

N10-007

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N10-007



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## Exam A

### QUESTION 1

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



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



**Correct Answer: C**

**Section: (none)**

#### Explanation

**Explanation/Reference:**

### QUESTION 2

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

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D. Improper VLAN assignment

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 3

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



### QUESTION 4

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 5**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 6**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 7**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 8

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**



### QUESTION 9

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 10**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 11**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 12**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 13

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



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 14

A network technician has discovered a rogue access point placed 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

**Correct Answer:** B

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 15**

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

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 16**

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

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 17**

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

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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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 18

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

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 19

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 20

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



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 21

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

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

**Correct Answer:** B

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 22**

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

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 23**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 24**

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



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- D. SLA

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



#### QUESTION 25

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

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D. VLAN

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 26

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 27

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

**Correct Answer:** ACF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 28

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 29

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

**Correct Answer:** A



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 30**

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

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 31**

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

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 32**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 33

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 34

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 35

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 36

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**



**Explanation/Reference:**

**QUESTION 37**

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

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 38**

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

**Correct Answer: EFG**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 39**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 40**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 41**

A network technician is able to connect the switches between two 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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 42**

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

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 43**

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

**Correct Answer:** C

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### **QUESTION 44**

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 the issue with the cable?

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

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



#### **QUESTION 45**

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

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### **QUESTION 46**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 47**

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



**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 48**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 49**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**



**QUESTION 50**

Which of the following protocols do MOST MITM attacks utilize?

- A. ARP
- B. SIP
- C. FTP
- D. SCP

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 51**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 52**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 53**

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

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 54**

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



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 55**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 56

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### QUESTION 57

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 58

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 59

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 60**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 61**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 62**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 63**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 64**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 65**

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

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 66**

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

**Correct Answer:** A



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 67**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 68**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 69**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 70

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



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 71

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 72

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

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### QUESTION 73

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 74**

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

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 75**

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

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 76**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 77

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 78

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

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 79**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 80**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 81**

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

**Correct Answer: B**



**Section: (none)**

**Explanation**

**Explanation/Reference:****QUESTION 82**

A small business developed an in-house application that is very sensitive to network latency when a 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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

### **QUESTION 83**

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

**Correct Answer: EF**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

### **QUESTION 84**

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



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 85**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 86**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 87**



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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 88

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.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 89

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.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 90

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:

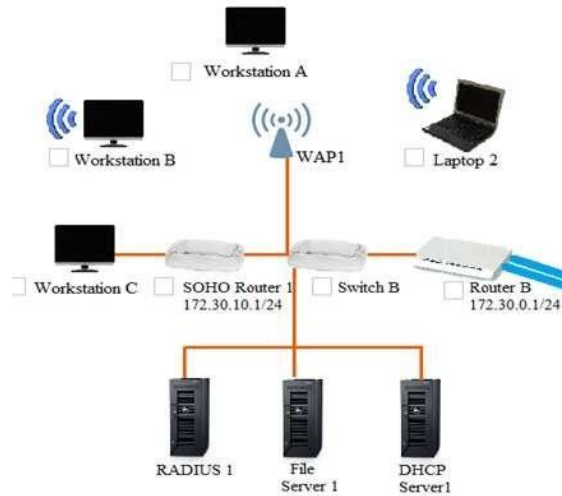
When the simulation is complete, select the Done button to submit.

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.

#### SITE A



#### SITE B



**WORKSTATION A**

IP Address	172.30.0.10
Netmask	255.255.255.0
Gateway	172.30.0.1

**WORKSTATION B**

IP Address	172.30.0.14
Netmask	255.255.255.0
Gateway	172.30.10.1

**WORKSTATION C**

IP Address	169.254.200.67
Netmask	255.255.255.0
Gateway	

**WORKSTATION D**

IP Address	172.16.0.221
Netmask	255.255.255.0
Gateway	172.16.0.1

**WORKSTATION E**

IP Address	172.16.0.21
Netmask	255.255.255.0
Gateway	172.16.0.1

**WORKSTATION F**

IP Address	172.16.10.43
Netmask	255.255.255.0
Gateway	172.16.10.1

**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

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.

**Correct Answer:** G

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 91**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 92**

A technician is sent to a remote office to set up a device to connect to the Internet. The company standards document requires stateful inspection. Which of the following should the technician install?

- A. Router
- B. Multiplayer switch
- C. Firewall
- D. Bridge



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 93**

A technician is assigned to secure a basic wireless network. Which of the following authentication protocols should the technician use to perform this task? (Choose two.)

- A. RDP
- B. SNMP
- C. WPA2



- D. EAP
- E. SSL

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 94

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 the 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.



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 95

A system administrator receives reports from users of odd behavior in regard to a 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.
- D. The reverse DNS entry is pointing to a different host.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 96

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 97**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 98**

Which of the following networking devices operates at Layer1?

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

**Correct Answer:** C



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 99**

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

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 100**

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

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 101**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 102

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



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 103

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.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 104

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.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 105

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.

**Correct Answer:** A

**Section:** (none)

**Explanation**



**Explanation/Reference:**

**QUESTION 106**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 107**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 108**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 109**

At which of the following OSI model layers would a router operate?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 110**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 111

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



<https://vceplus.com>

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 112

Which of the following DNS record types allows IPv6 records to be resolved to DNS names?

<https://vceplus.com>

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 113**

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



**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 114**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 115**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**



**QUESTION 116**

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

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 117**

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

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 118**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 119**

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. MPLSD. OSPF

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 120**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**



**QUESTION 121**

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

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 122**

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.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 123**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 124**

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.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 125**

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



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 126**

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

**Correct Answer:** D

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 127**

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

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 128**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 129**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**



**Explanation/Reference:**

**QUESTION 130**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 131**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 132**

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



**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 133**

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

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 134**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 135**

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.

**Correct Answer:** C



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 136**

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

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 137**

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.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 138**

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.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 139

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



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 140

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 141**

Which of the following protocols are classified as connectionless? (Choose two.)

- A. TFTP
- B. FTP
- C. HTTP
- D. SNMP
- E. SSH
- F. IMAP

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 142**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**



**Explanation/Reference:**

**QUESTION 143**

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

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 144**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 145**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 146**

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



**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 147**

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



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 148**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 149**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 150**

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.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 151

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



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 152

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? (Choose 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.

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 153**

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.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 154**

Which of the following protocols is associated with a three-way handshake?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 155**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 156**

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

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 157**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 158**

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



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 159**

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

**Correct Answer:** A

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 160**

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 disaster recovery solutions is the appropriate choice?

- A. Hot site
- B. Business continuity
- C. File backups
- D. Virtual snapshot

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 161**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 162**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 163

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



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 164

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 165

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.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 166

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

**Correct Answer:** A

**Section:** (none)

**Explanation**



**Explanation/Reference:**

**QUESTION 167**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 168**

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.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 169**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 170

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 171

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

**Correct Answer:** B



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 172**

The length of an IPv6 address is:

- A. 32 bits
- B. 64 bits
- C. 128 bits



<https://vceplus.com> D. 256 bits

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 173**

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.

<https://vceplus.com>

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 174

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 IP 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.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 175

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 176**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 177**

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 reprovision 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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 178**

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

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 179**

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

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 180**

According to the troubleshooting methodology, which of the following steps will help a technician gather information about a network problem? (Choose 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

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 181

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 `Destination unreachable`. Which of the following are MOST likely the causes of this issue? (Choose two.)

- A. Damaged cables
- B. Crosstalk
- C. Bent pins
- D. TX/RX reverse
- E. VLAN mismatch
- F. Duplex mismatch



**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 182

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 183**

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? (Choose two.)

- A. 20
- B. 21
- C. 53
- D. 67
- E. 68
- F. 389

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 184**

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? (Choose two.)

- A. RJ45
- B. DB-9
- C. LC
- D. SFP
- E. GBIC
- F. SC





**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 185**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**



**QUESTION 186**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 187**

A technician has been assigned to capture packets on a specific switchport. Which of the following switch features **MUST** be used to accomplish this?

- A. Spanning tree
- B. Trunking
- C. Port aggregation
- D. Port mirroring

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 188**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 189**

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 per seat.
- D. Distance limitations are preventing the students from connecting.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 190**

A WAP has been dropping off the network sporadically and reconnecting shortly thereafter. The Cat 5 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.



**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 191**

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

**Correct Answer:** A

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 192**

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

**Correct Answer: C**

**Section: (none)**

**Explanation****Explanation/Reference:****QUESTION 193**

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

**Correct Answer: C**

**Section: (none)**

**Explanation****Explanation/Reference:****QUESTION 194**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 195

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



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 196

Which of the following technologies is used to attach multiple guest operating systems to a single physical network port?

- A. Virtual switch
- B. FCoE. VPC
- D. vSAN
- E. Fibre Channel

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 197**

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 198**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 199**

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? (Choose two.)

- A. DNS poisoning
- B. ARP poisoning
- C. Man-in-the-middle
- D. Ransomware
- E. Evil twin
- F. Reflective

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 200**

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 201**

A technician is troubleshooting a server in the finance office that hosts an internal accounting program. The ticketing desk has received several calls from users reporting that access to the accounting program is degraded, and they are experiencing severe delays, sometimes timing out entirely. The problem has been isolated to the server. Which of the following tools should the technician use on the server to narrow down the issue?

- A. nslookup
- B. iptables
- C. pathping
- D. netstat

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### **QUESTION 202**

A wireless client is having issues staying connected to the wireless network even though the client is less than 20ft (6m) from the access point. Which of the following is MOST likely the cause?

- A. Distance limitations
- B. Latency
- C. Security type mismatch
- D. Absorption

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### **QUESTION 203**

After setting up in a temporary office, Joe tries to access the company's wireless network. Following several attempts, Joe is able to get an IP, but cannot access network resources. Which of the following is the MOST likely cause of this error when trying to connect to the company's wireless network?

- A. Incorrect passphrase
- B. Incorrect power levels



- C. Incorrect workstation certificate
- D. Incorrect encryption

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 204

A network technician is assisting a user who is having problems accessing a particular website. Other users are reporting that the website is accessible outside of the office. The technician suspects the problem is with the company's firewall. Which of the following should the technician use to troubleshoot?

- A. WiFi analyzer
- B. Bandwidth speed tester
- C. Dig
- D. Packet sniffer

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### QUESTION 205

A network extension needs to be run to a location 500ft (152m) from the nearest switch. Which of the following solutions would work BEST? (Choose two.)

- A. Cat 6 with a repeater placed in the middle of the run
- B. Cat 7
- C. Crossover cable
- D. Fiber-optic cabling
- E. Cat 7 with a patch panel placed in the middle of the run

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 206**

A technician has received a report that details the need for a patch and a complete list of the affected systems. Which of the following activities MOST likely generated the report?

- A. Port enumeration
- B. Baseline review
- C. Vulnerability scanning
- D. Packet analysis

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 207**

A client requests a new dynamic address and receives a response from two DHCP servers. Which of the following addressing information would the client use?

- A. The IP addressing information received last
- B. The IP addressing information from the highest server MAC address
- C. The IP addressing information from the highest server IP address
- D. The IP addressing information received first

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 208**



A technician is preparing to dispose of old network devices. Which of the following policies and best practices would outline procedures for removing sensitive information and configurations from surplus equipment?

- A. System life-cycle procedures
- B. Off-boarding procedures
- C. Safety procedures
- D. Appropriate use policy

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 209

Ann, a network technician, is told to disable unused ports on a switch. Another technician tells her the policy is to move those ports into a non-routed VLAN and leave them enabled. Which of the following documents should Ann use to ensure she is employing the correct method?

- A. Inventory management
- B. Wiring and port location
- C. Configuration baseline
- D. Standard operating procedure

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 210

A network technician is installing and configuring a new router for the sales department. Once the task is complete, which of the following needs to be done to record the change the technician is making to the company network?

- A. Change management
- B. Network diagrams
- C. Inventory report

D. Labeling report

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 211

An employee, who is using a laptop connected to the wireless network, is able to connect to the Internet but not to internal company resources. A systems administrator reviews the following information from the laptop:

```
IP: 192.168.1.100
MASK: 255.255.255.0
ROUTER: 192.168.1.1
```

The administrator was expecting to see a network address within 10.100.0.0/23, which is consistent with the company's wireless network. The network administrator verifies the company's wireless network is configured and working properly. Which of the following is the MOST likely cause of this issue?

- A. Interference
- B. Security type mismatch
- C. Wrong SSID
- D. Channel overlap

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 212

Which of the following technologies should be used in high-throughput networks to reduce network overhead?

- A. iSCSI
- B. QoS tags

- C. Port aggregation
- D. Jumbo frames

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 213

A network topology requires a switch to be placed in an unsecured location. Which of the following techniques should be used to prevent unauthorized access? (Choose two.)

- A. Disabling unused ports
- B. Upgrading firmware
- C. Using secure protocols
- D. File hashing
- E. MAC filtering
- F. Configuring a honeypot

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 214

A network technician is assisting a user who has relocated to a newly constructed office space. The user has no network connectivity. A cable tester was used on the port and is reporting that the pairs are open. Which of the following should be used to remedy this problem?

- A. Loopback adapter
- B. Tone generator
- C. Multimeter
- D. Punchdown tool

**Correct Answer:** D



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 215**

Before upgrading the firmware on several routers, a technician must verify the firmware file received is the same one the vendor provided. Which of the following should the technician use?

- A. 3DES encryption
- B. SSL certificate
- C. Digital signatures
- D. MD5 hash

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 216**

A wireless access point that was working in a large warehouse last week is now offline. The technician observes there is no power to the device. The technician verifies PoE is working on the switchport, and then confirms the wireless access point is still not powering up. Which of the following is the MOST likely issue?

- A. Attenuation
- B. Incorrect pin-out
- C. Damaged cable
- D. Switch misconfiguration

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 217**



A network engineer is trying to determine where to place a firewall based on the flow of traffic. Which of the following types of documentation would assist the engineer in doing this?

- A. Change management
- B. Rack diagram
- C. Network configuration
- D. Network diagram

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 218

A user believes a work email account has been compromised. A technician discovers that an email seeming to be from the user's bank shares the same origin IP address as the last login to the email account. Which of the following types of attack is described in this scenario?

- A. Spam
- B. Ransomware
- C. Man-in-the-middle
- D. Phishing

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 219

A customer wants to set up a guest wireless network for visitors. The customer prefers to not have a password on the network. Which of the following should a technician set up to force guests to provide information before using the network?

- A. Single sign-on
- B. RADIUS
- C. TACACS+

D. Captive portal

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 220**

A zero-day vulnerability is discovered that affects a specific network device. This vulnerability only affects services on port 21. This network device is restricted to use only secure protocols and services. Which of the following explains why this device is secure?

- A. Because secure protocols would reject malicious packets
- B. Because SCP is not a secure service
- C. Because FTP is not a secure service
- D. Because a secure firewall will protect the device

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 221**

When deploying UTP cables in a networking environment, which of the following are acceptable standards? (Choose two.)

- A. 10Base2
- B. 10Base5
- C. 10GBaseT
- D. 1000BaseLX
- E. 1000BaseSX
- F. 1000BaseT

**Correct Answer:** CF

**Section:** (none)

**Explanation**





**Explanation/Reference:**

**QUESTION 222**

A human resources manager notifies the IT manager the night before an employee will be terminated so the employee's access rights can be removed. Which of the following policies is being exercised?

- A. Privileged user agreement
- B. AUP
- C. Non-disclosure agreement
- D. Offboarding

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 223**

Which of the following BEST describes the characteristics of a differential backup solution?

- A. Backs up files with the creation or modified date as the current date.
- B. Backs up all files and sets the archive bit.
- C. Backs up files with a date earlier than today's date with a clear archive bit.
- D. Backs up files with the archive bit set but does not clear the bit.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 224**

A technician has been asked to diagnose problems with DHCP addressing on a VLAN. The DHCP server responds to pings from the technician's machine. Which of the following should the technician use to help diagnose the problem?

- A. Packet sniffer
- B. netstat
- C. nslookup
- D. Spectrum analyzer

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 225

Which of the following allow for higher fault tolerance, availability, and performance across multiple systems? (Choose two.)

- A. Load balancer
- B. Jumbo frames
- C. Clustering
- D. Round robin
- E. TCP offloading



**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 226

A network administrator wants to reduce the amount of time each user takes to log in to different systems in the network. Which of the following would reduce the time spent authenticating?

- A. Kerberos
- B. RADIUS
- C. Certificate
- D. SSO
- E. MFAF. NAC

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 227**

A network technician arrives at a remote office and is unable to connect a laptop to corporate resources using the wireless network. After checking the IP address, the network technician notices the assigned IP address does not belong to the corporate network IP scheme. Which of the following has the network technician discovered?

- A. Evil twin
- B. ARP poisoning
- C. DHCP exhaustion
- D. Social engineering

**Correct Answer:** A

**Section:** (none)

**Explanation**



**Explanation/Reference:**

**QUESTION 228**

Which of the following storage network technologies has the HIGHEST throughput?

- A. FCoE
- B. InfiniBand
- C. iSCSI
- D. OC3

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 229**

A network administrator is configuring the 172.16.40.0/22 network for a new building. Which of the following is the number of hosts that will be supported on this network?

- A. 510
- B. 512
- C. 1022
- D. 1024
- E. 2046
- F. 2048

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 230

At which of the following layers of the OSI model does compression occur?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 231

Ann, a user, reports that her desktop phone is not working on one cable. However, that cable provides connectivity to her laptop. A technician determines PoE is not provided to the end device. Which of the following is MOST likely the cause?

- A. Transceiver mismatch
- B. Crosstalk

- C. Jitter
- D. Open/short on the cable

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 232**

A shop owner wants to ensure that only a specified group of devices can access the wireless network. Which of the following methodologies will BEST ensure unauthorized devices cannot consume the shop owner's limited Internet bandwidth?

- A. Disable the SSID broadcast.
- B. Implement WEP authentication.
- C. Change the WiFi password.
- D. Activate MAC address filtering.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 233**

A network technician has been asked to install an additional switch in an IDF, but all of the single-mode fiber is in use between the IDF and MDF. The technician has deployed new transceivers that allow for the use of a single fiber strand, providing the additional fiber needed for the new switch. Which of the following has the technician deployed?

- A. 1000BaseLX SFP
- B. Duplex GBIC
- C. Duplex SFP+
- D. Bidirectional SFP

**Correct Answer:** D

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 234**

A network technician has purchased a 10GBase-T switch and wishes to connect it to 30 computers with 10GB network cards. The computers are 225ft (69m) away, and all need to establish a 10 Gbps connection to meet business requirements. To minimize costs while still meeting these requirements, which of the following cable types should the technician choose?

- A. Cat 5e
- B. Cat 6
- C. Cat 6a
- D. Cat 7

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 235**

Which of the following BEST describes the functionality of the root guard feature on a switch?

- A. BPDUs entering the root bridge are ignored.
- B. The STP root bridge cannot be changed.
- C. Broadcast storms entering from a root port are blocked.
- D. Loop protection is enabled on the root port of a switch.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 236**

A network administrator is adding a new WAN circuit from the ISP to a new building. In which of the following locations would the network administrator find the utility entry point?

- A. DMZ
- B. Data tier
- C. IDF
- D. Demarc

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 237

A vendor is installing an Ethernet network in a new hospital wing. The cabling is primarily run above the ceiling grid near air conditioning ducts and sprinkler pipes. Which of the following cable types is required for this installation?

- A. Plenum
- B. PVC
- C. Single-mode
- D. Cat 7

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 238

A network technician works in a large environment with several thousand users. Due to the needs of the organization, the network manager has asked the technician to design a solution that accommodates the data needs of all the users, while keeping all data on site. Which of the following solutions should the technician implement?

- A. SaaS
- B. SAN

- C. NAS
- D. IaaS

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 239**

A bookstore uses a Faraday cage to comply with credit card regulations. Customers report that their cellular phones have no signal when they are in the bookstore. Which of the following is the MOST likely cause?

- A. The Faraday cage is creating interference within the bookstore.
- B. The Faraday cage prevents access by redirecting signals.
- C. The Faraday cage is creating latency on the cellular network.
- D. The Faraday cage is creating attenuation of the cellular network.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 240**

An administrator is redesigning a company's network and wants to reduce the amount of hardware needed. Currently, all VLAN routing goes out a single switch interface to a router.

Which of the following would reduce the number of devices in this configuration?

- A. Bridge
- B. Multilayer switch
- C. Switch
- D. Next-generation firewall

**Correct Answer:** B



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 241**

A network technician needs to distribute an updated OS for all network switches at company locations throughout the world. The technician wants to ensure file integrity since several locations do not have high-quality connectivity to the Internet.

Which of the following methods should be used to distribute the images while ensuring integrity?

- A. Use a TFTP server and UDP protocol.
- B. Use an FTP server and provide the file hash.
- C. Use an HTTP server to share the file.
- D. Use a modem and dial-up connection.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 242**

Which of the following OSI layers do TCP and UDP operate within?

- A. Data link
- B. Network
- C. Session
- D. Transport
- E. Presentation
- F. Application

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 243**

Joe, a user, is having issues when trying to access certain web pages. Upon navigating to a web page, it seems like it connects, but then presents the following message:

The security certificate presented by this website was not trusted by a trusted certificate authority.

Joe has cleared his cache and cookies, rebooted his machine, and attempted to browse to the website from a coworker's desktop, but it still presented with this error.

Which of the following is the MOST likely cause of this error?

- A. The web server is missing an intermediate certificate.
- B. The website is missing an HTTPS certificate.
- C. TLS is not enabled in the browser.
- D. The SSL certificate has expired.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 244**

Which of the following is used to define the duration during which a client can use an IP address?

- A. MAC reservation
- B. IP helper
- C. Pool
- D. Lease time

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 245**

A network support specialist is setting up wireless networks for several small companies that are leasing adjacent spaces in an office building. The network support specialist has already configured an access point for each office with WPA2-AES encryption and minimized any overlap of the wireless channels. Several of the companies have expressed concerns about performance and security issues due to the high volume of wireless networks being installed in close proximity.

Which of the following actions will BEST mitigate the companies' concerns?

- A. Reduce the TX power on each access point.
- B. Enable MAC address filtering on each access point.
- C. Disable the SSID broadcast on each access point.
- D. Enable AP isolation on each access point.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**



**QUESTION 246**

A network technician receives a trouble ticket and speaks to the user who is experiencing the issues with the application. Which of the following should the technician perform NEXT?

- A. Gather information.
- B. Determine the symptoms.
- C. Establish a plan of action.
- D. Document the findings

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 247**

To achieve a more efficient and secure work environment, a company needs a way to control what is being accessed on the Internet using corporate resources. Which of the following devices should be used to accomplish this task? (Choose two.)

- A. Proxy server
- B. IDS
- C. Load balancer
- D. Content filter
- E. VPN concentrator
- F. IPS

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 248

A technician has been asked to install biometric controls at the entrance of a new datacenter. Which of the following would be appropriate authentication methods to meet this requirement? (Choose two.)

- A. Badge reader
- B. Retina scanner
- C. Random number-generating token
- D. Device proximity sensor
- E. Challenge question
- F. Combination lock
- G. Fingerprint reader

**Correct Answer:** BG

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 249

A network technician is setting up a WiFi network in a multi-tenant building. When trying to determine the best channel, which of the following is the BEST tool to use?

- A. Protocol analyzer
- B. Tone generator
- C. Spectrum analyzer
- D. Multimeter

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 250**

A network technician sets up a new schedule on the backup server. Management has informed the technician that a full backup does not need to be completed every day. The technician sets up weekly full backups. Which of the following should the technician configure for the remaining days to MINIMIZE the daily backup size?

- A. Snapshots
- B. Incremental
- C. Replica
- D. Differential

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 251**

A network technician is designing a network cable upgrade in a newly acquired office space. The IT manager wants to install a standardized twisted pair cable solution that supports speeds up to 1 Gbps and terminates with a standard RJ45 connector. Which of the following cable types should the technician suggest?

- A. SMF
- B. Cat 3
- C. Cat 5

D. Cat 6E. RG-6

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 252**

A technician wants to have the ability to transfer files from home to the company's network on a regular basis. Which of the following is a remote access protocol the technician can utilize to bypass interactive user authentication by using a list of known host public keys?

- A. FTP
- B. SCP
- C. TFTP
- D. Telnet

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 253**

A company runs Linux servers in its own datacenter and also on a popular public cloud service provider. The servers hosted by the cloud provider can only be accessed with proper authorization and are only accessed by the company's datacenter. Which of the following BEST describes the type of cloud architecture being used? (Choose two.)

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

**Correct Answer:** BD

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 254**

A company's web-based application has a database that is set up for high availability in case of a failure. Which of the following is necessary to achieve this type of setup?

- A. A virtual IP pointing to the active DB
- B. A static IP pointing to the passive DB
- C. A private IP pointing to the web front end
- D. A private IP pointing to the web proxy

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 255**

A network technician has installed multiple new lightweight access points across the network. Which of the following devices should the technician use to manage the new access points?

- A. Wireless controller
- B. SSH
- C. DHCP server
- D. Content filter
- E. WiFi analyzer

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 256**

Management is concerned there is excessive traffic on the network. A network technician wants to run a quick port scan to see any systems that have open ports. Which of the following tools should be used to do this?

- A. tcpdump
- B. dig
- C. nmap
- D. netstat

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 257**

A network technician receives the following command output from a Linux-based machine:

ABCDEG.com	430	IN	mx	mx1.ABCDEG.com
ABCDEG.com	5	IN	mx	mx2.ABCDEG.com
ABCDEG.com	430	IN	mx	mx10.ABCDEG.com
ABCDEG.com	521	IN	NS	ns1.ABCDEG.com
ABCDEG.com	521	IN	NS	ns3.ABCDEG.com
ABCDEG.com	521	IN	NS	ns2.ABCDEG.com
ABCDEG.com	521	IN	NS	ns4.ABCDEG.com

Which of the following commands did the network technician run?

- A. iptables -f ABCDEG.com
- B. dig -t ANY ABCDEG.com
- C. NMAP -t ABCDEG.com
- D. netstat -a ACDEG.com



**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 258**

During a weekend event, several people reported they were unable to get onto the wireless network. On Monday, the technician could not find a problem. Which of the following is the MOST likely cause?

- A. Cross talk
- B. Overcapacity
- C. Channel overlap
- D. Wrong passphrase

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



**QUESTION 259**

A network technician receives a switch that is configured to support VLANs on its ports. At which of the following layers is this switch operating?

- A. Layer 1
- B. Layer 2
- C. Layer 3
- D. Layer 4

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 260**

Which of the following protocols is used to transport outgoing mail across networks?

- A. POP
- B. SMTP
- C. IMAP
- D. LDAP

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 261**

To increase speed and availability, a high-traffic web application was split into three servers recently and moved behind a load balancer. Which of the following should be configured on the load balancer to allow for a single destination?

- A. SIP
- B. PAT
- C. NAT
- D. VIP

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 262**

A network technician is reading a network diagram and looking for the edge router. Which of the following is MOST likely the symbol used for the router?

- A. A circle with four outward arrows
- B. A rectangle with two horizontal arrows
- C. A square with two circular arrows
- D. A triangle with three outward arrows

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 263**

Which of the following would a network technician MOST likely connect to power wireless access points in drop ceilings?

- A. Powerline extender
- B. Ethernet-over-power adapter
- C. Power-over-Ethernet switch
- D. Power distribution unit
- E. Ethernet power controller

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 264**

A network engineer at a large company is restricting Internet browsing on the corporate WAN to only business-related external websites. Which of the following is the BEST solution to achieve this goal while avoiding the need to configure this restriction on each PC?

- A. Web application firewall
- B. Content filter
- C. IPS
- D. VPN concentrator

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 265**

The process of searching for open or weakly secured wireless networks in a geographic area is known as:

- A. phishing.
- B. social engineering.
- C. war driving.
- D. an evil twin.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 266**

A network technician notices that switches of the same model have different commands and security features while administering them. Which of the following hardening techniques should the technician perform on a regular schedule to ensure all switches have the same features and security functionality?

- A. Change the default credentials.
- B. Verify the firmware file hash.
- C. Disable unused switchports.
- D. Apply patches and updates.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 267**

A network administrator has deployed a secure wireless network that authenticates using Active Directory network credentials so individual users are uniquely identified when connected to the WLAN. Which of the following wireless technologies has the administrator configured?

- A. WEP
- B. EAP-PEAP
- C. PSK

D. CCMP-AES

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 268**

A SAN serves out storage to a company's virtual environment and provides low-level disk access. The company wants to use its existing IP network and equipment to access the virtual disks. Which of the following network connection types would BEST accomplish this task?

- A. InfiniBand
- B. iSCSI
- C. Fibre Channel
- D. CIFS

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 269**

A network administrator is responding to a help desk ticket, which states an unknown wireless access point is broadcasting in a specific area. Upon investigation, the administrator finds that a user brought a wireless access point from home and plugged it into the corporate network. This resulted in an attacker using the unsecured wireless LAN to gain access to the network. Which of the following should the network administrator have done to BEST prevent this problem?

- A. Changed the default credentials on the network switches
- B. Installed a Layer 7 firewall
- C. Implemented port security
- D. Disabled unnecessary services on the network switches

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 270**

Which of the following should be performed on a regular basis to prevent unauthorized access to a company network? (Choose two.)

- A. Packet analysis
- B. Reviewing baselines
- C. Vulnerability scanning
- D. Patch management
- E. Log archiving

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 271**

A network technician receives a report that the company's intranet web server is not responding. The technician verifies successful connectivity to the server via the `ping` and `tracert` commands. The technician also verifies the routers and switches are online and operational, and then runs Telnet to port 80 and receives a response. Which of the following troubleshooting steps should the technician perform NEXT?

- A. Establish a plan to reset the company router.
- B. Escalate the issue to the server administrator.
- C. Duplicate the issue and continue testing.
- D. Report that an issue was not identified.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 272**

A technician needs to connect two routers using copper cables. Which of the following cables would utilize both the TIA/EIA 568a and TIA/EIA 568b standards?

- A. Cat5 crossover
- B. Cat5e straight-through
- C. Cat5e rollover
- D. Cat6 console
- E. Cat6a straight-through

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 273

The engineering department wants to bring a legacy computer online to test a failed component. When patching the device into the switch, there are no link lights or connectivity. The legacy computer can ping its loopback address successfully. Another device can connect to that same port without issues. Which of the following should the network technician check NEXT? (Choose two.)

- A. Speed setting on the switch
- B. Duplex requirements
- C. Firmware version
- D. Protocols the legacy computer supports
- E. Network card drivers
- F. VLAN settings



**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 274

A user in the marketing department reports the email server is down. The user has not received email for more than 24 hours. Which of the following should the network technician do to investigate this issue?

- A. Question other users in the marketing department to see if they are also having connectivity issues.



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- B. Reboot the email server and verify connectivity once it is up again.
- C. Check the router and firewall to see if ACLs or firmware have changed in the last 24 hours.
- D. Check for network connectivity on the user's PC and reinstall the email client.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### QUESTION 275

A network administrator is reviewing the following output from a switch.

IP Address	MAC Address
10.10.20.1	07:b9:56:14:ab:17
10.10.20.2	aa:aa:aa:aa:aa:aa
10.10.20.3	bb:bb:bb:bb:bb:bb
10.10.20.4	07:b9:56:22:ae:01
10.10.20.5	cc:cc:cc:cc:cc:cc

Which of the following attacks has occurred on the switch?

- A. DNS poisoning
- B. ARP poisoning

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- C. VLAN hopping
- D. MAC address spoofing

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 276**

A user does not have access to network services but has Internet access. The technician notices the computer has an IP address of 192.168.1.144 when the network is 10.10.10.0. Which of the following is MOST likely the issue?

- A. Rogue DHCP server
- B. Duplicate IP addresses
- C. Incorrect gateway
- D. Server permission changes

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 277**

A technician is trying to identify the cause of an issue several wireless users are experiencing at an office. The office is in a square-shaped building, with four 802.11b WAPs with omnidirectional antennas located in the four corners of the building. Users near the center of the building report sporadic issues connecting to resources. The technician checks the signal strength in the middle of the building and determines it is adequate. Which of the following is causing the reported issue?

- A. The antenna types are incorrect, and unidirectional should be used.
- B. MAC filtering has not been updated.
- C. There is channel overlap of the access points.
- D. The power levels are set too low on the WAPs.

**Correct Answer:** C

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 278**

A network technician is performing an initial configuration of a new network switch. Per company policy, the only authorized manner for remotely administering the switch is through a command line. Which of the following protocols should the technician disable to adhere to the company policy?

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

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 279**

A network technician is troubleshooting a connectivity issue with Joe, a user. Joe has reported that when he attempts to RDP to machine1 (192.168.21.21) by name, he is connected to machine3 (192.168.21.23). When the network technician runs the command `nslookup machine1`, it returns the IP address 192.168.21.23; but when the `ping -a 192.168.21.23` command is run, the results return the hostname machine3. Which of the following DNS records should be updated to allow RDP connections to machine1 by hostname?

- A. A
- B. SRV
- C. PTR
- D. TXT

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 280**

Company policy dictates that full backups are taken every Sunday evening, and incremental backups occur Monday through Saturday in the evening. If data loss were to occur on a Thursday before the backup window, which of the following is the number of backup sets that would be needed to retrieve the lost data come Friday morning?

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 281**

A company's server-naming convention is overly complicated. The systems administrator wants to change the naming convention to make it easier for users to remember which hosts they should log into. However, renaming servers is complicated and requires some downtime. Which of the following DNS record types would accomplish this goal without requiring servers to be renamed?

- A. TXT
- B. A
- C. SRV
- D. CNAME

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 282**

A network technician is working on a way to set up a new branch office securely. The network manager confirms the company does not have any plans to expand to any other new sites and wants to implement the most cost-effective solution. Which of the following would be the BEST type of VPN to implement?

- A. Client-to-site VPN
- B. DMVPN
- C. Site-to-site VPN
- D. MPLS VPN

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 283

A network technician is reviewing the following output from a router:

SRC IP	SRC Port	DEST IP	DEST Port
192.168.5.100	4306	58.11.186.216	6063
192.168.5.100	4307	213.199.179.154	40025
192.168.1.100	4312	23.41.66.25	80
192.168.1.100	4313	23.41.66.25	80
192.168.3.100	4318	58.66.187.23	443
192.168.3.100	4319	58.66.186.216	80

Which of the following is this an example of?

- A. A vulnerability scan
- B. A port scan
- C. A traffic log
- D. A packet capture

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 284**

A network engineer wants to implement a technology that allows for an all-in-one approach to incoming and outgoing traffic from the Internet. This device should be able to filter content and scan for malicious information in each packet. Which of the following types of devices would be necessary?

- A. UTM appliance
- B. IDS appliance
- C. Proxy server
- D. RADIUS server

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 285**

Which of the following technologies allows network traffic to come into the network on a certain port and go to a destination server with a different port?

- A. Spanning port
- B. Port forwarding
- C. Port mirroring
- D. Port tagging

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 286**

An attacker has inserted a hub into a trunk link on the local network in an attempt to access the management subnet to attack the networking devices. Which of the following attacks can be used on a trunk link to provide access to the management subnet?

- A. Brute force
- B. VLAN hopping
- C. Evil twin

D. DNS poisoning

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 287

A developer has asked a network engineer for a small network segment of five computers connected via a Layer 1 device, configured in a star topology, and segregated from the corporate network. Which of the following would BEST fulfill the developer's request?

- A. Connect the five PCs to a hub that is not connected to the corporate network.
- B. Connect the five PCs to a switching router and assign the PCs to a separate VLAN.
- C. Connect the five PCs to a hardware firewall that is connected to the router.
- D. Connect the five PCs to a switch and configure the ports with implicit deny ACLs for outbound traffic.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 288

Which of the following additional capabilities does a next generation firewall provide beyond a standard network firewall? (Choose two.)

- A. Application control
- B. User identification
- C. Network address translation
- D. Virtual private networking
- E. High availability
- F. Access control rules

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 289**

A network team at a large company has received funding for a WiFi refresh. One of the requirements in the RFP is the new WLAN infrastructure must provide APs that support multiple streams of information at the same time. For which of the following WiFi features is the network team looking?

- A. MU-MIMO
- B. MIMO
- C. Channel bonding
- D. TDM
- E. Automatic channel selection

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**



**QUESTION 290**

A user has reported an issue with wireless VoIP phones dropping calls during business hours. When working late or in the evenings, the user does not experience call drops. When the network technician investigates the issue, all WAPs have balanced the number of connections evenly and are not dropping off the network. The network technician connects to the wireless network in the user's office and starts a continuous ping to an external server. The results show a drastic and varied response time for each packet. Which of the following is the MOST likely cause of the dropped calls?

- A. No QoS configured on the network
- B. Signal-to-noise ratio
- C. Interference from the microwave in the breakroom
- D. Rogue AP installed in the office

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 291**

A network technician is investigating reports of blocked downloads from a firewall. Which of the following should be used to determine which protocols are being blocked?

- A. Ping
- B. Log review
- C. Vulnerability scans
- D. Alerts

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 292

A network administrator is configuring a new Internet connection. The ISP provided a fiber-optic handoff, but the company's firewall only supports copper Ethernet interfaces. The administrator wants to connect the devices as easily as possible. Which of the following would be the BEST way to provide the connectivity needed?

- A. Bridge
- B. Router
- C. Multilayer switch
- D. Media converter

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 293

A brokerage firm requires high-speed network connectivity between several buildings in the financial district. Which of the following topologies would BEST meet this requirement?

- A. PAN
- B. WLAN



- C. SAN
- D. MAN

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 294**

Which of the following is a policy that communicates the guidelines for connecting personal employee devices to the corporate network?

- A. Remote access
- B. NDA
- C. SLA
- D. BYOD
- E. Incident response

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 295**

Joe, a user, reports intermittent connectivity issues, but a technician notices that the only time Joe has issues is when he is logged into the database. Losing connection after authenticating to a database, but still having access to network resources such as file/print services and email, would MOST likely be caused by:

- A. an incorrect DHCP gateway setting
- B. a duplicate IP address
- C. NTP synchronization
- D. ACL configuration

**Correct Answer:** D



**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 296**

An email server, which is called "Frederick," has an IPv6 address of 2001:5689:23:ABCD:6A, but most users call it "Fred" for short. Which of the following DNS entries is needed so the alias "Fred" can also be used?

- A. MX
- B. AAAA
- C. SRV
- D. CNAME
- E. TXT
- F. NS

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



**QUESTION 297**

A network administrator needs to be able to burst datacenter capacity during peak times, but does not want to pay for on-premises hardware that is not used during off-peak times. Which of the following would aid in this scenario?

- A. Public cloud
- B. SaaS
- C. PaaS
- D. Hybrid cloud

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 298**

A user wants to secure a network closet and be able to tell if anyone makes changes in the closet. Which of the following would be the BEST detective physical security devices in this situation? (Choose two.)

- A. Anti-tampering
- B. Badges
- C. Door locks
- D. Key fob
- E. Motion detection
- F. Video surveillance

**Correct Answer:** AF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 299**

A network technician needs to subnet the network. The marketing department has 28 devices. Which of the following private IP address spaces should be used to ensure the MINIMUM number of unused IP addresses?

- A. Gateway: 10.10.10.1Netmask:  
255.255.255.192
- B. Gateway:  
172.15.18.128Netmask:  
255.255.255.224
- C. Gateway: 192.168.1.97Netmask:  
255.255.255.224
- D. Gateway:  
224.102.113.65Netmask:  
255.255.255.192

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 300**

A technician restored network connectivity on a user's laptop. After validating full system functionality, which of the following steps should the technician take NEXT?

- A. Duplicate the problem, if possible
- B. Determine if anything has changed
- C. Test the theory to determine the cause
- D. Document the findings, actions, and outcomes

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 301**

Which of the following protocols operates at Layer 4 of the OSI model?

- A. TCP
- B. ARP
- C. IMAP
- D. POP3

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 302**

In the past, users brought personal laptops to the office to bypass some of the security protocols on their desktops. Due to new security initiatives, management has asked that users not be allowed to attach personal devices to the network. Which of the following should a technician use to BEST meet this goal?

- A. Shut down unused ports on switches
- B. Upgrade firmware on network devices

- C. Allow only secure protocols on the network
- D. Disable unnecessary services

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 303

A network analyst is providing access to an FTP server that stores files that are needed by external contractors who are working on a project. In which of the following network locations should the FTP server be placed to achieve the MOST secure environment?

- A. DMZ network
- B. Server network
- C. External network
- D. Internal network

**Correct Answer:** A

**Section:** (none)

**Explanation**



**Explanation/Reference:**

### QUESTION 304

The process of grouping network interfaces together to increase throughput is called:

- A. VLAN tagging
- B. load balancing
- C. port aggregation
- D. fault tolerance

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 305**

A network technician needs to install the latest firmware on the switch to address a recently discovered vulnerability. Which of the following should the technician do to have a rollback plan in case of issues with the new firmware? (Choose two.)

- A. Label the switch with IP address and firmware version
- B. Draw the switchport diagram
- C. Create a change management document
- D. Draw the network rack logical diagram
- E. Confirm standard operating procedures documentation
- F. Create a performance baseline of the switch

**Correct Answer:** CF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 306**

Which of the following storage connection types should be used to allow the consolidation of the physical connections for SAN and LAN in just one Layer 2 protocol?

- A. Fibre Channel
- B. SCSI
- C. T1/E1
- D. FCoE

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 307**

A technician is asked to provide centralized SSID management across the entire WAN. The BEST solution would be to:

- A. use a configuration management server
- B. configure a multilayer switch
- C. install a wireless controller
- D. use a proxy server

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 308**

A network technician is coordinating the upgrade of the company's WAP firmware with all the remote locations. The company has occasionally experienced errors when transferring large files to some of the remote offices. Which of the following should be used to ensure files arrive without modifications?

- A. File hash
- B. Encryption
- C. FCS
- D. Compression



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 309**

A network administrator needs to implement a new IP subnet containing 29 hosts. It is possible that the number of hosts in that subnet could eventually double. The company only has a single, unused public IP network left to work with: 164.10.12.0/24. Which of the following would be the BEST way to divide this network without wasting addresses?

- A. 164.10.12.0/24
- B. 164.10.12.64/29
- C. 164.10.12.128/26
- D. 164.10.12.191/28

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 310**

Which of the following BEST describe the differences between an IDS and an IPS? (Choose two.)

- A. An IDS will detect traffic anomalies and a predefined signature pattern, alert and log them, and allow them through the network.
- B. An IDS will detect traffic anomalies, alert and log them, and block the traffic.
- C. An IDS will detect previously unknown traffic anomalies, alert and log them, and block the traffic.
- D. An IPS will detect traffic anomalies, alert and log them, and allow them through the network.
- E. An IPS will detect previously unknown traffic signatures, and alert and log them.
- F. An IPS will detect traffic anomalies and a predefined signature pattern, alert and log them, and block the traffic.

**Correct Answer:** AF

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### **QUESTION 311**

A small business utilizes a SOHO router and wishes to secure its existing wireless infrastructure. The business has fewer than ten devices, which are a mixture of old and new machines. Due to the varying ages of the machines, the latest wireless encryption methods may not be supported on all devices. Which of the following would be the MOST cost-effective method to add a layer of security while allowing all machines to connect?

- A. WPA2
- B. EAP-FAST
- C. MAC filtering
- D. 802.1X

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**



**QUESTION 312**

Which of the following routing conventions is known as a link-state protocol?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 313**

A technician is installing six PCs and six VoIP telephones on a small office LAN. The VoIP telephones require QoS to be configured for proper operation. The customer router does not have QoS capability. Which of the following network devices should the technician purchase and install at this office?

- A. Managed PoE switch
- B. Load balancer
- C. Layer 3 switch
- D. Unmanaged PoE switch

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 314**

A network administrator has signed up for service with a new ISP. The administrator was given the IP address of 172.17.10.254/30 to use on the external interface of the Internet-facing router. However, the network administrator cannot reach the Internet using that address. Which of the following is the MOST likely explanation?

- A. The address provided by the ISP has a mask that is too small to be used and needs a larger mask.
- B. The address provided by the ISP is a private IP address space and is not routable on the Internet.

- C. The address provided by the ISP is the wrong one; they should be using 172.17.10.252/30.
- D. The address provided by the ISP is part of the reserved loopback address space and cannot be used.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 315**

A manufacturing company has signed an agreement with another company to collaborate on an upcoming project. Both companies require secure and persistent access to resources on each others' networks. Which of the following remote access technologies should the companies implement to satisfy their requirements?

- A. Out-of-band management
- B. Site-to-site VPN
- C. DMZ networks
- D. SFTP site

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 316**

A security administrator wants to implement the ability to prevent an unauthorized user from tailgating into the office building. Which of the following should be implemented?

- A. Badge reader
- B. Bluetooth reader
- C. Cipher lock
- D. Mantrap

**Correct Answer:** D

**Section:** (none)

**Explanation**



**Explanation/Reference:****QUESTION 317**

Joe, a technician, was able to copy data at a site with no network equipment between two new laptops, featuring gigabit Ethernet ports, by using a regular straightthrough patch cable. Joe then unsuccessfully tried to accomplish the same thing at a different site from his laptop with a gigabit Ethernet port to an older customer unit, which had a 10/100 network port. Which of the following is the cause of this?

- A. The customer's laptop does not support auto-MDIX.
- B. Joe's laptop does not support auto-MDIX.
- C. Straight-through patch cables are prone to crosstalk.
- D. The customer's laptop NIC does not support full duplex.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 318**

A network engineer has connected the storefront with the maintenance shed on the other side of a golf course using 802.11 wireless bridges and omnidirectional antennas. However, the signal strength is too weak. Which of the following is the MOST efficient and cost-effective solution to solve the issue?

- A. Replace the omnidirectional antennas with unidirectional antennas.
- B. Put protective enclosures around the omnidirectional antennas to prevent damage from golf balls.
- C. Replace the 802.11 wireless standard and use GSM instead.
- D. Replace the wireless bridges with wireless routers.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 319**

Which of the following OSI layers contains the LLC function?

- A. Network

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 320**

Which of the following BEST describes the RADIUS authentication service protocol?

- A. A protocol that sends passwords to the authentication server
- B. A protocol that sends encrypted tickets from the authentication server
- C. A protocol that sends X.500 service requests to the authentication server
- D. A protocol that sends configuration information from the authentication server

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 321**

A company needs a secure way to provide building blueprints to an engineering partner frequently. The Chief Information Officer (CIO) states that a secure protocol must be used for transfer, and the partner needs to initiate a secure connection to the company's router. Which of the following would BEST meet the requirements? (Choose two.)

- A. Site-to-site VPN
- B. Client-to-site VPN
- C. RDP
- D. SSH
- E. SFTP
- F. Captive portal

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**



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