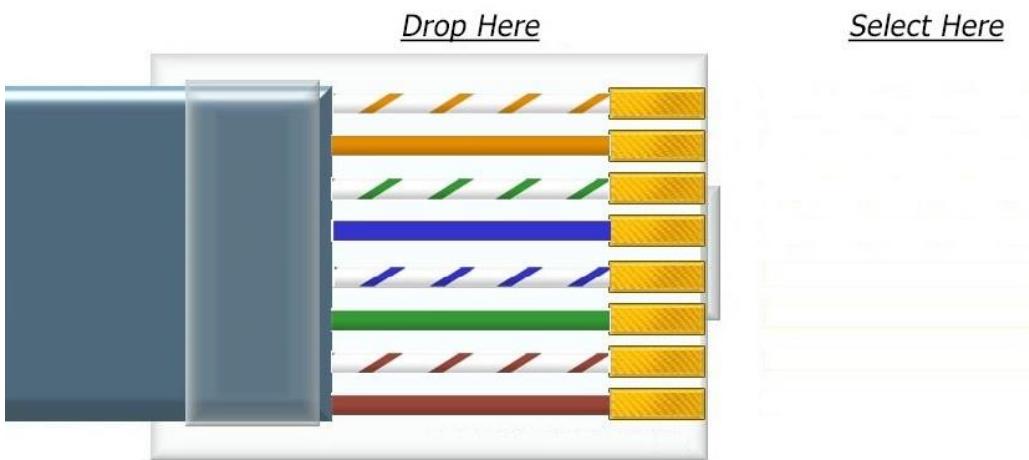


QUESTION 425

Drag and Drop Question
Build a T-658B Connection

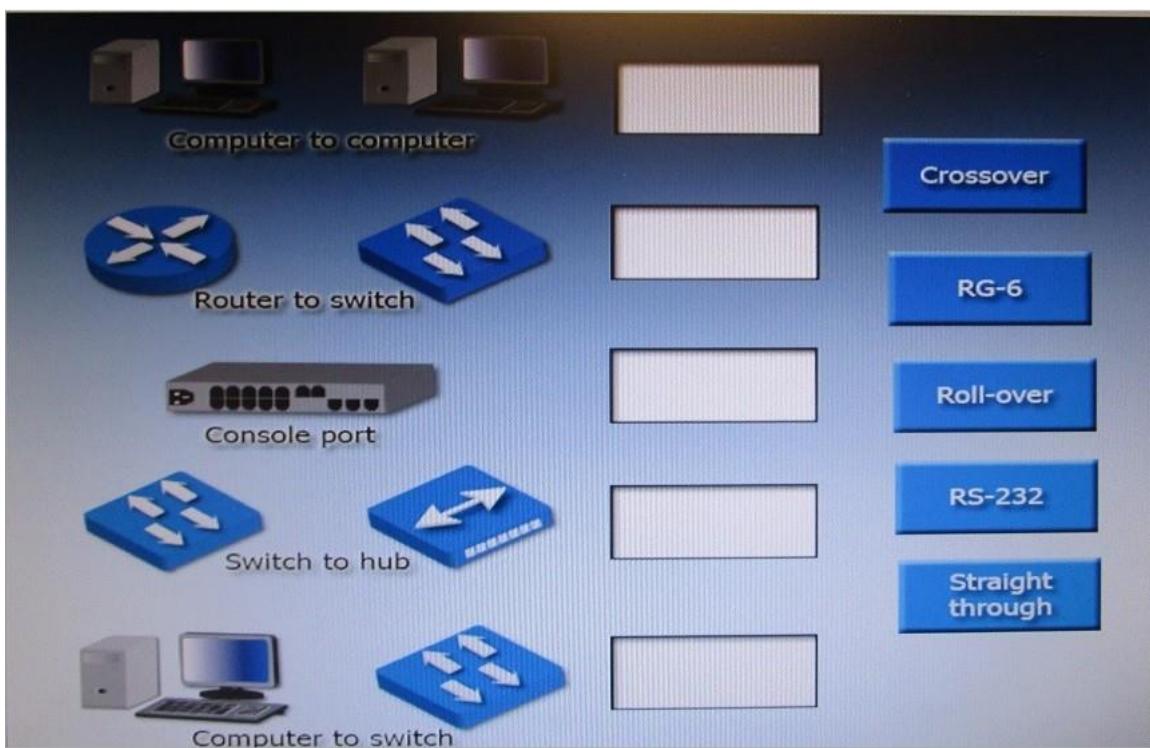


Answer:

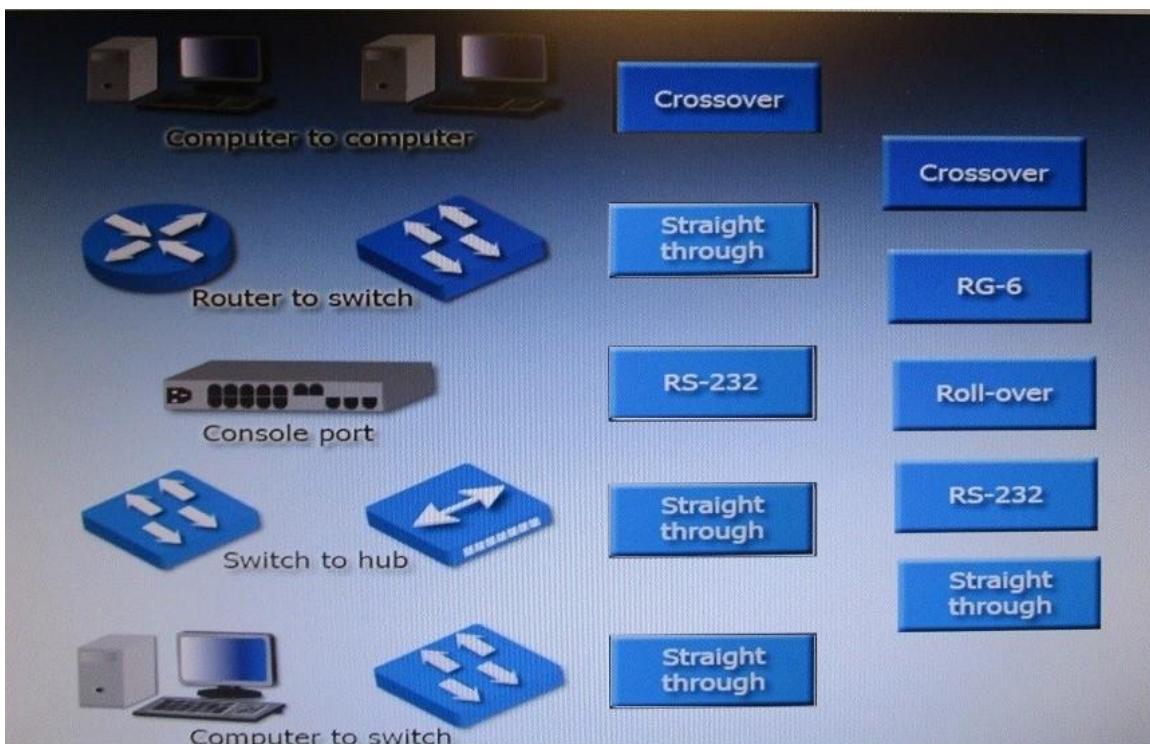


QUESTION 426

Drag and Drop Question

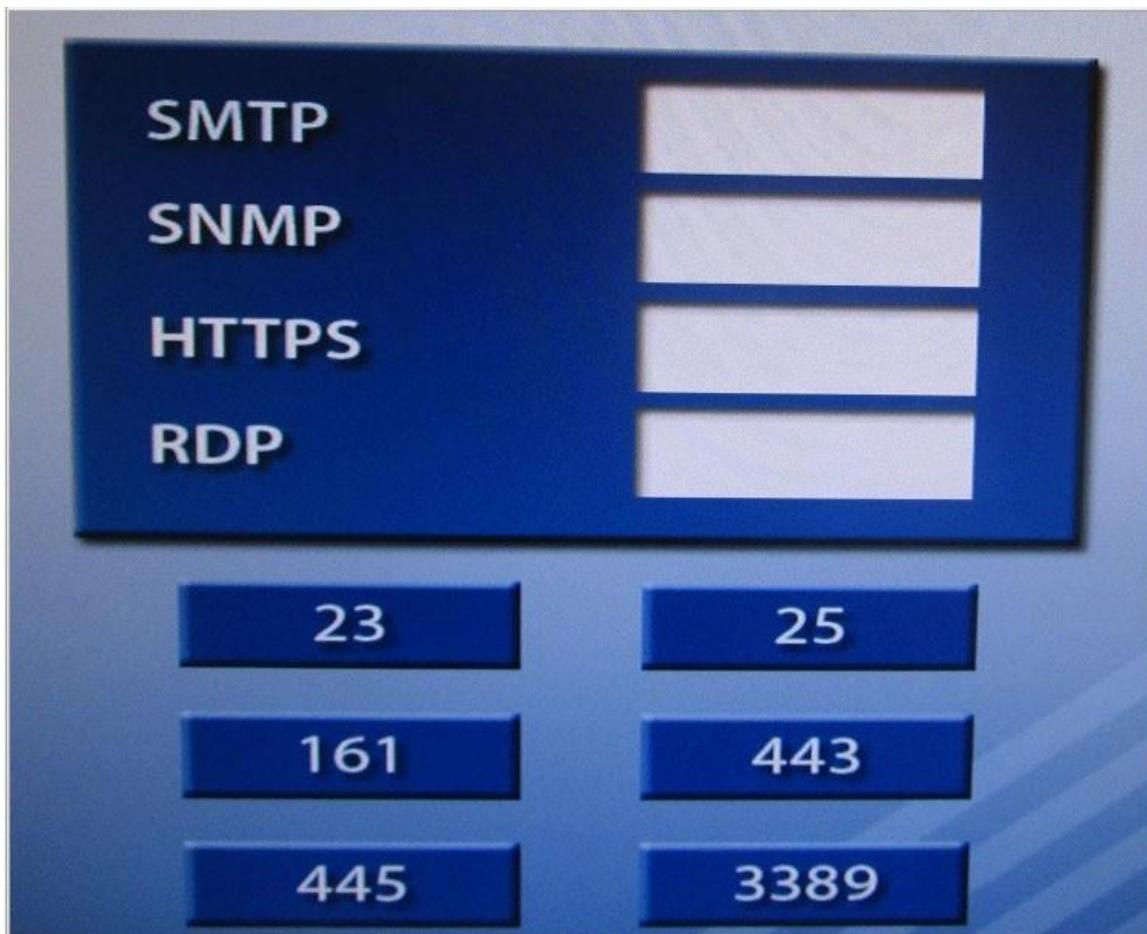


Answer:

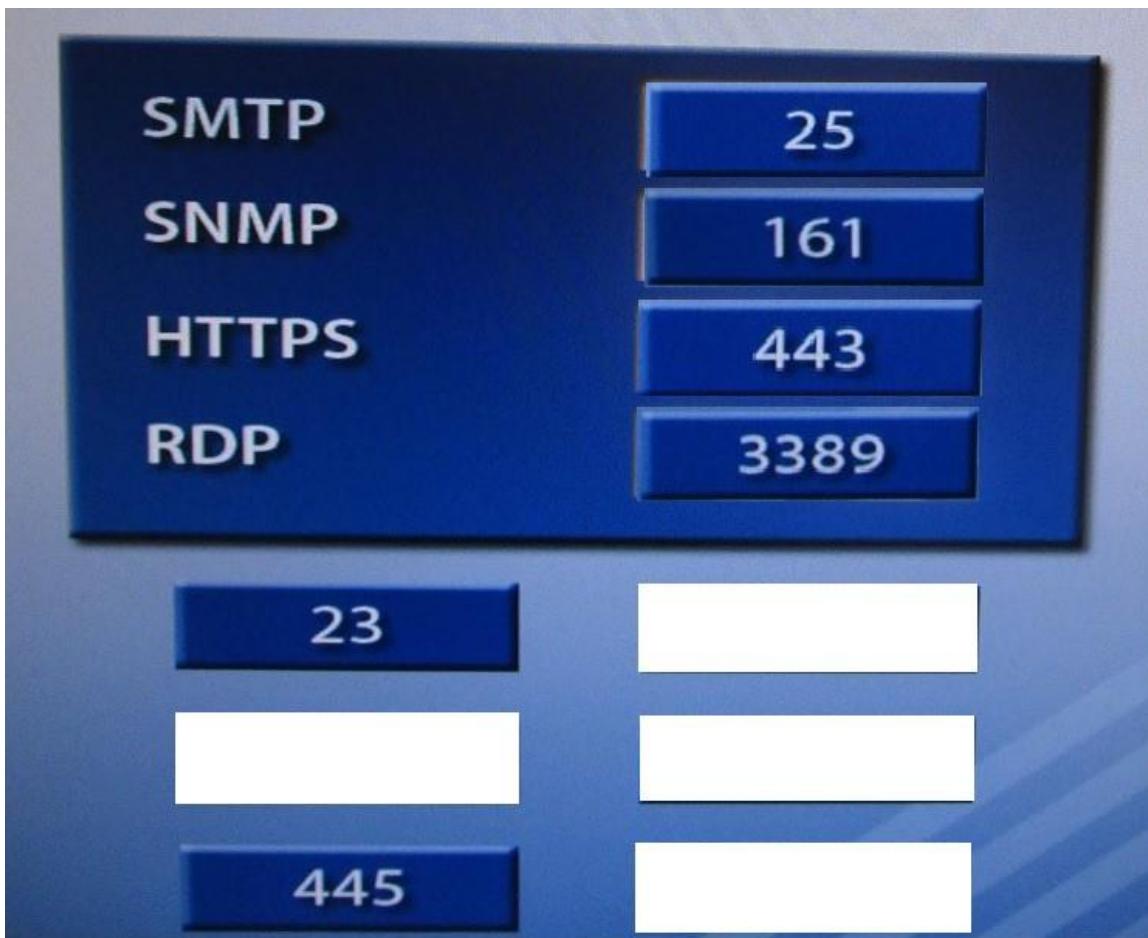


QUESTION 427

Drag and Drop Question



Answer:



QUESTION 428

Drag and Drop Question

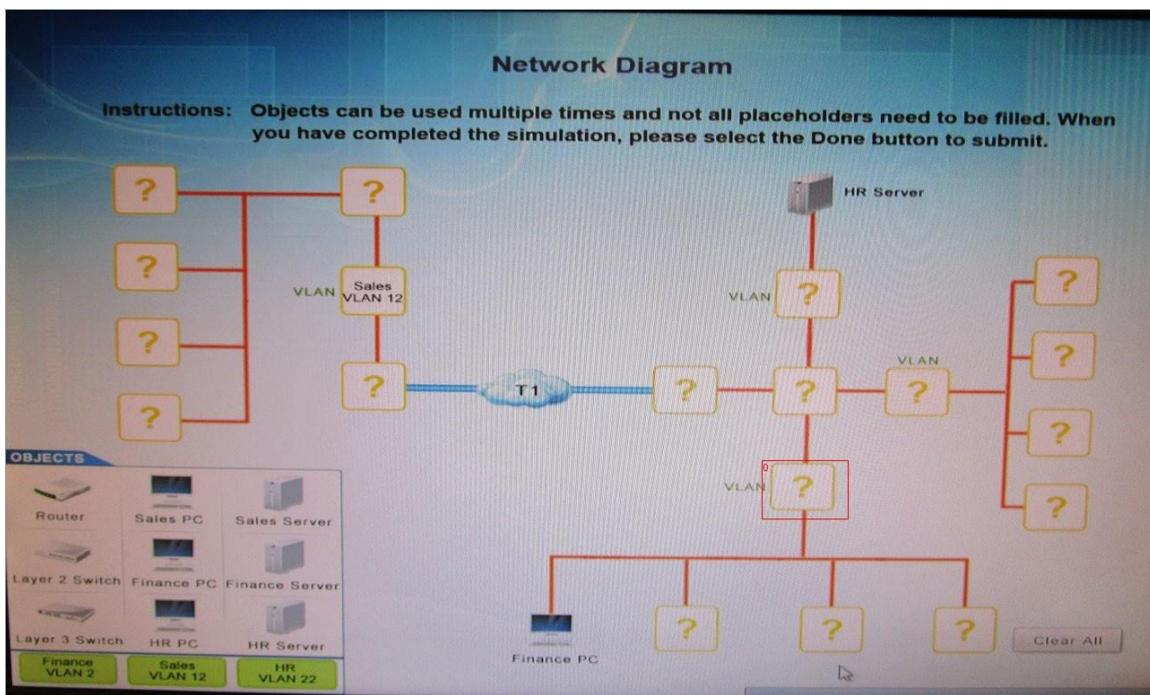
You are tasked with creating a network that will accomplish the following requirements

Requirements:

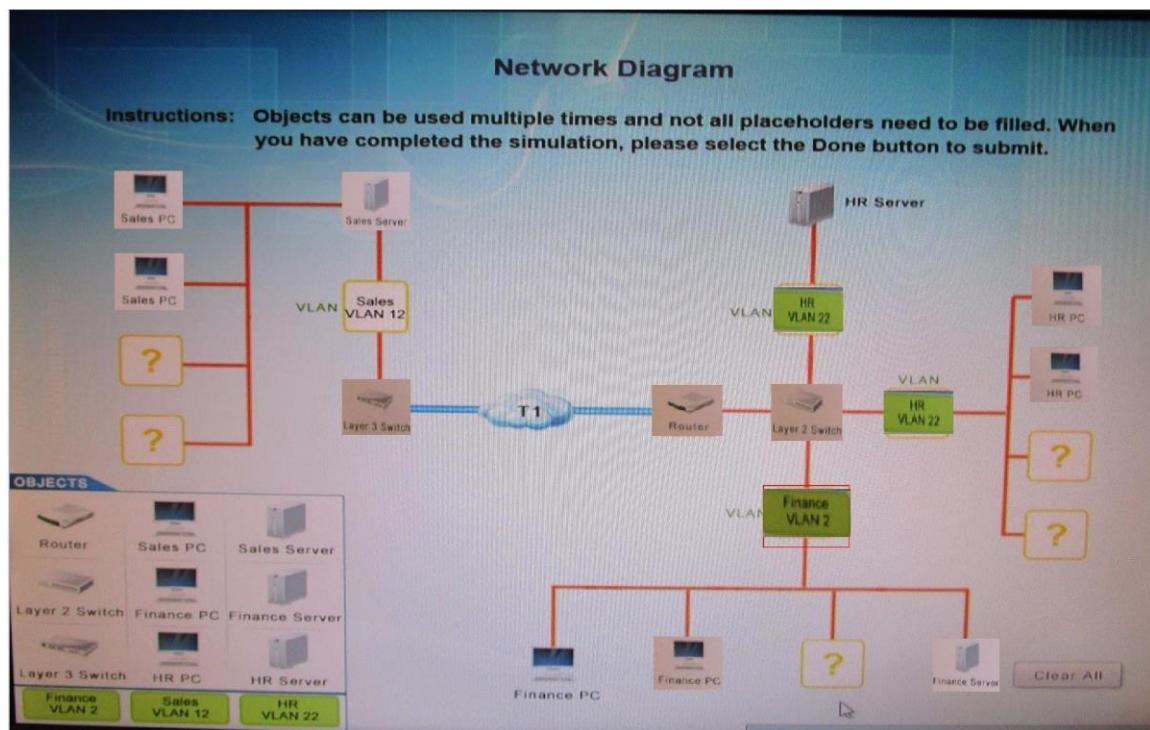
- 1) The remote sales team must be able to connect to the corporate network
- 2) Each department must have ONLY two PCs and a server
- 3) Each department must be segmented from each other
- 4) The following VLANs have been designated:
 - a) VLAN 2- Finance
 - b) VLAN 12- Sales
 - c) VLAN 22- Human Resources (HR)

Complete the network by dragging the required objects into the diagram

INSTRUCTIONS: Objects can be used multiple times and not all placeholders need to be filled



Answer:



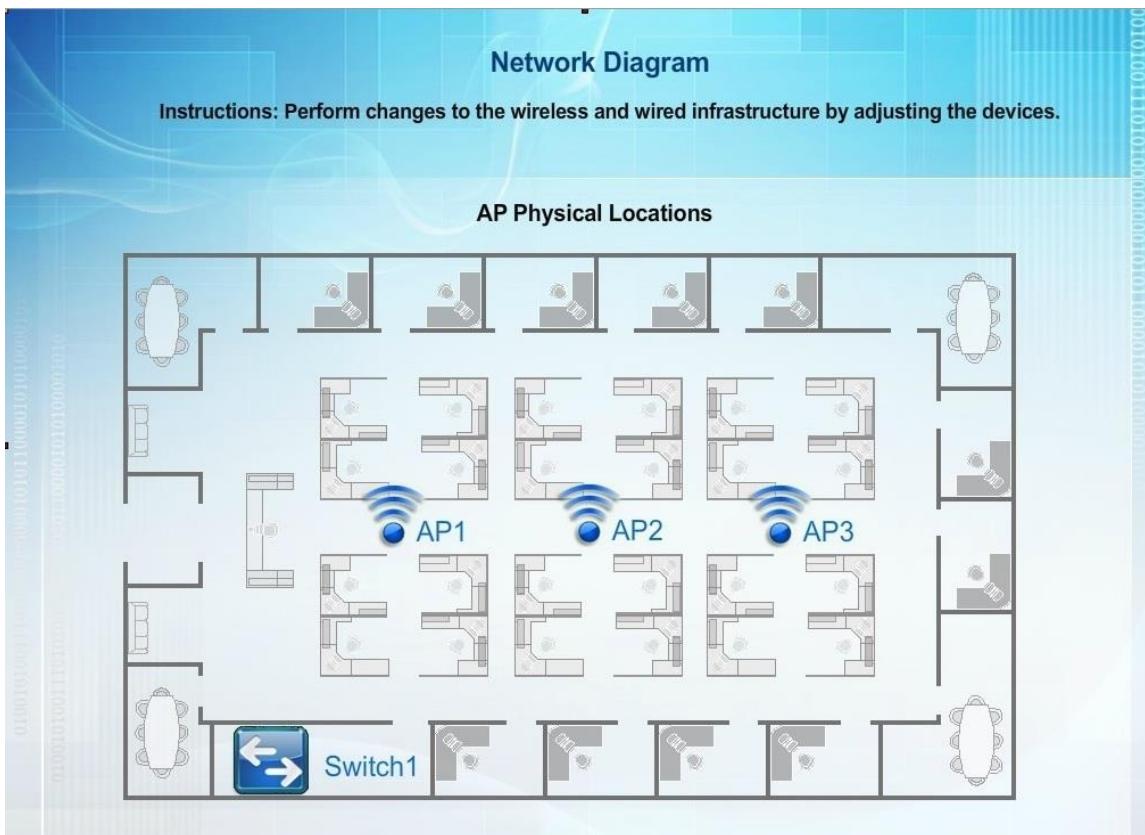
QUESTION 429

Lab Simulation

You have been tasked with setting up a wireless network in an office. The network will consist of 3 access points and a single switch. The network must meet the following parameters.

- The SSIDs need to be configured as corpnet with a key of S3cr3t!
- The wireless signals should not interfere with each other
- The subnet the Access points and Switch are on should only support 30 devices maximum
- The access Points should be configured to only support TKIP clients at a maximum speed

Instructions: Click on the devices to review their information and adjust the setting of the APs to meet the given requirements.



Answer:

This simulation is still under construction. On the first exhibit, the layout should be as follows

Access Point Name AP1

IP Address 192.168.1.3

Gateway 192.168.1.2

SSID corpnet

SSID Broadcast yes

Mode G

Channel 1

Speed Auto

Duplex Auto

WPA

Passphrase S3cr3t!

Exhibit 2 as follows

Access Point Name AP2
IP Address 192.168.1.4
Gateway 192.168.1.2
SSID corpnet
SSID Broadcast yes

Mode G
Channel 6

Speed Auto
Duplex Auto

WPA
Passphrase S3cr3t!

Exhibit 3 as follows

Access Point Name AP3
IP Address 192.168.1.5
Gateway 192.168.1.2
SSID corpnet
SSID Broadcast yes

Mode G
Channel 11

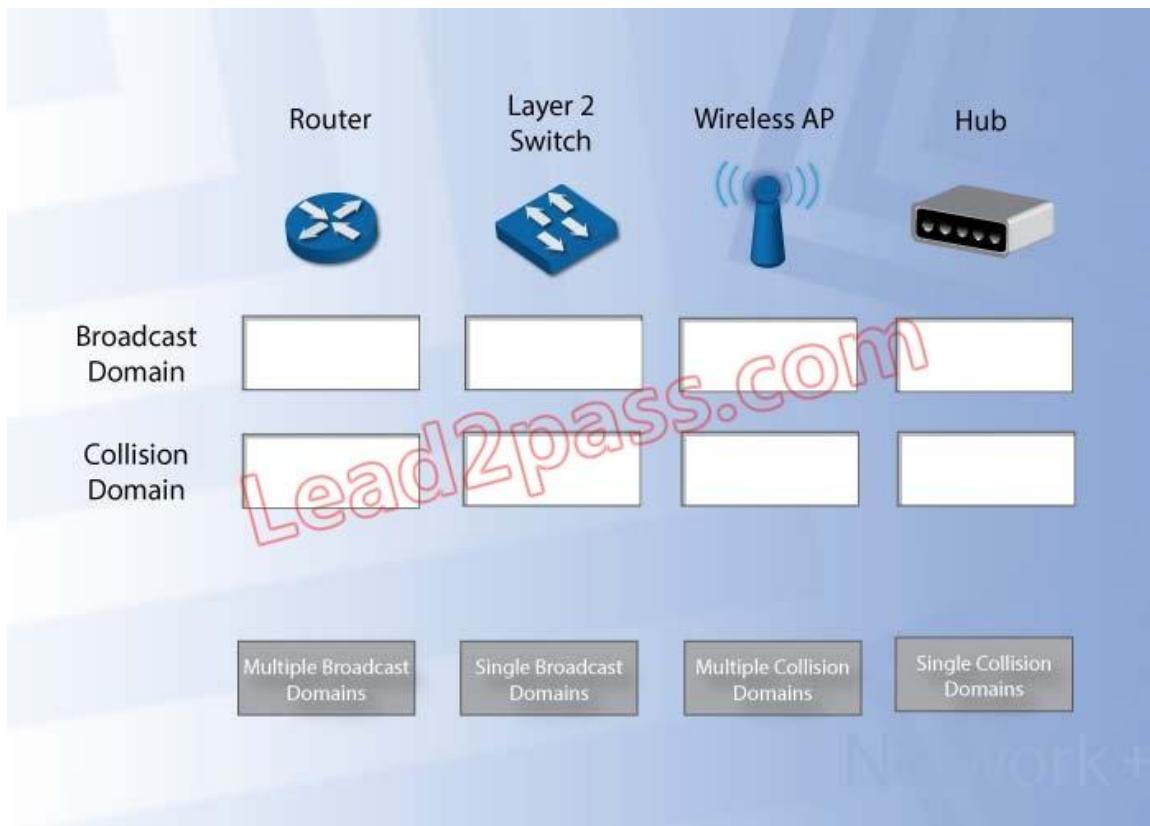
Speed Auto
Duplex Auto

WPA
Passphrase S3cr3t!

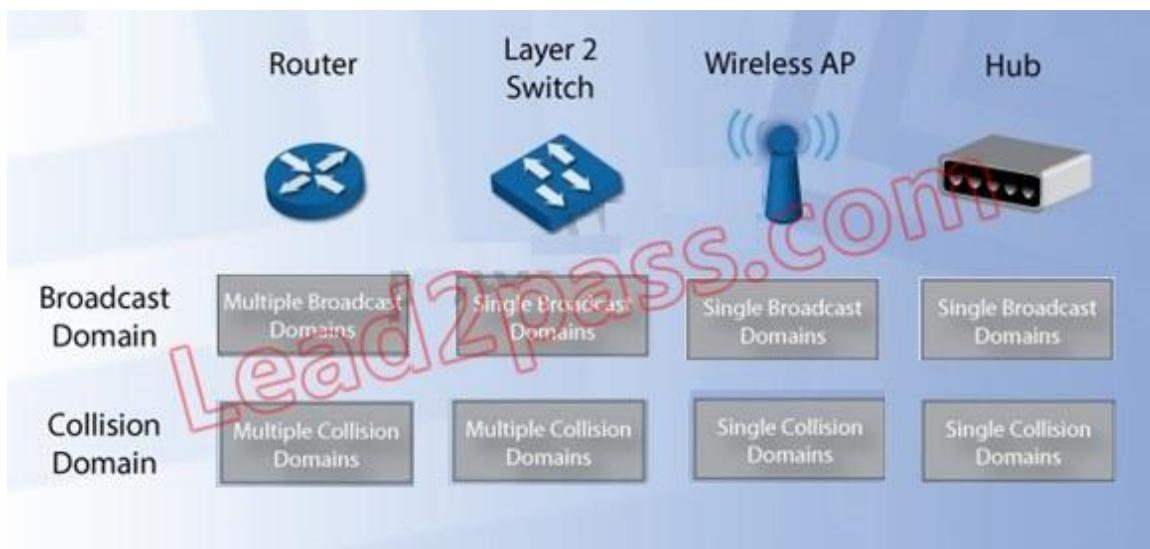
QUESTION 430

Drag and Drop Question

Under each network device, drag and drop the associated broadcast and/or collision description. Objects may be used multiple times, as needed.



Answer:



QUESTION 431

Which of the following protocols would the network administrator use to protect login credentials when accessing a router terminal session?

- A. SCP
- B. SNMPv3

- C. SSL
- D. SSH

Answer: D

QUESTION 432

A network technician is doing a wireless audit and finds an SSID that does not match the company's SSID. The company uses the SSID of ABC123, and the SSID the technician found is Default. Which of the following threats did the network technician find?

- A. AP isolation
- B. DDoS
- C. Evil twin
- D. Rogue AP

Answer: D

QUESTION 433

A network administrator notices that load balancing is not working properly on the web cluster as previously configured. In speaking with management, a change to the IP addressing scheme was made yesterday which possibly affected one member of the cluster. Due to the timing of the events, the administrator theorizes that this change caused the problem. Which of the following should the administrator do NEXT?

- A. Escalate to the management team
- B. Change the IP address back to its previous state
- C. Test the theory by analyzing logs
- D. Create a plan of action to present to management

Answer: C

QUESTION 434

Which of the following are standard fiber cable connector types? (Select TWO).

- A. RJ-11
- B. F-connector
- C. MTRJ
- D. DB-9
- E. ST

Answer: CE

QUESTION 435

A user would like to connect two laptops together and transfer files via the Ethernet ports. Which of the following should MOST likely be provided to the user to accomplish this?

- A. Crossover
- B. Rollover
- C. Loopback

- D. Straight cable

Answer: A

QUESTION 436

Hubs are differentiated from switches in that between the two, only hubs have:

- A. a single collision domain.
- B. a single broadcast domain.
- C. multiple collision domains.
- D. multiple broadcast domains.

Answer: A

QUESTION 437

The phone company has provided a channelized T1 line. Which of the following should this line be connected to?

- A. Switch
- B. CSU/DSU
- C. IDF
- D. MDF

Answer: B

QUESTION 438

Which of the following spreads out each of the individual wires of a UTP cable onto their own metal connector?

- A. BNC connection
- B. 110 block
- C. Plenum
- D. LC connector

Answer: B

QUESTION 439

A user at a hotel sees two SSIDs; both are called "HotelWireless". After the PC connects to one of the APs, the user notices their browser homepage has been changed. Which of the following BEST describes this AP?

- A. Man-in-the-middle
- B. DDoS
- C. Evil twin
- D. War driving

Answer: C

QUESTION 440

An administrator would like to search for network vulnerabilities on servers, routers, and embedded appliances. Which of the following tools would MOST likely accomplish this?

- A. Baseline analyzer
- B. Ping
- C. Protocol analyzer
- D. Nessus

Answer: D

QUESTION 441

A technician needs to install a new wireless encryption system. They are evaluating the feasibility of implementing WPA. WPA increases protection over WEP by implementing which of the following?

- A. Strong RC4 encryption
- B. Shared secret keys
- C. AES encryption
- D. Key rotation

Answer: D

QUESTION 442

A network administrator wants to perform a test to see if any systems are passing clear text through the network. Which of the following would be used?

- A. Social engineering
- B. Packet sniffing
- C. Rogue access point
- D. Man-in-the-middle

Answer: B

QUESTION 443

A network administrator is setting up a WAP and wants to disable the ability of gaining access from the parking garage. Which of the following should the network administrator review?

- A. Signal strength
- B. SSID name
- C. WPA2 encryption
- D. WEP encryption

Answer: A

QUESTION 444

A network administrator wants to balance the amount of data between two networking cards. Which of the following can be used for two or more networking cards?

- A. NIC bonding
- B. Proxy server
- C. Firewall ACLs
- D. VLANs

Answer: A

QUESTION 445

Which of the following assists a network administrator in reverse engineering malware and viruses?

- A. Virtual switches
- B. Virtual machines
- C. VLANs
- D. IDS

Answer: B

QUESTION 446

A home user states during a basement remodel, one of the workers cut the network cable that goes from the modem to the WAP and nothing else has changed. According to the network troubleshooting methodology, which of the following is the NEXT step?

- A. Identify the problem
- B. Question the user
- C. Establish a plan of action
- D. Establish a theory of probable cause

Answer: C

QUESTION 447

Which of the following layers of the OSI model make up the Network Interface layer of the TCP/IP model? (Select TWO).

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

Answer: BE

QUESTION 448

At which layer of the OSI model do MAC addresses operate?

- A. Data Link
- B. Network
- C. Application

D. Physical

Answer: A

QUESTION 449

A network technician recently replaced a managed switch in an enterprise network with a new managed switch. Users on the switch can communicate with each other but now cannot access other network segments. Which of the following is the MOST likely reason that the users are unable to access any network segments?

- A. The newly installed switch is defective and must be returned.
- B. The newly installed switch is using a different MAC address than the previous switch.
- C. The technician forgot to change the VTP mode on the new switch to server.
- D. The technician did not use the correct cable when trunking the new switch.

Answer: D

QUESTION 450

A network administrator currently collects log files from several different servers. Which of the following would allow the network administrator to collect log files on a centralized host?

- A. The network administrator should install and configure a traffic analysis server.
- B. The network administrator should install and configure a DMZ server.
- C. The network administrator should install and configure a syslog server.
- D. The network administrator should install and configure a network sniffer.

Answer: C

QUESTION 451

A company has been given a Class C address to be utilized for all devices. The company has several subnets and the largest subnet has 15 hosts. Which of the following represents the MINIMUM CIDR notation of this subnet mask?

- A. /26
- B. /27
- C. /28
- D. /29

Answer: B

QUESTION 452

A company has gone through several upgrades on their network but unfortunately have no way of identifying who approved the upgrades. Which of the following should be implemented to track this type of work?

- A. Change management
- B. Asset management
- C. Access log
- D. Baselines

Answer: A

QUESTION 453

An administrator is trying to retrieve management information from the network devices on their LAN. Which of the following monitoring resources provides the ability to collect this information encrypted over the network?

- A. SNMPv3
- B. VTP
- C. CDP
- D. IPSec

Answer: A

QUESTION 454

Which of the following WAN technologies utilizes an optical SONET carrier and has a maximum bandwidth of 155.54Mbps?

- A. DS3
- B. E3
- C. OC3
- D. T3

Answer: C

QUESTION 455

A network administrator decides to secure their small network by allowing only specific MAC addresses to gain access to the network from specific switches. Which of the following is described by this example?

- A. Packet filtering
- B. Hardware firewalls
- C. Port security
- D. Stateful inspection

Answer: C

QUESTION 456

Which of the following is used to limit the amount of bandwidth used on a link for different applications to improve overall performance?

- A. QoS
- B. Fault tolerance
- C. Load balancing
- D. Traffic shaping

Answer: D

QUESTION 457

Users are reporting that all of a sudden some of the files stored on the remote file server share are becoming corrupted and cannot be opened. A technician is dispatched to the server room to troubleshoot. The technician verifies that no changes to the network infrastructure occurred recently. Which of the following tools is MOST likely to reveal why files are becoming corrupted?

- A. Environmental monitor
- B. OTDR
- C. Cable tester
- D. Punch down tool

Answer: A

QUESTION 458

A large corporate office is looking to place smaller network closets around campus to handle switching for remote workstations. To which of the following is this referring?

- A. MDF
- B. VPN
- C. RDP
- D. IDF

Answer: D

QUESTION 459

MIMO technology in the 802.11n standard provides for which of the following benefits?

- A. Channel expansion
- B. Gigabit wireless bandwidth
- C. Multipath support
- D. Channel bonding

Answer: C

QUESTION 460

A small office is looking to deploy wireless to cover one half of the work area only. The technician is restricted to suspending the WAP in the middle of the office due to network jack limitations. Which of the following antenna types would BEST meet these requirements?

- A. Dipole
- B. Parabolic
- C. Directional
- D. Omni-directional

Answer: C

QUESTION 461

If a technician does not assign an IP address to a device, the DHCP server will assign the device

- A. static IP address.
- B. reservation.
- C. dynamic IP address.
- D. MAC address.

Answer: C

QUESTION 462

A technician has been called about intermittent connectivity near IDF 2. Multiple cables were recently pulled through a common conduit. Which of the following is MOST likely the cause of the problem?

- A. Crosstalk
- B. Bad connectors
- C. Wrong DNS
- D. Duplicate IP address

Answer: A

QUESTION 463

Which of the following would be used on a network to ensure access to resources if a critical host becomes unavailable?

- A. QoS
- B. CARP
- C. VLAN
- D. DHCP server

Answer: B

QUESTION 464

Which of the following is used to ensure traffic flows efficiently on multiple T-1 circuits?

- A. DNS server
- B. Content filter
- C. Proxy server
- D. Load balancer

Answer: D

QUESTION 465

All users on a specific network segment report losing access to the wired network. During troubleshooting, the network administrator observes link lights on the workstations. When physically reviewing each switch, the network administrator changes the switch view settings to Activity and sees that all port lights remain solid green. Which of the following is MOST likely causing this issue?

- A. STP convergence

- B. Power failure
- C. Excessive bandwidth usage
- D. Broadcast storm

Answer: D

QUESTION 466

Which of the following STP states indicates an inactivated port due to a loop?

- A. Disabled
- B. Learning
- C. Blocking
- D. Forwarding

Answer: C

QUESTION 467

Which of the following cables supports 10Gbps throughput and 100 meters as the maximum distance?

- A. T1 crossover
- B. Singlemode fiber
- C. CAT6a
- D. Coaxial

Answer: C

QUESTION 468

A number of remote users have reported being unable to securely log on to the company's network. Upon speaking with some of the employees experiencing the issue, no changes were made to their configurations, usernames, or passwords. The technician establishes a theory that one of the VPN concentrators may be down. Which of the following should the technician do NEXT?

- A. Plan to reboot the concentrator as the potential solution
- B. Escalate the problem to management
- C. Continue to speak to users, questioning if changes have been made
- D. Test access to the concentrator to confirm the status

Answer: D

QUESTION 469

In a small office environment, one computer is set up to provide Internet access to three other computers that are not interconnected. This is an example of which of the following topology types?

- A. Peer-to-peer
- B. Point-to-multipoint
- C. Hybrid

- D. Point-to-point

Answer: B

QUESTION 470

A network technician is trying to run a protocol analyzer and is instructed to record the chimney offload state of TCP. Which of the following utilities did the technician use to check this parameter with the output listed below?

```
Querying active state...
TCP Global Parameters
```

```
-----  
Receive-Side Scaling State : enabled  
Chimney Offload State : disabled  
Receive Window Auto-Tuning Level : normal  
Add-On Congestion Control Provider : ctcp  
ECN Capability : disabled  
RFC 1323 Timestamps : disabled
```

- A. net
- B. netstat
- C. nbtstat
- D. netsh

Answer: D

QUESTION 471

Which of the following can use a third party back-end LDAP user database for authentication?

- A. ISAKMP
- B. TACACS+
- C. PKI
- D. CHAP

Answer: B

QUESTION 472

A technician has spent most of the day replacing a server running DHCP. Some of the users have begun to call the help desk stating that Internet connection stopped working even after rebooting. Upon investigation, the users' PCs with issues all have IP addresses that start with 169.254.x.x. The technician completes the replacement and powers on the new DHCP server. Which of the following is the BEST way to provide the PCs with issues a new IP address?

- A. Statically assign a legitimate IP address, and then set the PCs' NICs to DHCP
- B. Inform each user to replace 169.254 with 192.168
- C. Wait five minutes until the PC resends a DHCP request
- D. Run netstat on each PC and then reboot into safe mode

Answer: C

QUESTION 473

A network administrator is implementing an IPS on VLAN 1 and wants the IPS to learn what to prevent on its own. Which of the following would MOST likely be installed?

- A. Honeynet
- B. Signature based IPS
- C. Behavior based IPS
- D. Host based IPS

Answer: C

QUESTION 474

Which of the following network topologies is ONLY possible between two users?

- A. Star
- B. Client-server
- C. Hybrid
- D. Peer-to-peer

Answer: D

QUESTION 475

Ann, a new user, is unable to communicate on the network from her computer. A technician has verified that the cables are functioning properly. Based on the information below, which action should the technician take to correct Ann's problem?

Computer_ASwitch_A
IP: 10.0.0.60Int VLAN10
SM: 255.255.255.0IP address 10.0.0.1/28
GW: 10.0.0.1Speed 100 Duplex Full

- A. Change the duplex on the switch interface to half
- B. Change the speed on the switch interface to 10Mbps
- C. Change the subnet mask of the computer to 255.255.255.240
- D. Change the IP address of the computer to 10.0.0.12

Answer: D

QUESTION 476

A new technician has been tasked with implementing a QoS policy for the Network. The technician decides it would be best to monitor the information traversing the network to gain statistical information on ports and protocols utilized. Which of the following tools should the technician use to complete this objective QUICKEST?

- A. Traffic analyzer
- B. Network sniffer
- C. SNMPv3
- D. System logs

Answer: A

QUESTION 477

Users report that they are unable to access the production server with IP address 192.168.30.17. These users need to be provided access without changing any subnet to VLAN information. The VLANs configured on the network are listed below:

DepartmentVLAN	#Subnet used
Marketing	20192.168.20.0/28
Customer Service	25192.168.20.64/28
Finance	30192.168.30.0/28
WHSE	35192.168.30.16/28
Sales	40192.168.3.16/28

The users experiencing this issue need to be added to which of the following VLANs?

- A. 25
- B. 30
- C. 35
- D. 40

Answer: C

QUESTION 478

A technician is installing an 802.11n network. The technician is using a laptop that can connect at a maximum speed of 11 Mbps. The technician has configured the 802.11n network correctly but thinks it could be the type of WLAN card used on the laptop. Which of the following wireless standards is the WLAN card MOST likely using?

- A. 802.11a
- B. 802.11b
- C. 802.11g
- D. 802.11n

Answer: B

QUESTION 479

Which of the following firewall rules will block destination telnet traffic to any host with the source IP address 1.1.1.2/24?

- A. Deny any source host on source port 23 to destination any
- B. Deny any source network 1.1.1.0/24 to destination any on port 23
- C. Deny source host 1.1.1.2 on source port 23 to destination any
- D. Deny any source network 1.1.1.0/24 with source port 23 to destination any

Answer: B

QUESTION 480

Which of the following addresses is a class B private address?

- A. 132.216.14.184

- B. 152.119.25.213
- C. 162.17.43.22
- D. 172.23.226.34

Answer: D

QUESTION 481

A technician installs a wireless router on an existing network by connecting it directly to the firewall. By default, the main network is a Class A network, while the wireless network is a Class C network. After the wireless router is installed, users connected to the wireless network report they are unable to connect to the Internet. Which of the following needs to be configured to BEST resolve this issue?

- A. Configure the main network to Class C
- B. Allow for duplicate IP addresses
- C. Allow the main network to handle DHCP
- D. Create a spanning tree to prevent switching loops

Answer: C

QUESTION 482

Which of the following configurations of a wireless network would be considered MOST secure?

- A. WEP using MAC Filtering
- B. WEP and hiding the SSID
- C. WPA2
- D. WPA TKIP and hiding the SSID

Answer: C

QUESTION 483

Which of the following is the minimum subnet mask to allow 172.16.1.5 and 172.16.4.3 to be on the same subnet?

- A. /19
- B. /21
- C. /22
- D. /24

Answer: B

QUESTION 484

DHCP uses which of the following ports by default?

- A. 21
- B. 23
- C. 68
- D. 443

Answer: C

QUESTION 485

Which of the following describes a manually entered route?

- A. Static
- B. Dynamic
- C. Multicast
- D. Unicast

Answer: A

QUESTION 486

Which of the following is the unit used to transfer information at Layer 2 of the OSI model?

- A. Packet
- B. Socket
- C. Session
- D. Frame

Answer: D

QUESTION 487

A network technician visits a site that needs voice connectivity to the corporate office and installs four IP phones. The phone exchange resides at the telephone company. Which of the following technologies is being used?

- A. Virtual switch
- B. Virtual server
- C. Virtual desktop
- D. Virtual PBX

Answer: D

QUESTION 488

A client has just leased a new office space in a busy commercial building and would like to install a wireless network. Several other tenants are on the same floor. Multiple wireless networks are present in the building. Which of the following can be changed on the client's wireless network to help ensure that interference from other wireless networks is at a minimum?

- A. WPA encryption key selection
- B. Channel selection
- C. Antenna types
- D. Disable SSID

Answer: B

QUESTION 489

A MAC address is a part of which of the following OSI model layers?

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

Answer: B

QUESTION 490

Which of the following is the reason why a company's network may contain a DHCP server?

- A. To assign IP addresses to devices on the network
- B. To convert IP addresses to fully qualified domain names
- C. To provide POP3 and IMAP email functionality
- D. To allow secure remote access

Answer: A

QUESTION 491

A company recently added an addition to their office building. A technician runs new plenum network cables from the switch on one side of the company's gymnasium 80 meters (262 ft.) to the new offices on the other side, draping the wires across the light fixtures. Users working out of the new offices in the addition complain of intermittent network connectivity. Which of the following is MOST likely the cause of the connectivity issue?

- A. dB loss
- B. Distance
- C. Incorrect connector type
- D. EMI
- E. Crosstalk

Answer: D

QUESTION 492

Which of the following tools would a technician use to determine if a CAT6 cable is properly terminated?

- A. Cable tester
- B. Punch down tool
- C. Crimper
- D. Multimeter

Answer: A

QUESTION 493

An administrator is able to list the interfaces on a switch after providing the community string "public". Which of the protocols is the administrator MOST likely using?

- A. Telnet
- B. RADIUS
- C. SSH
- D. SNMP

Answer: D

QUESTION 494

Which of the following characteristics allows an 802.11g WAP to have transfer speeds up to 108Mbps?

- A. MIMO technology
- B. Channel bonding
- C. Encryption type
- D. Frequency

Answer: B

QUESTION 495

The systems administrator has assigned an IP address and default gateway to a standard Layer 2 switch. Which of the following would be the primary purpose of doing this?

- A. Allow VLAN routing
- B. Enable packet filtering on the switch
- C. Allow remote administration of the switch
- D. Enable MAC filtering on the switch

Answer: C

QUESTION 496

Ann, a technician, installs a wireless router in a network closet in a large office. She then configures all workstations in various offices on that floor to use the wireless connection. Maximum connection speed at each workstation is 54 Mbps. Some users complain that their network connection is very slow. Which of the following is MOST likely the problem?

- A. Workstations were configured with the wrong connection speed on the wireless adapter.
- B. Users with a slow connection are too far away from the wireless router.
- C. Users that cannot connect are configured on the wrong channel.
- D. Wireless network SSID is incorrect.

Answer: B

QUESTION 497

Which of the following dynamic routing protocols selects routing paths based upon hop count?

- A. BGP
- B. RIP
- C. OSPF
- D. IGRP

Answer: B

QUESTION 498

A technician, Joe, visits a site that has reported a network down emergency. He immediately reboots the switches and the router since the network is down. Which of the following network troubleshooting methodology steps should Joe have performed FIRST?

- A. Determine if anything has changed
- B. Once a theory is confirmed determine the next step is to resolve the problem
- C. Implement the solution or escalate as necessary
- D. Question the obvious

Answer: A

QUESTION 499

A network technician is designing a SOHO environment where cost is a consideration. The requirements include access to the Internet and access to the guest house which is 100 feet away. The location of the Internet modem is located in the main house. Which of the following is the BEST option to accomplish these requirements?

- A. Use two combined Internet/router/wireless devices, one in each house.
- B. Use a Layer 3 switch in the main house and a combined Internet/router/wireless device in the guest house.
- C. Use a combined Internet/router/wireless device in the main house and a wireless access point in the guest house.
- D. Use a single combined Internet/router/wireless device at the guest house.

Answer: C

QUESTION 500

Which of the following cable types is MOST commonly used with POTS?

- A. CAT3
- B. Multimode
- C. CAT6
- D. Coaxial

Answer: A

QUESTION 501

Which of the following is used to determine whether or not a user's account is authorized to access a server remotely?

- A. VPN
- B. RDP
- C. LDAP
- D. Encryption

Answer: C

QUESTION 502

A firewall that detects and prevents attacks from outside the network based on learned data patterns can BEST be described as which of the following?

- A. Signature based IDS
- B. Behavior based IPS
- C. Host based IPS
- D. Network based IDS

Answer: B

QUESTION 503

Which of the following technologies prevents network collisions to maximize safe delivery of network data?

- A. CSMA/CA
- B. DWDM
- C. RADIUS
- D. SONET

Answer: A

QUESTION 504

Which of the following are authentication methods that can use AAA authentication? (Select TWO).

- A. Kerberos
- B. PKI
- C. TKIP/AES
- D. MS-CHAP
- E. RADIUS
- F. TACACS+

Answer: EF

QUESTION 505

A company is connected to an ISP, but owns the premise router with an internal CSU/DSU. Which of the following is considered the demarc?

- A. Premise router
- B. ISP router
- C. Smart jack
- D. CSU/DSU

Answer: C

QUESTION 506

Which of the following are considered AAA authentication methods? (Select TWO).

- A. Kerberos
- B. Radius
- C. MS-CHAP
- D. TACACS+
- E. 802.1X

Answer: BD

QUESTION 507

An IP camera has a failed PoE NIC. This is the third time in months that a PoE NIC has failed on this device. The technician suspects a possible power issue. Which of the following should be used to test the theory?

- A. Toner probe
- B. Loopback plug
- C. Protocol analyzer
- D. Multimeter

Answer: D

QUESTION 508

A technician is troubleshooting a network issue and needs to view network traffic on a switch in real-time. Which of the following would allow the technician to view network traffic on a switch?

- A. ISAKMP
- B. Port forwarding
- C. Port security
- D. Port mirroring

Answer: D

QUESTION 509

A technician finds that the network card is no longer functioning. At which of the following OSI layers is the problem occurring?

- A. Layer 1
- B. Layer 3
- C. Layer 5
- D. Layer 7

Answer: A

QUESTION 510

The address 6FFE:FFFF:0000:2F3B:04AC:00FF:FEBE:5C4A is an example of which of the following?

- A. APIPA
- B. MAC
- C. IPv4
- D. IPv6

Answer: D

QUESTION 511

An administrator has added four switches to a campus network. The switch in wiring closet A is only connected to the switch in wiring closet C. The switch in wiring closet B is connected to the switch in wiring closet C as well as wiring closet D. The switch in wiring closet D is only connected to the switch in wiring closet B. Which of the following topologies is represented in this design?

- A. Ring
- B. Star
- C. Bus
- D. Mesh

Answer: C

QUESTION 512

A company wants an administrator to perform a vulnerability test. The administrator finds the company has a POTS phone system. Which of the following can the administrator use to point out the phone system vulnerability?

- A. Honeypot
- B. Butt set
- C. Spyware
- D. Blue jacking

Answer: B

QUESTION 513

Which of the following is used to explain guidelines for users while using network resources?

- A. Network cut sheet
- B. Baselines
- C. Acceptable use policy
- D. Regulations

Answer: C

QUESTION 514

Standards such as JPEG and ASCII operate at which of the following OSI model layers?

- A. Presentation
- B. Data link
- C. Session

D. Application

Answer: A

QUESTION 515

Which of the following cable types is employed to protect against interference in the physical environment or when security is a concern?

- A. STP
- B. RG-6
- C. Fiber
- D. RG-59

Answer: C

QUESTION 516

A technician is responsible for configuring a new firewall. The hardware team has already installed, powered, and connected the system. Which of the following types of documentation should the technician utilize to complete the task?

- A. Rack diagram
- B. IDF/MDF documentation
- C. Network performance baseline
- D. Logical and physical diagrams

Answer: D

QUESTION 517

Which of the following networking devices operates at Layer1?

- A. Router
- B. Firewall
- C. Hub
- D. Bridge

Answer: C

QUESTION 518

A disgruntled employee decides to leak critical information about a company's new product. The employee places keyloggers on the department's computers, allowing the information to be sent out to the Internet.

Which of the following attacks is occurring?

- A. Man-in-the-middle
- B. Logic bomb
- C. Insider threat
- D. Social engineering

Answer: C

QUESTION 519

A network technician needs to set up an access method for Ann, a manager, to work from home. Ann needs to locally mapped corporate resources to perform her job. Which of the following would provide secure access to the corporate resources?

- A. Utilize an SSH connection to the corporate server.
- B. Use TFTP to transfer files to corporate resources.
- C. Allow RDP through an external firewall.
- D. Connect utilizing client-to-site VPN.

Answer: D

QUESTION 520

Which of the following DNS record types is an alias?

- A. CNAME
- B. PTR
- C. NS
- D. SRV

Answer: A

QUESTION 521

A recently constructed building makes use of glass and natural light. Users in the building are reporting poor cellular connectivity and speeds. Which of the following is MOST likely the cause?

- A. Absorption
- B. Channel overlap
- C. Reflection
- D. Frequency mismatch

Answer: C

QUESTION 522

A network technician is working on a new switch implementation to expand the network. Which of the following is the BEST option to ensure the implementation goes according to business requirements?

- A. AUP
- B. NDA
- C. SOP
- D. SLA

Answer: C

QUESTION 523

A technician is utilizing SNMPv3 to monitor network statistics. Which of the following actions

would occur immediately of a server's utilization spikes above the prescribed value?

- A. A trap message is sent via UDP to the monitoring workstation.
- B. The SET function pushes an alert to the MIB database.
- C. The object identifier is modified and reported during the next monitoring cycle.
- D. A response message is sent from the agent to the manager.

Answer: A

QUESTION 524

In which of the following scenarios should a technician use a cross-over cable to provide connectivity?

- A. PC to switch
- B. Switch to AP
- C. Router to switch
- D. Router to modem
- E. PC to PC

Answer: E

QUESTION 525

802.11n clients currently have no way to connect to the network. Which of the following devices should be implemented to let the clients connect?

- A. Router
- B. Range extender
- C. VoIP endpoint
- D. Access point

Answer: D

QUESTION 526

A network technician is setting up a new router. Since it is exposed to the public, which of the following are the BEST steps the technician should take when setting up this device? (Choose two.)

- A. Disable unnecessary services.
- B. Use private IP addresses.
- C. Allow remote management access.
- D. Disable the console port.
- E. Enable encryption.
- F. Upgrade to the latest firmware.

Answer: AF

QUESTION 527

A network technician is configuring user access to a VPN concentrator and has been advised to use a protocol that supports encryption over UDP. Which of the following protocols has the

technician MOST likely configured for client use?

- A. TFTP
- B. DTLS
- C. DNS
- D. SNMP

Answer: B

QUESTION 528

A switch has detected duplicate broadcast messages sourced from a second port. The broadcasts continue to be transmitted and duplicated until the amount of traffic causes severe performance issues. Which of the following should be configured to prevent this behavior?

- A. BPDU guard
- B. DHCP snooping
- C. ARP protection
- D. Spanning tree

Answer: D

QUESTION 529

A Chief Information Officer (CIO) is concentrated about an attacker gaining administrative access to the company's network devices. Which of the following is the MOST secure way to prevent this?

- A. ACL allowing only HTTP
- B. ACL allowing only Telnet
- C. Out-of-band modem
- D. Out-of-band console router

Answer: D

QUESTION 530

The Chief Executive Officer's (CEO's) tablet cannot connect to the wireless network from the corner office. A network technician verified the tablet can connect to the wireless network in other areas of the building. The distance between the office and the 802.11ac WAP is 150ft (46m), and there are a few cubicles in between. Which of the following is the MOST likely cause of the tablet not connecting?

- A. Absorption
- B. Reflection
- C. Distance
- D. Refraction
- E. Attenuation

Answer: C

QUESTION 531

A company has two geographically separate locations that need to connect using a VPN. Which of the following devices must be specifically configured to allow VPN traffic into the network?

- A. Firewall
- B. Switch
- C. Router
- D. Modem

Answer: A

QUESTION 532

A technician is working on a new machine that has been procured for testing and development. The machine will run a hypervisor and host several operating systems of various types so the development team can test the company's applications in a variety of environments. The technician wants the virtual machines to be available to communicate with each other without leaving the hypervisor. Which of the following is the BEST solution to the problem?

- A. The technician should connect the machine to its own separate switch.
- B. The technician should add a route in each virtual machine to the default gateway.
- C. The technician should configure a virtual switch.
- D. The technician should set up individual routes between the machines.

Answer: C

QUESTION 533

A network technician is repurposing a switch that has been in storage for some time. The device has been wiped to factory defaults. Which of the following should be done FIRST to ensure the device has been hardened before configuration?

- A. Generate new keys.
- B. Disable unused ports.
- C. Check for updated firmware.
- D. Configure the default VLAN.

Answer: C

QUESTION 534

A technician is setting up a wireless access point in a coffee shop. The shop is not concerned with security but only wants to allow customers to have access. Which of the following configurations should the technician deploy?

- A. Use a pre-shared key.
- B. Set up EAP.
- C. Configure RADIUS.
- D. Configure MAC filtering.

Answer: A

QUESTION 535

A network technician at a small office upgrades the LAN switch. After the upgrade, a user reports being unable to access network resources. When the technician checks the switchport, the LED light is not lit. Which of the following should the technician check FIRST?

- A. The device is using the correct cable type.
- B. The switchport is functioning properly.
- C. The device is connected to the switch.
- D. The switch is connected to the router.

Answer: C

QUESTION 536

A technician looks at an ARP table in an attempt to resolve a connectivity issue. After table of the switch is cleared, a different MAC in the output. Which of the following does this indicate?

- A. ARP flooding
- B. VLAN mismatch
- C. Duplicate IP address
- D. Faulty NIC

Answer: A

QUESTION 537

Which of the following is networking stand-alone hardware that will permit any WiFi-compliant device to connect to a network?

- A. Wireless hub
- B. Wireless firewall
- C. Wireless access point
- D. Wireless bridge

Answer: C

QUESTION 538

An administrator wants to implement an additional authentication factor to the remote SSH servers. Which of the following accomplishes this goal with the principle of "something you have"?

- A. Certificate
- B. Pattern
- C. Password
- D. Fingerprint

Answer: A

QUESTION 539

Which of the following devices are MOST often responsible for 1q tagging? (Select TWO).

- A. Switch

- B. Router
- C. IDS
- D. Hub
- E. IPS
- F. Network tap

Answer: AB

QUESTION 540

A VoIP system will require 23 concurrent voice channels and signaling channel. Which of the following types of service would provide the BEST connectivity to the PSTN?

- A. PRI
- B. BRI
- C. E1/E3
- D. DSL

Answer: A

QUESTION 541

A company decides to deploy customer-facing, touch-scan kiosks. The kiosks appear to have several open service ports that could potentially become compromised. Which of the following is the MOST effective way to protect the kiosks?

- A. Install an IDS to monitor all traffic to and from the kiosks.
- B. Install honeypots on the network to detect and analyze potential kiosk attacks before they occur.
- C. Enable switchport security on the ports to which the kiosks are connected to prevent network ?level attacks.
- D. Create a new network segment with ACLs, limiting kiosks' traffic with the internal network.

Answer: D

QUESTION 542

A network technician is configuring user's access to a VPN concentrator and has advised to use a protocol that supports encryption over UDP.

Which of the following protocols has the technician MOST likely configured for client use?

- A. TFTP
- B. DTLS
- C. DNS
- D. SNMP

Answer: B

QUESTION 543

A network technician at a small office upgrades the VLAN switch. After the upgrade, a user reports being unable to access network resources. When the technician checks the switchport, the LED light is not lit. Which of the following should technician check FIRST?

- A. The device is using the correct cable type.
- B. The switchport is functioning properly.
- C. The device is connected to the switch.
- D. The switch is connected to the router.

Answer: C

QUESTION 544

Which of the follow creates a secure remote connection at the OSI network layer?

- A. L2TP
- B. SSL
- C. DTLS
- D. IPSec

Answer: A

QUESTION 545

A junior technician is settings up a voice control device so the Chief Executive Officer (CEO) will able to control various things in the office. Of which of the following types of the IoT technologies is this an example?

- A. LAN
- B. WAN
- C. SAN
- D. PAN

Answer: B

QUESTION 546

A technician is downloading an ISO from a vendor's website. To ensure the integrity of the download, which of the following should be verified?

- A. File size
- B. Vendor URL
- C. File hashing
- D. Encryption

Answer: C

QUESTION 547

A network administrator is assigned to run and connect a Cat 6e Ethernet cable between two nodes in a datacenter. Which of the following connector types should the network administrator use to terminate this cable?

- A. DB-9
- B. RS-232
- C. DB-25
- D. RJ-45

Answer: D

QUESTION 548

Management has requested that services be available within 72 hours of a disaster. Budget is a major concern. A contract is signed with a company that has plenty of space, and the technician will have the option of putting infrastructure equipment in place. Which of the following BEST describes this business continuity strategy?

- A. Cold site
- B. Differential backup
- C. Hot site
- D. Incremental backup
- E. Warm site
- F. Full backup

Answer: A

QUESTION 549

A network technician is planning to update the firmware on a router on the network. The technician has downloaded the file from the vendor's website. Before installing the firmware update, which of the following steps should the technician perform to ensure file integrity?

- A. Perform antivirus and anti-malware scans of the file.
- B. Perform a hash on the file for comparison with the vendor's hash.
- C. Download the file a second time and compare the version numbers.
- D. Compare the hash of the file to the previous firmware update.

Answer: B

QUESTION 550

A network technician performs a wireless site survey at a company building and identifies that the cafeteria is not covered by a wireless signal. The cafeteria is located in a medium-size, square-shaped room. Which of the following types of WAP antenna should the technician install in the center of the cafeteria to provide the BEST coverage?

- A. Unidirectional
- B. Parabolic
- C. Omnidirectional
- D. Yagi

Answer: C

QUESTION 551

An entire enterprise cannot access a specific website. The network technician knows the website was accessible last week. The technician can also ping the website. Which of the following is the technician MOST likely to find upon investigation?

- A. The firewall is misconfigured.

- B. The network is being hit by a zero-day attack.
- C. The SSL certificate is untrusted.
- D. The SSL certificate has expired.

Answer: D

QUESTION 552

At which of the following OSI model layers would a router operate?

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

Answer: B

QUESTION 553

Which of the following are DNS record types? (Choose three.)

- A. CNAME
- B. NTP
- C. PTR
- D. LDAP
- E. DHCP
- F. TTL
- G. SRV
- H. SSH

Answer: ACG

QUESTION 554

Which of the following backup techniques is used to capture all the data that has changed since the last full backup?

- A. Incremental
- B. Replica
- C. Differential
- D. Snapshot

Answer: C

QUESTION 555

A network administrator frequently needs to assist users with troubleshooting network hardware remotely, but the users are non-technical and unfamiliar with network devices. Which of the following would BEST help the administrator and users during hands-on troubleshooting?

- A. Logical diagrams
- B. MDF documentation

- C. Equipment labeling
- D. Standard operating procedures

Answer: D

QUESTION 556

A technician is observing brownout issues at a smaller office. At least once a week, the edge switch power cycles. Which of the following should the technician do to resolve the issue?

- A. Install a new switch
- B. Install a UPS
- C. Replace the switch uplink cable.
- D. Install a new electrical circuit.

Answer: B

QUESTION 557

A technician is troubleshooting a workstation's network connectivity and wants to confirm which switchport corresponds to the wall jack the PC is using. Which of the following concepts would BEST help the technician?

- A. Consistent labeling
- B. Change management
- C. Standard work instructions
- D. Inventory management
- E. Network baseline

Answer: A

QUESTION 558

Under which of the following layers of the OSI model do ATM cells operate?

- A. Data link
- B. Network
- C. Session
- D. Transport
- E. Presentation

Answer: A

QUESTION 559

A new building needs to be joined to an existing network, but management has decided that running fiber is too expensive. Since the buildings are about 1000ft (305m) apart, the IT department has been asked to propose alternatives. Which of the following is the BEST device to add to each building to facilitate the extension of the network while meeting budgetary demands?

- A. Switch
- B. Router
- C. Media converter

- D. PRP wireless

Answer: D

QUESTION 560

A junior network technician is working in the field and needs to connect to the company's remote server, however, doing so will require the junior technician to use the public Internet. Because security is a concern, which of the following is the BEST method to use?

- A. Telnet
- B. SSH
- C. SFTP
- D. VNC

Answer: B

QUESTION 561

A home user has purchased a new smart TV to stream online video services. The smart TV is unable to connect to the wireless network after several attempts. After returning from vacation, the home user tries again and can connect the TV to the wireless network. However, the user notices a laptop is no longer able to connect to the network. Which of the following is the MOST likely cause?

- A. The DHCP scope has been exhausted.
- B. The security passcode has been changed.
- C. The SSID is hidden.
- D. The AP configuration was reset.

Answer: A

QUESTION 562

A security guard notices an authorized individual, who is dressed like a lab technician, has entered a secure area of the hospital with a large group. Which of the following security attacks is taking place?

- A. Evil twin
- B. Social engineering
- C. Insider threat
- D. Phishing

Answer: B

QUESTION 563

Which of the following DNS record types allows IPv6 records to be resolved to DNS names?

- A. PTR
- B. A
- C. AAAA
- D. SRV

Answer: C

QUESTION 564

A network technician has recently installed new VoIP phones at all employee's desks to support a new SIP cloud VoIP solution. However, the technician is unable to make a call from the device after testing. Which of the following should the technician verify? (Choose two.)

- A. TCP 443 is allowed.
- B. UDP 1720 is allowed.
- C. UDP 5060 is allowed.
- D. UDP 5061 is allowed.
- E. TCP 8080 is allowed.
- F. TCP 8181 is allowed.

Answer: CD

QUESTION 565

Which of the following would allow a network technician to access files on a remote system? (Choose two.)

- A. FTP
- B. TFTP
- C. VLSM
- D. SIP
- E. SMTP
- F. IMAP

Answer: AB

QUESTION 566

Which of the following provides two-factor authentication?

- A. Username + password
- B. Smart card + PIN
- C. Fingerprint + retina scan
- D. Key fob + ID card

Answer: B

QUESTION 567

A technician set up a new SOHO network recently. The installed router has four Ethernet ports, however, the customer has seven devices that need wired connections. Which of the following should the technician do to BEST meet the customer's requirements?

- A. Install a six-port switch.
- B. Configure port forwarding on the router.
- C. Install WAPs near the devices.
- D. Configure the switchports as EtherChannel ports.

Answer: A

QUESTION 568

A technician is performing a maintenance task on a weekly basis and wants to ensure the task is properly documented and able to be performed by other technicians. Which of the following types of documentation should the technician complete?

- A. Standard operating procedure
- B. Work order
- C. Performance baseline
- D. Logical diagram
- E. Change management

Answer: A

QUESTION 569

A company is allowing its employees to use their personal computers, tablets, and IoT devices while at work. However, there are rules and guidelines to which employees must adhere. Which of the following documents applies to these employees?

- A. NDA
- B. SOP
- C. BYOD
- D. SLA

Answer: C

QUESTION 570

Which of the following are characteristics of jumbo frames? (Choose two.)

- A. Commonly used on SAN
- B. MTU size greater than 1500
- C. MTU size greater than 10000
- D. Commonly used on IaaS
- E. MTU size greater than 12000

Answer: AB

QUESTION 571

A network administrator gets a call regarding intermittent network outages across the country. Which of the following should be used to connect to the network so the administrator can troubleshoot this issue from home? (Choose two.)

- A. FTP
- B. SMTP
- C. VPN
- D. SSH
- E. SNMP

Answer: CD

QUESTION 572

A network technician downloaded new firmware for the company firewall. Which of the following should the network technician verify to ensure the downloaded file is correct and complete?

- A. File hash
- B. File date
- C. File type
- D. File size

Answer: A

QUESTION 573

A technician is troubleshooting network connectivity issues with a remote host. Which of the following tools would BEST inform the technician of nodes between the client and the remote host? (Choose two.)

- A. tracert
- B. ping
- C. tcpdump
- D. pathping
- E. netstat
- F. nslookup
- G. route

Answer: AD

QUESTION 574

Which of the following will listen on the line to ensure there is no traffic transmitting and implement a back-off timer if a collision occurs?

- A. CSMA/CD
- B. CSMA/CA
- C. MPLS
- D. OSPF

Answer: A

QUESTION 575

A network technician receives a call from a branch office about a problem with its wireless connectivity. The user states the office is hosting a large meeting that includes some online training with local businesses. The guest users have all brought devices to connect to the guest network at the branch office. All users are connected to a single WAP and are reporting that connections keep dropping and network speeds are unusable. Which of the following is the MOST likely cause of this issue?

- A. DHCP exhaustion

- B. Channel overlapping
- C. Interference
- D. Overcapacity

Answer: D

QUESTION 576

Which of the following BEST describes an exploit?

- A. A router with default credentials
- B. An open mail relay server
- C. An SNMPv1 private community
- D. A privilege escalation script

Answer: D

QUESTION 577

A server in a LAN was configured to act as a gateway between all company computers and an external network. Which of the following networking devices offers the ability to increase both performance and security?

- A. Load balancer
- B. IDS
- C. Proxy server
- D. Wireless controller

Answer: C

QUESTION 578

A technician is setting up VoIP phones on a wireless network. Users report that calls are choppy and sometimes dropped. The technician has measured two characteristics using simple command-line tools that verify the problem. Which of the following characteristics did the technician measure? (Choose two.)

- A. Reflection
- B. Latency
- C. Interference
- D. Packet loss
- E. Signal-to-noise ratio
- F. Attenuation

Answer: BD

QUESTION 579

Which of the following ports should a network technician open on a firewall to back up the configuration and operating system files of a router to a remote server using the FASTEST method possible?

- A. UDP port 22

- B. TCP port 22
- C. TCP port 25
- D. UDP port 53
- E. UDP port 69

Answer: E

QUESTION 580

A technician is replacing a failed SOHO router for a customer who has an existing switch, cable modem, and static IP address. The user has a web server that faces the Internet so users can visit and leave comments. Which of the following BEST describes the correct configuration for this customer's requirements?

- A. The modem is placed in bridge mode, the router is placed behind the modem, and the web server is placed behind the router.
- B. The router is placed in bridge mode, the modem is placed behind the router, and the web server is placed behind the modem.
- C. The web server is placed in bridge mode, the router is placed behind the web server, and the modem is placed behind the router.
- D. The switch is placed in bridge mode, the modem is placed behind the router, and the router is placed behind the modem.

Answer: A

QUESTION 581

A network technician is attempting to troubleshoot a connectivity issue. The issue is only reported during the evening hours, and only a single workstation loses connectivity. Which of the following is the MOST likely cause of the issue?

- A. The router has a time-based ACL, applied for the network segment.
- B. A light source is creating EMI interference, affecting the UTP cabling.
- C. Nightly backups are consuming excessive bandwidth.
- D. The user has violated the AUP, and Internet access has been restricted.

Answer: D

QUESTION 582

A network administrator is redesigning network security after an attack. During the attack, an attacker used open cubicle locations to attach devices to the network. The administrator wants to be able to monitor future attacks in a safe environment and determine the method of attack. Which of the following should the administrator do to BEST meet this requirement?

- A. Create a VLAN for the unused ports and create a honeypot on the VLAN.
- B. Install a BPDU guard on switchports and enable STP.
- C. Create a DMZ for public servers and secure a segment for the internal network.
- D. Install antivirus software and set an ACL on the servers.

Answer: A

QUESTION 583

A company has just refreshed the hardware in its datacenter with new 10G Ethernet switches. A technician wishes to set up a new storage area network but must use existing infrastructure. Which of the following storage standards should the technician use?

- A. iSCSI
- B. Fibre Channel
- C. NAS
- D. InfiniBand

Answer: C

QUESTION 584

A network technician needs to install a new access switch. After installing the new switch, the technician begins to move connections from the old switch to the new switch. The old switch used a GBIC with SC connectors, and the new switch uses an SFP with LC connectors. After connecting the SC connector to the SC-to-LC adapter and plugging it into the switch, the link does not come up as expected. Which of the following should a network technician perform NEXT?

- A. Replace SFP with a new one.
- B. Fall back to the old switch.
- C. Transpose the fiber pairs.
- D. Replace multimode with single-mode cable.

Answer: C

QUESTION 585

A network technician is installing a new SOHO branch office that requires the use of a DOCSIS-compatible modem. The modem needs to be connected to the ISP's network at the demarc. Which of the following cable types should be used?

- A. UTP
- B. Multimode
- C. Coaxial
- D. Serial

Answer: C

QUESTION 586

A technician needs to order cable that meets 10GBaseT and fire safety requirements for an installation between a drop ceiling and a standard ceiling. Which of the following should the technician order to ensure compliance with the requirements?

- A. PVC Cat 5
- B. Plenum Cat 5e
- C. Plenum Cat 6a
- D. PVC Cat 7

Answer: C

QUESTION 587

Which of the following physical security devices is used to detect unauthorized server room access?

- A. Access badge
- B. Biometrics
- C. Smart card
- D. Video surveillance

Answer: D

QUESTION 588

A network technician recently installed a new server on a network. The technician must ensure the server does not have any unnecessary services running. The IP address of the server is 204.211.38.50. Which of the following commands would allow the technician to make this determination?

- A. nmap
- B. pathping
- C. route
- D. nslookup

Answer: A

QUESTION 589

Joe, an employee at a large regional bank, wants to receive company email on his personal smartphone and tablet. To authenticate on the mail server, he must first install a custom security application on those mobile devices. Which of the following policies would BEST enforce this requirement?

- A. Incident response policy
- B. BYOD policy
- C. DLP policy
- D. Remote access policy

Answer: B

QUESTION 590

A technician is allocating the IP address space needed for a new remote office. This office will contain the engineering staff with six employees and the digital marketing staff with 55 employees. The technician has decided to allocate the 192.168.1.0/24 block to the remote office. The engineering staff has been allocated the 192.168.1.64/29 subnet. Using the LEAST amount of space possible, which of the following would be the last usable IP address in the engineering subnet?

- A. 192.168.1.62
- B. 192.168.1.63
- C. 192.168.1.70

D. 192.168.1.71

Answer: A

QUESTION 591

An administrator is troubleshooting a user's intermittent wireless connectivity issue. Other users across the hallway can connect and use the wireless network properly. Upon inspection of the connection details, the administrator finds the following:

SSID	Company-WiFi
Signal	5%
SNR	2

Which of the following is MOST likely the cause of the poor wireless connection?

- A. Channel overlap
- B. Overcapacity
- C. Incorrect antenna type
- D. Latency

Answer: C

QUESTION 592

A VoIP system will require 23 concurrent voice channels and one signaling channel. Which of the following types of WAN service would provide the BEST connectivity to the PSTN?

- A. PRI
- B. BRI
- C. E1/E3
- D. DSL

Answer: A

QUESTION 593

A network administrator is going to be performing a major upgrade to the network. Which of the following should the administrator use in case of a failure?

- A. Baseline report
- B. Vulnerability report
- C. Rollback plan
- D. Business continuity plan

Answer: C

QUESTION 594

A web application is unable to authenticate customers so they can access their bills. The server administrator has tested the LDAP query but is not receiving results. Which of the following is the NEXT step the server administrator should take to correct the problem?

- A. Check port 636 to see if it is being blocked.
- B. Change service port 636 to port 389.
- C. Restart the web server.
- D. Verify the browser is using port 443.

Answer: A

QUESTION 595

Which of the following is networking stand-alone hardware that will permit any WiFi-compliant device to connect to a wired network?

- A. Wireless hub
- B. Wireless firewall
- C. Wireless access point
- D. Wireless bridge

Answer: C

QUESTION 596

Which of the following devices are MOST often responsible for 802.1q tagging? (Choose two.)

- A. Switch
- B. Router
- C. IDS
- D. Hub
- E. IPS
- F. Network tap

Answer: AB

QUESTION 597

A network technician is installing a new wireless network in a small office. Due to environmental concerns, the customer wants the network to run exclusively on the 5GHz frequency. Which of the following wireless technologies should the technician install to BEST meet this requirement? (Choose two.)

- A. 802.11ac
- B. 802.11b
- C. 802.11g
- D. 802.11n
- E. Bluetooth
- F. Z-Wave

Answer: AD

QUESTION 598

Which of the following concepts would BEST describe when a company chooses to use a third-party vendor to host and administer a critical application?

- A. SaaS
- B. IaaS
- C. PaaS
- D. CASB

Answer: C

QUESTION 599

A content filter is set to analyze XML and JSON that users access from the Internet. At which of the following layers is this analysis taking place?

- A. 1
- B. 3
- C. 5
- D. 7
- E. 6

Answer: E

QUESTION 600

Ann, a new employee within a department, cannot print to any of the printers in the department or access any of the resources that others can. However, she can access the Internet. The network engineer has confirmed that Ann's account has been set up the same as the others. There are no access lists restricting Ann's access. Which of the following could be the issue for this lack of access?

- A. Duplex/speed mismatch
- B. VLAN mismatch
- C. DNS server issue
- D. DHCP server issue
- E. Spanning tree blocked ports

Answer: B

QUESTION 601

A technician is configuring a printer for a client. The technician connects the printer to the network, but is unsure how to determine its switchport. Which of the following should the technician do FIRST to locate the switchport?

- A. Perform a DNS lookup on the server.
- B. Set up an SSH session to the desktop.
- C. Reference the ARP table in the router.
- D. Configure port security on the switch.

Answer: C

QUESTION 602

A router is set up to utilize RIPv2 to route traffic throughout the network. Which of the following routing metrics is used to determine the path?

- A. Distance
- B. Bandwidth
- C. Speed
- D. Hop count

Answer: D

QUESTION 603

A second router was installed on a network to be used as a backup for the primary router that works as a gateway. The infrastructure team does not want to change the IP address of the gateway on the devices. Which of the following network components should be used in this scenario?

- A. Loopback IP
- B. Virtual IP
- C. Reserved IP
- D. Public IP

Answer: B

QUESTION 604

Which of the following can be done to implement network device hardening? (Choose two.)

- A. Implement spanning tree
- B. Perform VLAN hopping
- C. Patch and update
- D. Perform backups
- E. Enable port mirroring
- F. Change default admin password

Answer: CF

QUESTION 605

A critical vulnerability is discovered on a network device. The vendor states it has already patched this vulnerability in its current release. Which of the following actions should an administrator take?

- A. Change the default password
- B. Use a firewall in front of the device.
- C. Update the firmware.
- D. Upgrade the configuration.

Answer: C

QUESTION 606

A technician has been alerted of incoming HTTP traffic on the LAN segment that should not contain any web servers. The technician has the IP address of the destination host and wants to determine if the socket for HTTP is open. Which of the following should the technician perform?

- A. Baseline assessment
- B. Packet analysis
- C. Port scan
- D. Patch-level assessment

Answer: C

QUESTION 607

Which of the following creates a secure remote connection at the OSI network layer?

- A. L2TP
- B. SSL
- C. DTLS
- D. IPSec

Answer: D

QUESTION 608

A network technician has salvaged several Ethernet cables from a datacenter. The technician attempts to use the cables to connect desktops to the network without success. Which of the following is MOST likely the issue?

- A. The cables have an incorrect pin-out.
- B. The cables are UTP instead of STP.
- C. The cables are Cat 6 instead of Cat 5.
- D. The cables are not plenum rated.

Answer: A

QUESTION 609

A company decides to deploy customer-facing, touch-screen kiosks. The kiosks appear to have several open source service ports that could potentially become compromised. Which of the following is the MOST effective way to protect the kiosks?

- A. Install an IDS to monitor all traffic to and from the kiosks.
- B. Install honeypots on the network to detect and analyze potential kiosk attacks before they occur.
- C. Enable switchport security on the ports to which the kiosks are connected to prevent network-level attacks.
- D. Create a new network segment with ACLs, limiting kiosks' traffic with the internal network.

Answer: D

QUESTION 610

While working on a Linux-based OS, a technician experiences an issue accessing some servers and some sites by name. Which of the following command-line tools should the technician use to assist in troubleshooting?

- A. dig

- B. iptables
- C. ifconfig
- D. traceroute

Answer: A

QUESTION 611

A network administrator has had difficulty keeping track of IP address assignments on networking devices and clients recently. Which of the following is the BEST technology to aid in this scenario?

- A. DNS
- B. DHCP
- C. IPAM
- D. NTP

Answer: C

QUESTION 612

A technician is surveying a college's network equipment rooms and connectivity. Which of the following types of documentation does the technician need to perform a detailed site survey? (Choose three.)

- A. IDF/MDF documentation.
- B. Cable run label documentation.
- C. Network configuration documentation.
- D. Performance baseline documentation.
- E. Standard operating procedure documentation.
- F. Change management documentation.
- G. Rack diagram documentation.

Answer: ACG

QUESTION 613

A technician is connecting a PC to a switchport. At the wiring closet, the technician is unable to identify which cable goes from patch panel A connected to the switch to patch panel B connected to the PC. Which of the following tools should the technician use to resolve the issue?

- A. Cable tester
- B. Multimeter
- C. Tone generator
- D. OTDR

Answer: C

QUESTION 614

A technician wants to deploy a network that will require wireless client devices to prompt for a username and password before granting access to the wireless network. Which of the following must be configured to implement this solution?

- A. EAP-PEAP
- B. CCMP-AES
- C. WPA2-PSK
- D. TKIP-RC4

Answer: A

QUESTION 615

Which of the following protocols are classified as connectionless? (Choose two.)

- A. TFTP
- B. FTP
- C. HTTP
- D. SNMP
- E. SSH
- F. IMAP

Answer: AD

QUESTION 616

Users in a school lab are reporting slow connections to the servers and the Internet. Other users in the school have no issues. The lab has 25 computers and is connected with a single 1Gb Ethernet connection on Cat 5e wiring to an unmanaged switch. There are also three spare Cat 5e cable runs, which are not in use. The school wants to double the connection speed between the lab and the servers without running new cables. Which of the following would be the BEST solution?

- A. Plug in a second spare cable at each end to double the speed.
- B. Replace the switches with ones that utilize port bonding and use the spare cables.
- C. Replace the switches with 10Gb switches and utilize the existing cabling.
- D. Plug in a second cable and set one port to TX and one port to RX.

Answer: B

QUESTION 617

A junior technician is setting up a voice control device so the Chief Executive Officer (CEO) will be able to control various things in the office. Of which of the following types of IoT technologies is this an example?

- A. LAN
- B. WAN
- C. SAN
- D. PAN

Answer: D

QUESTION 618

Users on a LAN segment are reporting a loss of connectivity to network services. The client PCs

have been assigned with 169.254.X.X IP addresses. Which of the following IP address schemas is being utilized?

- A. Private IP
- B. Static IP
- C. APIPA
- D. Loopback

Answer: C

QUESTION 619

A network administrator has created a new VLAN for the server and clients within the accounting department and wants to outline how it integrates with the existing network. Which of the following should the administrator create?

- A. Logical diagram
- B. Physical diagram
- C. Rack diagram
- D. Configuration diagram

Answer: A

QUESTION 620

Which of the following would indicate that a circuit speed should be increased?

- A. Low latency
- B. Low bandwidth consumption
- C. High number of SIEM alerts
- D. High packet drops

Answer: D

QUESTION 621

A technician has installed an older IP camera as a temporary replacement for a recently failed newer one. The technician notices that when the camera's video stream is off, the ping roundtrip time between the camera and the network DVR is consistently less than 1ms without dropped packets. When the camera video stream is turned on, the ping roundtrip time increases dramatically, and network communication is slow and inconsistent. Which of the following is MOST likely the issue in this scenario?

- A. VLAN mismatch
- B. Duplex mismatch
- C. Cat 6 RX/TX reversed
- D. Damaged cable

Answer: B

QUESTION 622

Wireless users have been experiencing connectivity problems. Investigation shows neighboring

wireless appliances, which are not connected to the network, have been on the same 5GHz frequency to communicate. Which of the following wireless performance problem concepts defines this issue?

- A. Interference
- B. Distance limitation
- C. Signal-to-noise ratio
- D. Absorption

Answer: A

QUESTION 623

Which of the following BEST explains the purpose of signature management as a mitigation technique?

- A. Hardening devices
- B. Segmenting the network
- C. Detecting malicious activity
- D. Restricting user credentials

Answer: C

QUESTION 624

A network technician installs a web server on the firewall. Which of the following methods should the technician implement to allow access to outside users without giving access to the inside network?

- A. VLAN
- B. DMZ
- C. SNMP
- D. NTP

Answer: B

QUESTION 625

A Chief Information Officer (CIO) tasks the network engineer with protecting the network from outside attacks. Placing which of the following devices on the network perimeter would provide the MOST security for the system?

- A. Firewall
- B. NGFW
- C. Content filter
- D. IDS/IPS

Answer: B

QUESTION 626

Management has requested that a wireless solution be installed at a new office. Which of the following is the FIRST thing the network technician should do?

- A. Order equipment
- B. Create network diagrams
- C. Perform a site survey
- D. Create an SSID.

Answer: C

QUESTION 627

A technician has deployed an additional DHCP server for redundancy. Clients in certain subnets are not receiving DHCP leases from the new DHCP server. Which of the following is the MOST likely cause?

- A. The new DHCP server's IP address was not added to the router's IP helper list.
- B. The new DHCP server is not receiving the requests from the clients.
- C. The ARP cache of the new DHCP server needs to be updated.
- D. The ARP table on the router needs to be cleared.

Answer: A

QUESTION 628

Greater bandwidth and availability are required between two switches. Each switch has multiple 100Mb Ethernet ports available. Which of the following should a technician implement to help achieve these requirements?

- A. Spanning tree
- B. Clustering
- C. Power management
- D. Port aggregation

Answer: D

QUESTION 629

A technician is configuring a new server with an IP address of 10.35.113.47 on the 10.35.112.0 subnet to allow for the maximum number of hosts. When configuring network settings, which of the following is the correct subnet mask?

- A. 10.35.112.0/30
- B. 10.35.112.0/24
- C. 255.255.240.0
- D. 255.255.248.0
- E. 255.255.255.0

Answer: C

QUESTION 630

Ann, a customer, recently upgraded her SOHO Internet to gigabit fiber from cable. She was previously getting speeds around 75Mbps down and 25Mbps up. After the upgrade, Ann runs a speed test on her desktop and gets results of 1000Mbps down and 100Mbps up. A technician

connects directly to the router and sees the correct 1000Mbps speeds. Which of the following is MOST likely the cause? (Select two).

- A. All ports should be configured for full duplex.
- B. There is a 10/100 switch on the network.
- C. The connections are using Cat 5 cable.
- D. The connections are using Cat 6 cable.
- E. There is a transceiver mismatch at the fiber termination point.
- F. Signal attenuation on the new fiber has reached the upper limits.

Answer: AC

QUESTION 631

A user reports intermittent performance issues on a segment of the network. According to the troubleshooting methodology, which of the following steps should the technician do NEXT after collecting initial information from the customer?

- A. Document findings, actions, and outcomes.
- B. Establish a theory of probable cause.
- C. Establish a plan of action to resolve the problem.
- D. Duplicate the problem, if possible.

Answer: D

QUESTION 632

Which of the following protocols is associated with a three-way handshake?

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

Answer: D

QUESTION 633

Which of the following would a company place at the edge of its network if it wants to view and control which Internet applications are being used?

- A. VPN concentrator
- B. NGFW
- C. IDS/IPS
- D. Proxy server

Answer: B

QUESTION 634

A technician wants to physically connect two office buildings' networks. The office buildings are located 600ft (183m) apart. Which of the following cable types is the BEST choice?

- A. Cat 5e
- B. Cat 6a
- C. Multimode
- D. Coaxial

Answer: C

QUESTION 636

A network engineer at a multinational company is asked to purchase mobile phones for senior executives who often travel internationally. The executives want their phones to work with wireless carriers in multiple countries when they travel. Which of the following cellular standards should these new phones support?

- A. GSM
- B. TDM
- C. CDMA
- D. PSTN

Answer: A

QUESTION 637

Which of the following should a network administrator use to configure Layer 3 routes? (Select TWO).

- A. Multilayer switch
- B. Firewall
- C. Hub
- D. Bridge
- E. Modem
- F. Media converter

Answer: AB

QUESTION 638

While logged into a financial application, a user gets errors when trying to write to the database. The network administrator is not familiar with the application and how it communicates with the database. Which of the following documentation types should the network administrator use to troubleshoot the data flow?

- A. Logical diagram
- B. Physical diagram
- C. Network baseline
- D. Change management log

Answer: A

QUESTION 639

Joe, a network engineer, is attempting to install wireless in a large work area. He installs the access point in the middle of the work space. When testing, he notices a -60dB reading on one

side of the room and a - 92dB reading on the other side. Which of the following is MOST likely the issue?

- A. External interference
- B. Distance limitations
- C. Channel overlap
- D. Incorrect antenna type

Answer: D

QUESTION 640

A network technician wants to address PCs on a subnet with IPv6 in addition to IPv4. The subnet currently uses a DHCP server that only supports IPv4. Which of the following should the technician use to assign IPv6 addresses automatically without DHCP?

- A. APIPA
- B. MAC reservations
- C. EUI-64
- D. IPv4 to IPv6 tunnel

Answer: C

QUESTION 641

A technician is establishing connectivity through a VPN for remote server access. Which of the following protocols should be utilized to configure this VPN connection securely?

- A. IPSec
- B. IGRP
- C. L2TP
- D. PPTP

Answer: A

QUESTION 642

A network technician receives a request for a disaster recovery solution. Management has requested no downtime in the event of a disaster. Which of the following recovery solutions is the appropriate choice?

- A. Hot site
- B. Business continuity
- C. File backups
- D. Virtual snapshot

Answer: B

QUESTION 643

A network technician receives a new firmware update for a network device. The technician wants to ensure the file has not been tampered with. Which of the following techniques should the technician use to ensure the integrity of the file?

- A. Cyclic redundancy check
- B. System integrity check
- C. Hash comparison
- D. Root guard

Answer: C

QUESTION 644

An AP is configured to authenticate clients by using their Active Directory username and password. The AP uses UDP to connect to the authentication service, which then queries Active Directory. Which of the following authentication services is being used by the AP in this scenario?

- A. RADIUS
- B. TACACS+
- C. LDAP
- D. Kerberos

Answer: A

QUESTION 645

Which of the following should be configured on the network to achieve performance for the FCoE storage traffic?

- A. PoE
- B. DHCP snooping
- C. Jumbo frames
- D. Virtual IP

Answer: C

QUESTION 646

A network administrator wants to narrow the scope of a subnet to two usable IP addresses within a class C network. Which of the following is the correct CIDR notation?

- A. 10.10.50.0/30
- B. 172.16.20.0/30
- C. 192.1.0.124/30
- D. 192.168.0.192/24
- E. 192.170.10.0/24

Answer: C

QUESTION 647

A network technician notices that most of the nodes in the 10.10.74.0/23 address space return either 1 or 2 node hop after running a tracert, however, some of the new servers are showing a hop count larger than 10. Which of the following is the MOST likely reason for this?

- A. New servers are being provisioned in the cloud.

- B. Those servers have host-based firewalls.
- C. Some of the servers are configured to use different gateways.
- D. Part of the subnet is configured to use different VLANs.

Answer: A

QUESTION 648

A technician has a remote site that often has congestion issues. When this happens, the remote router cannot be managed using SSH because the session drops. Which of the following is a possible solution to the issue?

- A. Out-of-band management
- B. HTTPS management URL
- C. Client-to-site VPN
- D. Router ACL

Answer: A

QUESTION 649

A technician has installed multiple new PC clients and is connecting them to the network. Only one client is receiving IP addressing information. Which of the following should the technician verify as the NEXT troubleshooting step?

- A. DHCP scope
- B. DHCP lease
- C. Default gateway
- D. DNS zone

Answer: A

QUESTION 650

Which of the following WAN technologies swaps the header on a packet when internally switching from one provider router to another?

- A. ATM
- B. Frame relay
- C. MPLS
- D. PPP

Answer: C

QUESTION 651

A network administrator is purchasing a mobile phone for a manager who is traveling internationally. The phone needs to be able to make and receive calls in multiple countries outside of North America. Which of the following cellular technologies should the administrator look for in the phone?

- A. CDMA
- B. GSM

- C. TDMA
- D. CSMA

Answer: B

QUESTION 652

A network administrator is downloading a large patch that will be uploaded to several enterprise switches simultaneously during the day's upgrade cycle. Which of the following should the administrator do to help ensure the upgrade process will be less likely to cause problems with the switches?

- A. Confirm the patch's MD5 hash prior to the upgrade.
- B. Schedule the switches to reboot after an appropriate amount of time.
- C. Download each switch's current configuration before the upgrade.
- D. Utilize FTP rather than TFTP to upload the patch.

Answer: C

QUESTION 653

A network technician is segmenting network traffic into various broadcast domains. Which of the following should the network technician utilize?

- A. VLAN
- B. STP
- C. ACL
- D. BPDU

Answer: A

QUESTION 654

After rebooting a PC, a user is no longer able to connect to the corporate network. As a test, the technician plugs a different laptop into the same network jack and receives an IP address of 169.254.112.137. Which of the following is MOST likely causing the issue?

- A. DHCP scope exhaustion
- B. Improper DNS setting
- C. Incorrect ACL setting
- D. Port-security violation

Answer: A

QUESTION 655

A network administrator is concerned about clients being able to access the local Internet while connected to the corporate VPN. Which of the following should be disabled on the client to prevent this?

- A. TLS
- B. Remote file access
- C. Split tunneling

D. HTTPS

Answer: C

QUESTION 656

A network technician travels to a remote office to set up a new SOHO for the company. Wireless networking should be used at the remote office. The network technician sets up all the related wireless network equipment, and the last step is to connect the users' devices to the company network. To complete this step, which of the following should be used to secure the remote network location?

- A. Host-based firewalls
- B. WPA2/WPA
- C. Open access
- D. Port filtering

Answer: B

QUESTION 657

The length of an IPv6 address is:

- A. 32 bits
- B. 64 bits
- C. 128 bits
- D. 256 bits

Answer: C

QUESTION 658

A network technician is troubleshooting a problem with a user's client-to-site VPN connection. The user is unable to establish a connection to the server, but the error message that appears on screen does not contain useful information. Which of the following should the technician do NEXT to troubleshoot the issue?

- A. Reconfigure the user's VPN connection in the router to fix profile corruption.
- B. Inform the user that provisioning sometimes fails and the connection needs to be attempted again.
- C. Review the logs in the VPN client to check for any informational messages.
- D. Verify the system has the latest OS patches installed.

Answer: C

QUESTION 659

Management requires remote access to network devices when the ISP is down. Which of the following devices would provide the BEST solution?

- A. Router
- B. Firewall
- C. Bridge
- D. Modem

Answer: D

QUESTION 660

A network technician installed a new host on the network. The host is not connecting to the company's cloud servers. The technician attempts to ping a server using the AP address with no success. Checking the IP address using ipconfig displays:

IP address	10.10.23.231
Subnet mask	255.255.192.0
Default gateway	10.10.20.1
DNS1	11.11.11.11
DNS2	11.11.11.12

Which of the following should the technician perform NEXT to determine where the issue is located?

- A. Modify the default gateway address and ping the server to test connectivity.
- B. Change the DNS servers to be on the same subnet as the host.
- C. Modify the router's ACL to allow port 80 to exit the network.
- D. Perform a tracert command to locate where the packet is dropped.

Answer: D

QUESTION 661

A network technician is performing a firmware upgrade on a switch. The firmware needs to be downloaded to the device. Which of the following methods should the technician use to retrieve the updated firmware?

- A. RDP
- B. SSH
- C. TFTP
- D. Telnet

Answer: C

QUESTION 662

A network technician is assisting a user who is experiencing connectivity problems with the VPN. The technician has confirmed the VPN is functioning and other users at the site cannot access the Internet. Which of the following commands would MOST likely be used to further troubleshoot?

- A. tracert
- B. netstat
- C. arp
- D. dig

Answer: A

QUESTION 663

Which of the following MUST be installed on an employee's computer if the remote access VPN implements an SSL VPN with PKI authentication?

- A. Shared secret
- B. HTTPS server
- C. Soft spoken
- D. Private certificate

Answer: D

QUESTION 664

Which of the following default ports should be opened on a firewall to allow for SSH and Telnet? (Select TWO)

- A. 21
- B. 22
- C. 23
- D. 25
- E. 123
- F. 443

Answer: BC

QUESTION 665

Two computers are connected to a multilayer switch, and both can access the corporate file server. The computers cannot talk to one another. Which of the following is MOST likely the cause?

- A. Duplex/speed mismatch
- B. ACL misconfiguration
- C. Bad port
- D. Crosstalk

Answer: B

QUESTION 666

A user calls the help desk for assistance with setting up a new SOHO router. The user has three employees who all have laptops that need to connect to the wireless network. The users need to have firewall rules allowing access to an internal server, but cannot be configured with static IP addresses. Which of the following BEST describes what the technician should implement?

- A. CNAME record in the users' dynamic DNS accounts
- B. Additional lease time for the laptop computers
- C. IP helper relay system for configuration hops
- D. DHCP reservation for the laptops' MACs

Answer: D

QUESTION 667

A home user is unable to get to the Internet from a workstation that is connected to a wireless network. When reviewing the results of the ipconfig command, the user wants to verify the default gateway is correct. Which of the following devices should be the gateway?

- A. Cable modem
- B. SOHO router
- C. DNS server
- D. Layer 2 switch

Answer: A

QUESTION 668

A technician is troubleshooting intermittent connectivity on a line-of-sight wireless bridge. Which of the following tools should the technician use to determine the cause of the packet loss?

- A. Spectrum analyzer
- B. OTDR
- C. Packet sniffer
- D. Multimeter

Answer: A

QUESTION 669

Which of the following should be configured to allow for IP-to-name resolutions?

- A. CNAME
- B. A
- C. PTR
- D. NS

Answer: C

QUESTION 670

When configuring a new switch in a packet-switched network, which of the following helps protect against network loops?

- A. Spanning tree
- B. Flood guard
- C. BPDU guard
- D. DHCP snooping

Answer: A

QUESTION 671

A company has just installed a new cloud VoIP solution, however, users occasionally report poor call quality or dead air being present. Which of the following describes the NEXT troubleshooting step the technician should take?

- A. The technician should check the internal diagnostics on all the phones to look for a common thread.
- B. The technician should reset all the phones and deprovision information from the provider
- C. The technician should use a packet tracer to see if the traffic is getting out of the network
- D. The technician should run ping tests on the Internet line to monitor for packet loss and latency

Answer: D

QUESTION 672

A network technician needs to configure a device with an embedded OS so it can be connected to a wireless handheld scanner. Which of the following technologies should be configured on the OS to create the wireless connection?

- A. Partial mesh
- B. Ad hoc
- C. Ring
- D. Bus

Answer: B

QUESTION 673

An NGFW alerts that a web server in the DMZ is sending suspicious traffic. A network administrator finds that port 25 is open, and the traffic is originating from this port. The only purpose of this server is to deliver website traffic. Which of the following should the network administrator recommend to the systems administrator?

- A. Disable Telnet service on the server.
- B. Disable DHCP service on the server.
- C. Disable the SMTP service on the server
- D. Disable FTP service on the server.

Answer: C

QUESTION 674

Joe, a network technician, wants to locally back up several router and switch configurations. He wants to store them on a server that can be accessed easily for recovery without authentication. Which of the following servers should Joe use?

- A. Telnet
- B. LDAP
- C. TFTP
- D. Samba

Answer: C

QUESTION 675

According to the troubleshooting methodology, which of the following steps will help a technician gather information about a network problem? (Select TWO).

- A. Test solutions.
- B. Duplicate the problem
- C. Establish a theory of probable cause
- D. Question users
- E. Implement preventive measures.
- F. Document findings

Answer: BD

QUESTION 676

A user reports network resources can no longer be accessed. The PC reports a link but will only accept static IP addresses. The technician pings other devices on the subnet, but the PC displays the message . Which of the following are MOST likely the causes of this issue? (Select Destination unreachable TWO).

- A. Damaged cables
- B. Crosstalk
- C. Bent pins
- D. TX/RX reverse
- E. VLAN mismatch
- F. Duplex mismatch

Answer: CE

QUESTION 677

While testing an ACL on the default gateway router to allow only web browsing, ports TCP 80 and TCP 443 were the only ports open. When tested, no websites were accessible via their URLs inside the network. Which of the following configurations should be added to the ACL?

- A. permit tcp any any eq 20
- B. permit udp any any eq 25
- C. permit udp any any eq 53
- D. permit udp any any eq 68
- E. permit tcp any any eq 110
- F. permit tcp any any eq 8080

Answer: C

QUESTION 678

Users have been experiencing connection timeout issues when using a web-based program. The network technician determines the problem happened due to a TTL setting that was set too low on the firewall. Which of the following BEST enabled the network technician to reach this conclusion?

- A. Reviewing application logs
- B. Reviewing a baseline report
- C. Reviewing a vulnerability scan
- D. Reviewing SLA requirements

Answer: A

QUESTION 679

A network technician is installing a new wireless network for a client. The client has experienced issues with other building tenants connecting to the wireless network and utilizing the bandwidth. The client wants to prevent this from happening by using certificate-based authentication. Which of the following technologies should the network administrator implement?

- A. WPA-PSK
- B. EAP-TLS
- C. AES-CCMP
- D. WEP-TKIP

Answer: B

QUESTION 680

A network administrator is installing a campus network of two routers, 24 switches, 76 APs, and 492 VoIP phone sets. Which of the following additional devices should the administrator install to help manage this network?

- A. VoIP PBX
- B. Content filter
- C. RADIUS server
- D. Wireless controller

Answer: D

QUESTION 681

A technician arrives at a new building to find cabling has been run and terminated, but only the wall ports have been labeled. Which of the following tools should be utilized to BEST facilitate labeling the patch panel?

- A. Tone generator
- B. Cable tester
- C. Multimeter
- D. Loopback adapter

Answer: B

QUESTION 682

Which of the following policies prohibits a network administrator from using spare servers in the datacenter to mine bitcoins?

- A. NDA
- B. BYOD
- C. AUP
- D. MOU

Answer: C

QUESTION 683

Which of the following technologies is used when multiple Ethernet adapters work to increase speed and fault tolerance?

- A. Clustering
- B. Load balancing
- C. Redundant circuits
- D. NIC teaming

Answer: D

QUESTION 684

A network technician has finished configuring a new DHCP for a network. To ensure proper functionality, which of the following ports should be allowed on the server's local firewall? (Select TWO).

- A. 20
- B. 21
- C. 53
- D. 67
- E. 68
- F. 389

Answer: DE

QUESTION 685

A network technician is reviewing switch ACLs to determine if they are causing communication issues with one PC. The PC's IP address is 192.168.12.66. Which of the following is the network range found in the ACL that could have affected this PC?

- A. 192.168.12.97 255.255.255.192
- B. 192.168.12.97 255.255.255.224
- C. 192.168.12.97 255.255.255.240
- D. 192.168.12.97 255.255.255.248

Answer: A

QUESTION 686

A new technician is connecting an access switch to a distribution switch uplink in a datacenter using fiber cables. Which of the following are transceivers the technician should use to perform this job? (Select TWO).

- A. RJ45
- B. DB-9
- C. LC
- D. SFTP
- E. GBIC

F. SC

Answer: CF

QUESTION 687

Which of the following physical security devices is used to prevent unauthorized access into a datacenter?

- A. Motion detector
- B. Video camera
- C. Asset tracking
- D. Smart card reader

Answer: D

QUESTION 688

A technician is installing two new servers that collect logs. After installing the servers, the technician reviews the logical output from various commands. Which of the following should be included in a logical network diagram?

- A. Rack location
- B. Room number
- C. Media type
- D. Hostname

Answer: D

QUESTION 689

A few weeks after starting a new position, Joe, a junior network administrator, receives a call from an internal number asking for his username and password to update some records. Joe realizes this may be a type of attack on the network, since he has full access to network resources. Which of the following attacks is described?

- A. Logic bomb
- B. Social engineering
- C. Trojan horse
- D. Insider threat

Answer: B

QUESTION 690

A technician is sent to troubleshoot a faulty network connection. The technician tests the cable, and data passes through successfully. No changes were made in the environment, however, when a network device is connected to the switch using the cable, the switchport will not light up. Which of the following should the technician attempt NEXT?

- A. Modify the speed and duplex
- B. Plug in to another port
- C. Replace the NIC

- D. Change the switch

Answer: B

QUESTION 691

A technician has been assigned to capture packets on a specific switchport. Which of the following switch feature MUST be used to accomplish this?

- A. Spanning tree
- B. Trunking
- C. Port aggregation
- D. Port mirroring

Answer: D

QUESTION 692

Which of the following operate only within the UDP protocol?

- A. Frames
- B. Datagrams
- C. Segments
- D. Packets

Answer: B

QUESTION 693

An employee reports an error when visiting a website using SSL, and a message is displayed warning of an invalid certificate. Which of the following could be occurring?

- A. Phishing
- B. DDoS
- C. Evil twin
- D. MITM
- E. OCSP stapling

Answer: C

QUESTION 694

A network technician is troubleshooting a connectivity issue and determines the cause is related to the VLAN assignment on one of the access switches in the network. After resolving the issue, the network technician decides to update the documentation to refer to the correct VLAN. Which of the following should the technician update?

- A. Physical diagram
- B. Logical diagram
- C. IDF documentation
- D. Change management documentation
- E. Incident response plan

Answer: B

QUESTION 695

A university has a lecture hall containing 100 students. Currently, the lecture hall has two 802.11ac wireless access points, which can accommodate up to 50 devices each. Several students report they are unable to connect devices to the wireless network. Which of the following is MOST likely the issue?

- A. One of the wireless access points is on the wrong frequency
- B. The students are attempting to connect 802.11g devices
- C. The students are using more than one wireless device port seat.
- D. Distance limitations are preventing the students from connecting.

Answer: D

QUESTION 696

A WAP has been dropping off the network sporadically and reconnecting shortly thereafter. The Cat5 wire connecting the access point is a long run of 265ft (81m) and goes through the business area and the mechanical room. Which of the following should the technician do to fix the AP connectivity issue?

- A. Install a repeater to boost the signal to its destination
- B. Replace the UTP cable with plenum cable.
- C. Upgrade the cable from Cat 5 to Cat 5e.
- D. Set the AP to half duplex to compensate for signal loss.

Answer: C

QUESTION 697

A technician wants to configure a SOHO network to use a specific public DNS server. Which of the following network components should the technician configure to point all clients on a network to a new DNS server?

- A. Router
- B. Switch
- C. Load balancer
- D. Proxy server

Answer: A

QUESTION 698

A company wishes to allow employees with company-owned mobile devices to connect automatically to the corporate wireless network upon entering the facility. Which of the following would BEST accomplish this objective?

- A. Open wireless
- B. Geofencing
- C. Pre-shared key
- D. MAC filtering

Answer: C

QUESTION 699

A network engineer for a manufacturing company is implementing a wireless network that provides reliable coverage throughout the facility. There are several large, electric, motorized machines installed on the shop floor for automating the manufacturing process. These machines are known to be significant sources of RF interference. Which of the following frequencies should the wireless network use to MINIMIZE this interference?

- A. 2.4 GHz
- B. 56MHz
- C. 5GHz
- D. 900MHz

Answer: C

QUESTION 700

A company has procured a new office building and started the process of assigning employees to work at that location. The company has also purchased equipment for the new location. There are 5033 laptops, 6000 monitors, and 857 printers. Which of the following steps is the technician most likely to complete FIRST?

- A. Create a rack diagram
- B. Create a network baseline
- C. Create an inventory database
- D. Create a port location diagram

Answer: C

QUESTION 701

Which of the following is created on a 48-port switch with five active VLANs?

- A. 48 networks, five segments
- B. 48 collision domains, five broadcast domains
- C. 240 private networks
- D. 240 usable IP addresses

Answer: B

QUESTION 702

A corporate manager says wireless phones do not work properly inside the main building. After a troubleshooting process, the network administrator detects that the voice packets are arriving on the wireless phones with different delay times. Which of the following performance issues is the company facing?

- A. Jitter
- B. Latency
- C. Attenuation

- D. Frequency mismatch

Answer: A

QUESTION 703

Which of the following technologies is used to attach multiple guest operating systems to a single physical network port?

- A. Virtual switch
- B. FCoE
- C. VPC
- D. vSAN
- E. Fibre Channel

Answer: A

QUESTION 704

When speaking with a client, an employee realizes a proposed solution may contain a specific cryptographic technology that is prohibited for non-domestic use. Which of the following documents or regulations should be consulted for confirmation?

- A. Incident response policy
- B. International export controls
- C. Data loss prevention
- D. Remote access policies
- E. Licensing restrictions

Answer: B

QUESTION 705

A network technician is installing a new network switch in the MDF. The technician is using fiber to connect the switch back to the core. Which of the following transceiver types should the technician use?

- A. MT-RJ
- B. BNC
- C. GBIC
- D. F-type

Answer: C

QUESTION 706

A network technician notices a router that repeatedly reboots. When contacting technical support, the technician discovers this is a known problem in which an attacker can craft packets and send them to the router through an obsolete protocol port, causing the router to reboot. Which of the following did the network technician fail to do? (Select TWO).

- A. Generate new crypto keys.
- B. Keep patches updated.

- C. Disable unnecessary services.
- D. Shut down unused interfaces.
- E. Avoid using common passwords.
- F. Implement file hashing.

Answer: BC

QUESTION 707

A technician has replaced a customer's desktop with a known-good model from storage. However, the replacement desktop will not connect to network resources. The technician suspects the desktop has not been kept up to date with security patches. Which of the following is MOST likely in place?

- A. ACL
- B. NAC
- C. Traffic shaping
- D. SDN
- E. NTP

Answer: B

QUESTION 708

A network technician wants to gain a better understanding of network trends to determine if they are over capacity. Which of the following processes should the technician use?

- A. Log review
- B. Port scanning
- C. Vulnerability scanning
- D. Traffic analysis

Answer: D

QUESTION 709

A network technician is configuring network addresses and port numbers for a router ACL to block a peer-to-peer application. Which of the following is the HIGHEST layer of the OSI model at which this router ACL operates?

- A. Transport
- B. Network
- C. Session
- D. Application

Answer: A

QUESTION 710

An attacker has flooded the hardware tables of a switch to forward traffic to the attacker's IP address rather than the default router. The traffic received is copied in real time, and then forwarded to the default router transparently from the end-user perspective. Which of the following attacks are occurring in this scenario? (Select TWO).

- A. DNS poisoning
- B. ARP poisoning
- C. Man-in-the-middle
- D. Ransomware
- E. Evil twin
- F. Reflective

Answer: BC

QUESTION 711

A remote user is required to upload weekly reports to a server at the main office. Both the remote user and the server are using a Windows-based OS. Which of the following represents the BEST method for the remote user to connect to the server?

- A. RDP
- B. Telnet
- C. SSH
- D. VNC

Answer: A

QUESTION 712

At which of the following layers of the OSI model would TCP/UDP operate?

- A. Layer 3
- B. Layer 4
- C. Layer 5
- D. Layer 6

Answer: B

QUESTION 713

Drag and Drop Question

You are tasked with creating a network that will accomplish the following requirements.

Requirements:

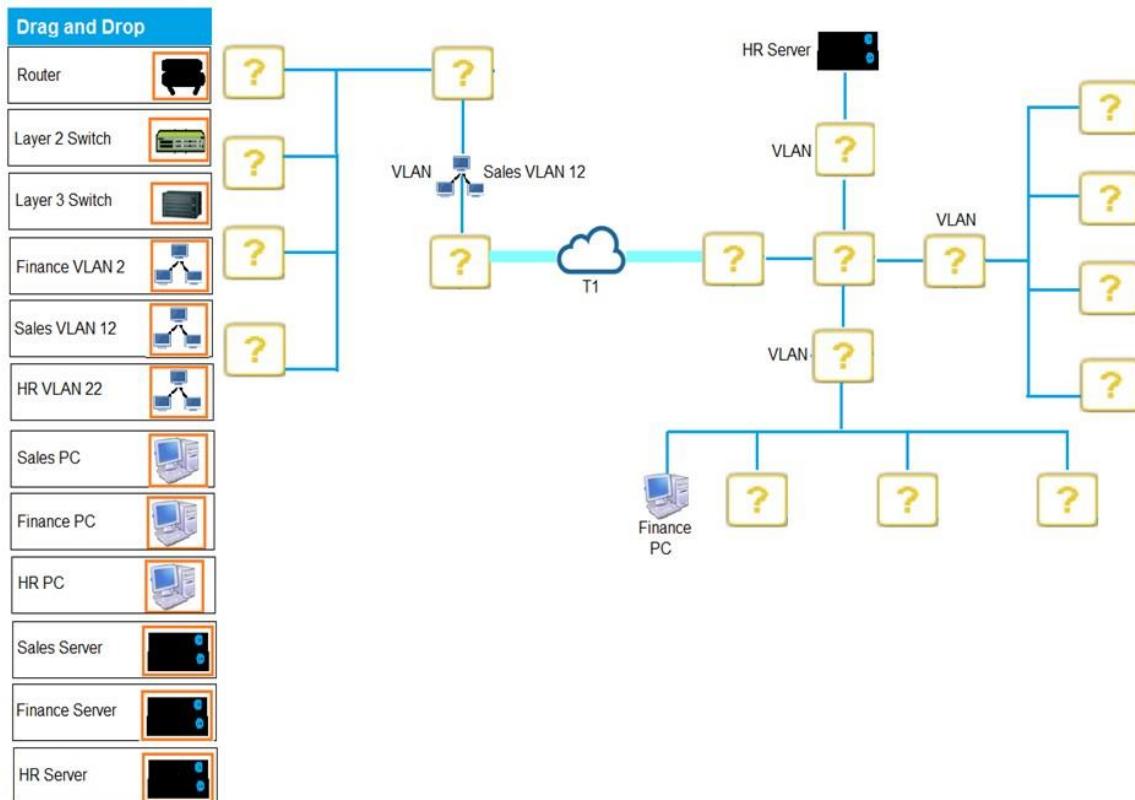
- The remote Sales Team must be able to connect to the corporate network.
- Each department must have ONLY two PCs and a server.
- Each department must be segmented from each other.
- The following VLANs have been designed:
 - VLAN 2 – Finance
 - VLAN 12 – Sales
 - VLAN 22 – Human Resources (HR)
- Routing for VLAN 12 is implemented on the router. Routing for VLAN 2 and VLAN 22 is on the switch.

Instructions

Complete the network by dragging the required objects onto the diagram.

Objects can be used multiple times and not all placeholders need to be filled.

If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.



Answer:

