CompTIA

Exam Questions N10-009

CompTIA Network+ Exam

NEW QUESTION 1
- (Exam Topic 1)
A network technician is installing new software on a Windows-based server in a different geographical location. Which of the following would be BEST for the technician to use to perform this task?

A. RDP
B. SSH
C. FTP
D. DNS

Answer: A

Explanation:
RDP (Remote Desktop Protocol) is the best option for a network technician to use when installing new
software on a Windows-based server in a different geographical location. This protocol allows the technician to connect to the server remotely and control it as if they were physically present.
References:
Network+ N10-007 Certification Exam Objectives, Objective 2.2: Given a scenario, implement the appropriate network-based security and troubleshoot common connectivity issues.

NEW QUESTION 2
- (Exam Topic 1)
An engineer notices some late collisions on a half-duplex link. The engineer verifies that the devices on both ends of the connection are configured for half duplex. Which of the following is the MOST likely cause of this issue?

A. The link is improperly terminated
B. One of the devices is misconfigured
C. The cable length is excessive
D. One of the devices has a hardware issue

Answer: C

Explanation:
In a half-duplex link, devices can only send or receive data at one time, not simultaneously. Late collisions occur when devices transmit data at the same time after waiting for a clear channel. One of the causes of late collisions is excessive cable length, which increases the propagation delay and makes it harder for devices to detect collisions. The link termination, device configuration, and device hardware are not likely to cause late collisions on a half-duplex link.

NEW QUESTION 3
- (Exam Topic 1)
Wireless users are reporting intermittent internet connectivity. Connectivity is restored when the users disconnect and reconnect, utilizing the web authentication process each time. The network administrator can see the devices connected to the APs at all times. Which of the following steps will MOST likely determine the cause of the issue?

A. Verify the session time-out configuration on the captive portal settings
B. Check for encryption protocol mismatch on the client's wireless settings
C. Confirm that a valid passphrase is being used during the web authentication
D. Investigate for a client's disassociation caused by an evil twin AP

Answer: A

Explanation:
A captive portal is a web page that requires users to authenticate before they can access the internet. If the session time-out configuration is too short, users may experience intermittent internet connectivity and have to reconnect using the web authentication process each time. The network administrator can verify the session time-out configuration on the captive portal settings and adjust it if needed. References: CompTIA Network+ Certification Exam Objectives Version 2.0 (Exam Number: N10-006), Domain 1.0 Network Architecture, Objective 1.8 Explain the purposes and use cases for advanced networking devices.

NEW QUESTION 4
- (Exam Topic 1)
A network administrator is installing a wireless network at a client's office. Which of the following IEEE 802.11 standards would be BEST to use for multiple simultaneous client access?

A. CDMA
B. CSMA/CD
C. CSMA/CA
D. GSM

Answer: C

Explanation:
CSMA/CA (Carrier Sense Multiple Access with Collision Avoidance) is an IEEE 802.11 standard that would be best to use for multiple simultaneous client access on a wireless network. CSMA/CA is a media access control method that allows multiple devices to share the same wireless channel without causing collisions or interference. It works by having each device sense the channel before transmitting data and waiting for an acknowledgment from the receiver after each transmission. If the channel is busy or no acknowledgment is received, the device will back off and retry later with a random delay. References: https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/82068-csma-ca.html

NEW QUESTION 5

- (Exam Topic 1)
A network administrator discovers that users in an adjacent building are connecting to the company's guest wireless network to download inappropriate material. Which of the following can the administrator do to MOST easily mitigate this issue?

A. Reduce the wireless power levels
B. Adjust the wireless channels
C. Enable wireless client isolation
D. Enable wireless port security

Answer: A

Explanation:
Reducing the wireless power levels can limit the range of the guest wireless network and prevent users in an adjacent building from connecting to it. Adjusting the wireless channels or enabling wireless client isolation will not affect the signal strength or coverage of the guest network. Enabling wireless port security will not work on a guest network that does not use authentication or MAC address filtering. References: CompTIA Network+ Certification Exam Objectives Version 2.0 (Exam Number: N10-006), Domain 2.0 Network Operations, Objective 2.5 Given a scenario, implement appropriate wireless configuration settings; Guest WiFi Security - Cisco Umbrella

NEW QUESTION 6
- (Exam Topic 1)
A technician is troubleshooting a wireless connectivity issue in a small office located in a high-rise building. Several APs are mounted in this office. The users report that the network connections frequently disconnect and reconnect throughout the day. Which of the following is the MOST likely cause of this issue?

A. The AP association time is set too low
B. EIRP needs to be boosted
C. Channel overlap is occurring
D. The RSSI is misreported

Answer: C

Explanation:
Channel overlap is a common cause of wireless connectivity issues, especially in high-density environments where multiple APs are operating on the same or adjacent frequencies. Channel overlap can cause interference, signal degradation, and performance loss for wireless devices. The AP association time, EIRP, and RSSI are not likely to cause frequent disconnects and reconnects for wireless users.

NEW QUESTION 7
- (Exam Topic 1)
A network engineer performs the following tasks to increase server bandwidth: Connects two network cables from the server to a switch stack
Configure LACP on the switchports
Verifies the correct configurations on the switch interfaces Which of the following needs to be configured on the server?

A. Load balancing
B. Multipathing
C. NIC teaming
D. Clustering

Answer: C

Explanation:
NIC teaming is a technique that combines two or more network interface cards (NICs) on a server into a single logical interface that can increase bandwidth, provide redundancy, and balance traffic. NIC teaming can be configured with different modes and algorithms depending on the desired outcome. Link Aggregation Control Protocol (LACP) is a protocol that enables NIC teaming by dynamically bundling multiple links between two devices into one logical link. References: https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0), https://docs.microsoft.com/en-us/windows-server/networking/technologies/nic-teaming/nic-teaming

NEW QUESTION 8
- (Exam Topic 1)
A technician is configuring a network switch to be used in a publicly accessible location. Which of the following should the technician configure on the switch to prevent unintended connections?

A. DHCP snooping
B. Geofencing
C. Port security
D. Secure SNMP

Answer: C

Explanation:
Port security is a feature that restricts input to a switch port by limiting and identifying MAC addresses of the devices allowed to access the port. This prevents unintended connections from unauthorized devices or spoofed MAC addresses. Port security can also be configured to take actions such as shutting down the port or sending an alert when a violation occurs. References:
https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0),
https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst9500/software/release/16-10/configuration_guide/se

NEW QUESTION 9
- (Exam Topic 1)
Which of the following can be used to centrally manage credentials for various types of administrative privileges on configured network devices?

A. SSO

B. TACACS+
C. Zero Trust
D. Separation of duties
E. Multifactor authentication

Answer: B

Explanation:
TACACS+ (Terminal Access Controller Access Control System Plus) can be used to centrally manage credentials for various types of administrative privileges on configured network devices. This protocol separates authentication, authorization, and accounting (AAA) functions, providing more granular control over access to network resources.
References:
- Network+ N10-007 Certification Exam Objectives, Objective 4.2: Given a scenario, implement secure network administration principles.

NEW QUESTION 10
- (Exam Topic 1)
A network administrator is implementing OSPF on all of a company's network devices. Which of the following will MOST likely replace all the company's hubs?

A. A Layer 3 switch
B. A proxy server
C. A NGFW
D. A WLAN controller

Answer: A

Explanation:
A Layer 3 switch will likely replace all the company's hubs when implementing OSPF on all of its network devices. A Layer 3 switch combines the functionality of a traditional Layer 2 switch with the routing capabilities of a router. By implementing OSPF on a Layer 3 switch, an organization can improve network performance and reduce the risk of network congestion. References: Network+ Certification Study Guide, Chapter 5: Network Security

NEW QUESTION 10
- (Exam Topic 1)
A new cabling certification is being requested every time a network technician rebuilds one end of a Cat 6 (vendor-certified) cable to create a crossover connection that is used to connect switches. Which of the following would address this issue by allowing the use of the original cable?

A. CSMA/CD
B. LACP
C. PoE+
D. MDIX

Answer: D

Explanation:
MDIX (medium-dependent interface crossover) is a feature that allows network devices to automatically detect and configure the appropriate cabling type, eliminating the need for crossover cables. By enabling
MDIX on the switches, a technician can use the original Cat 6 cable to create a crossover connection. References: CompTIA Network+ Certification Study Guide, Sixth Edition by Glen E. Clarke

NEW QUESTION 11
- (Exam Topic 1)
According to troubleshooting methodology, which of the following should the technician do NEXT after determining the most likely probable cause of an issue?

A. Establish a plan of action to resolve the issue and identify potential effects
B. Verify full system functionality and, if applicable, implement preventive measures
C. Implement the solution or escalate as necessary
D. Test the theory to determine the cause

Answer: A

Explanation:
According to troubleshooting methodology, after determining the most likely probable cause of an issue, the next step is to establish a plan of action to resolve the issue and identify potential effects. This step involves defining the steps needed to implement a solution, considering the possible consequences of each step, and obtaining approval from relevant stakeholders if necessary. References: https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0), https://www.comptia.org/blog/the-comptia-guide-to-it-troubleshooting

NEW QUESTION 13
- (Exam Topic 1)
Which of the following ports is commonly used by VoIP phones?

A. 20
B. 143
C. 445
D. 5060

Answer: D

Explanation:
TCP/UDP port 5060 is commonly used by VoIP phones. It is the default port for SIP (Session Initiation Protocol), which is a signaling protocol that establishes,

modifies, and terminates multimedia sessions over IP networks. SIP is widely used for VoIP applications such as voice and video calls. References: https://www.voip-info.org/session-initiation-protocol/

NEW QUESTION 18
- (Exam Topic 1)
A network administrator is designing a new datacenter in a different region that will need to communicate to the old datacenter with a secure connection. Which of the following access methods would provide the BEST security for this new datacenter?

A. Virtual network computing
B. Secure Socket Shell
C. In-band connection
D. Site-to-site VPN

Answer: D

Explanation:
Site-to-site VPN provides the best security for connecting a new datacenter to an old one because it creates a secure tunnel between the two locations, protecting data in transit. References: CompTIA Network+ Certification Study Guide, Chapter 5: Network Security.

NEW QUESTION 23
- (Exam Topic 1)
A network is experiencing a number of CRC errors during normal network communication. At which of the following layers of the OSI model will the administrator MOST likely start to troubleshoot?

A. Layer 1
B. Layer 2
C. Layer 3
D. Layer 4
E. Layer 5
F. Layer 6
G. Layer 7

Answer: A

Explanation:
CRC errors are cyclic redundancy check errors that occur when data is corrupted during transmission. CRC errors are usually caused by physical layer issues such as faulty cables, connectors, ports, or interference. The network administrator will most likely start to troubleshoot at layer 1 of the OSI model, which is the physical layer that deals with the transmission of bits over a medium. References: CompTIA Network+ Certification Exam Objectives Version 2.0 (Exam Number: N10-006), Domain 4.0 Network Troubleshooting and Tools, Objective 4.1 Given a scenario, implement network troubleshooting methodology.

NEW QUESTION 26
- (Exam Topic 1)
A technician is troubleshooting a network switch that seems to stop responding to requests intermittently whenever the logging level is set for debugging. Which of the following metrics should the technician check to begin troubleshooting the issue?

A. Audit logs
B. CPU utilization
C. CRC errors
D. Jitter

Answer: B

Explanation:
CPU utilization is a metric that measures the percentage of time a CPU spends executing instructions. When the logging level is set for debugging, the router may generate a large amount of logging data, which can increase CPU utilization and cause the router to stop responding to requests intermittently. References:
- Network+ N10-008 Objectives: 2.1 Given a scenario, troubleshoot common physical connectivity issues.

NEW QUESTION 29
- (Exam Topic 1)
Which of the following is the physical topology for an Ethernet LAN?

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

Answer: D

Explanation:
In a star topology, all devices on a network connect to a central hub or switch, which acts as a common connection point. Ethernet LANs typically use a star topology, with each device connected to a central switch. References:
- Network+ N10-008 Objectives: 2.2 Explain common logical network topologies and their characteristics.

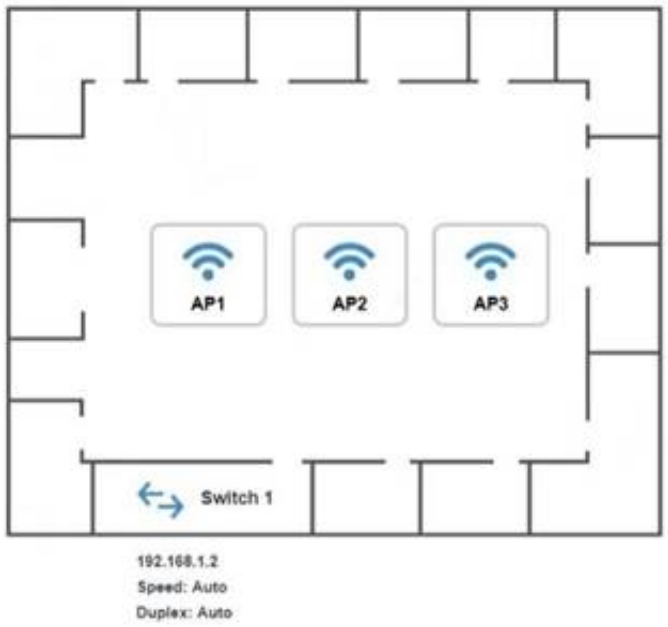
NEW QUESTION 34
- (Exam Topic 1)
Which of the following provides redundancy on a file server to ensure the server is still connected to a LAN even in the event of a port failure on a switch?

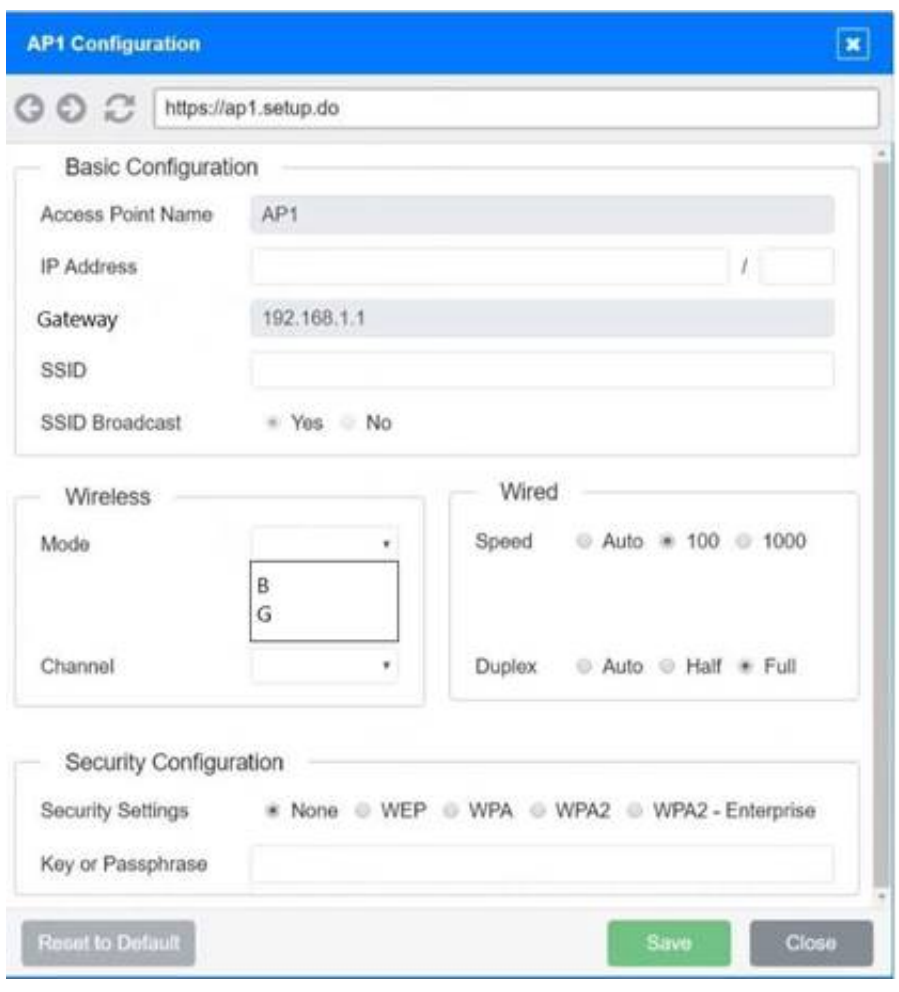
A. NIC teaming
B. Load balancer
C. RAID array
D. PDUs

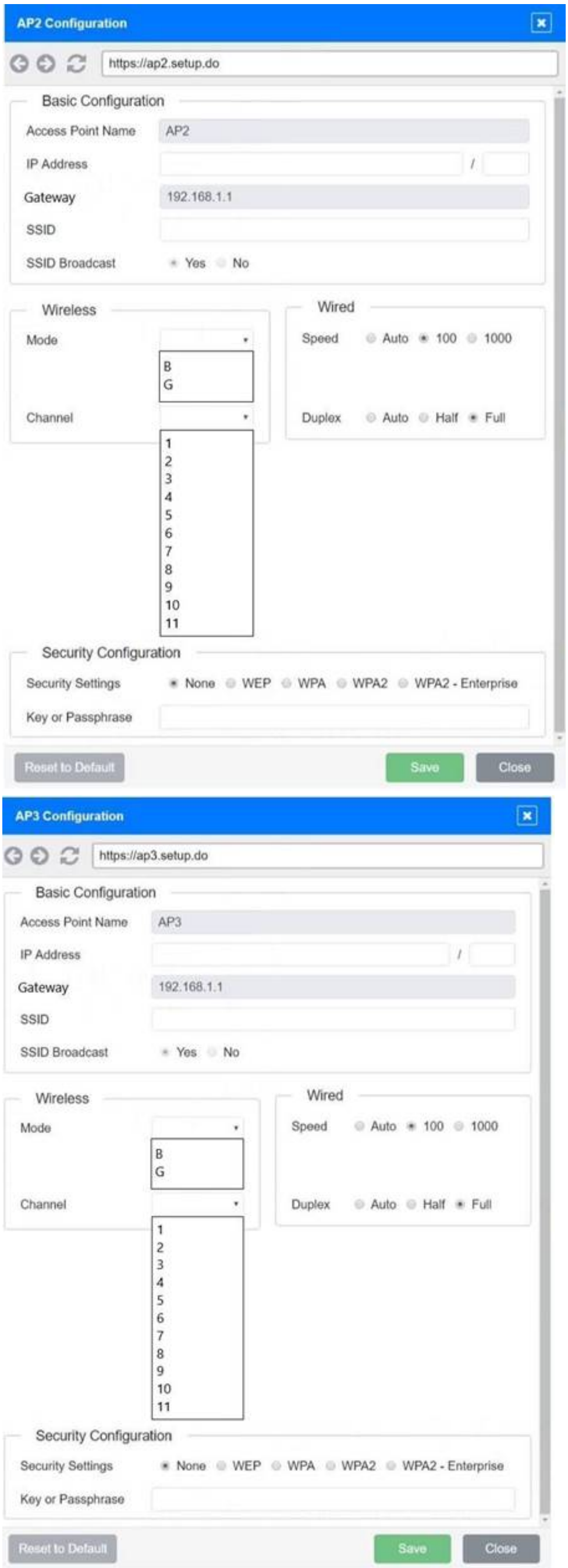
Answer: A

Explanation:
NIC teaming, also known as network interface card teaming or link aggregation, allows multiple network interface cards to be grouped together to provide redundancy and increased throughput. In the event of a port failure on a switch, NIC teaming ensures that the file server remains connected to the LAN by automatically switching to another network interface card.
References: CompTIA Network+ Certification Study Guide, Sixth Edition by Glen E. Clarke

NEW QUESTION 38
- (Exam Topic 1)
SIMULATION
You have been tasked with setting up a wireless network in an office. The network will consist of 3 Access Points and a single switch. The network must meet the following parameters:
The SSIDs need to be configured as CorpNet with a key of S3cr3t! The wireless signals should not interfere with each other
The subnet the Access Points and switch are on should only support 30 devices maximum The Access Points should be configured to only support TKIP clients at a maximum speed INSTRUCTONS
Click on the wireless devices and review their information and adjust the settings of the access points to meet the given requirements.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.



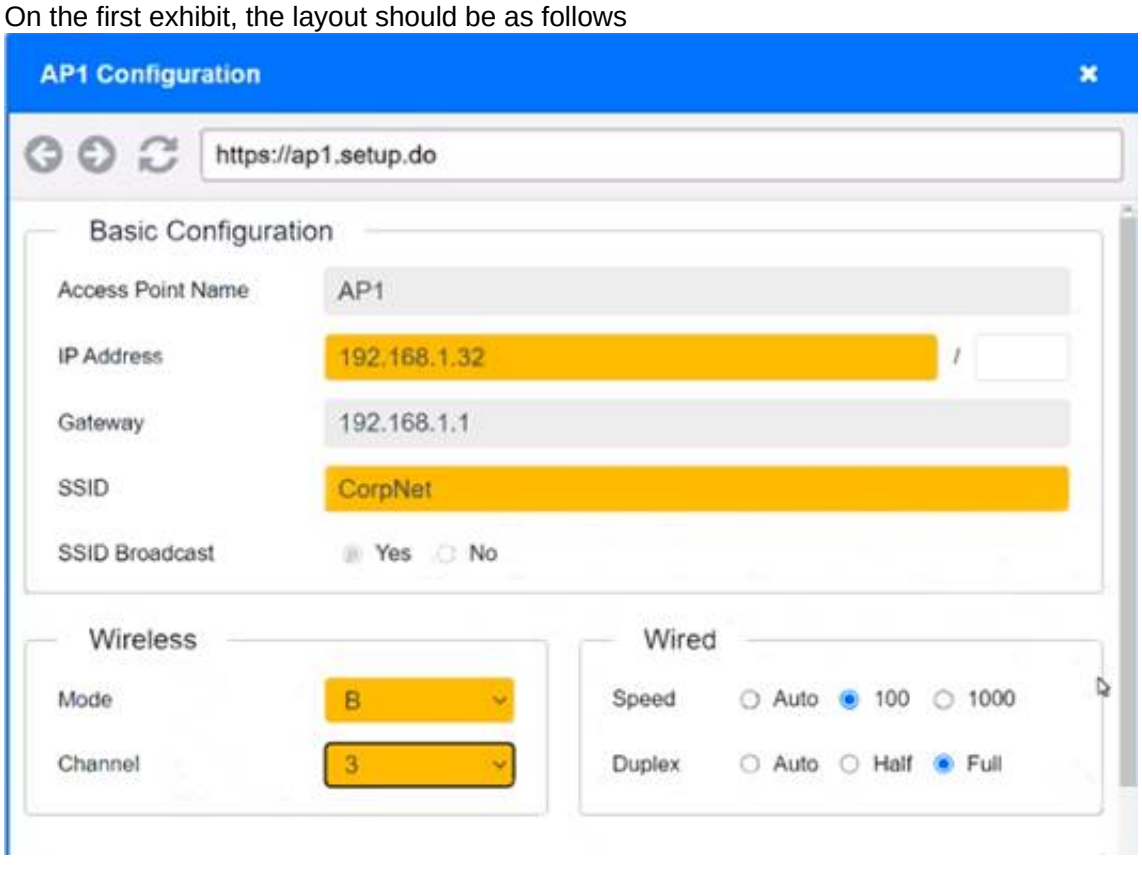




A. Mastered
B. Not Mastered

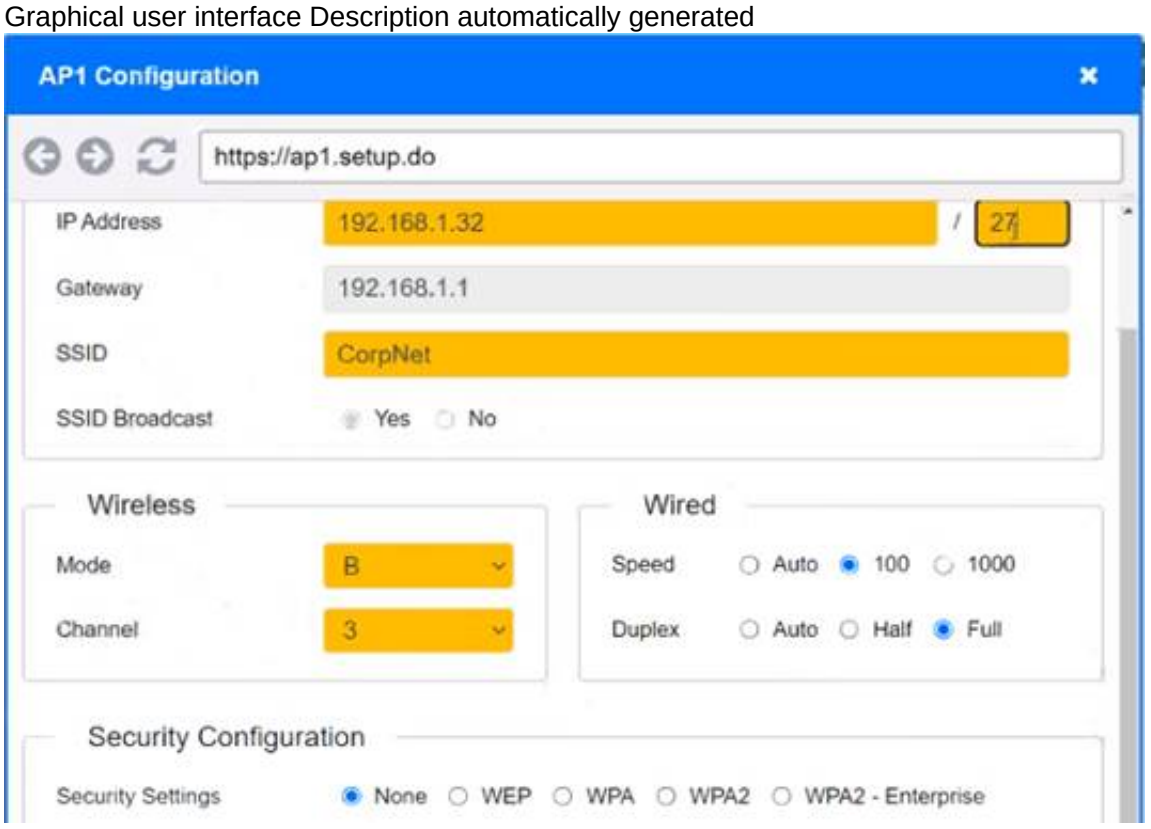
Answer: A

Explanation:
On the first exhibit, the layout should be as follows



Graphical user interface, text, application, chat or text message Description automatically generated

Graphical user interface Description automatically generated



Graphical user interface, text, application, chat or text message Description automatically generated

Graphical user interface Description automatically generated

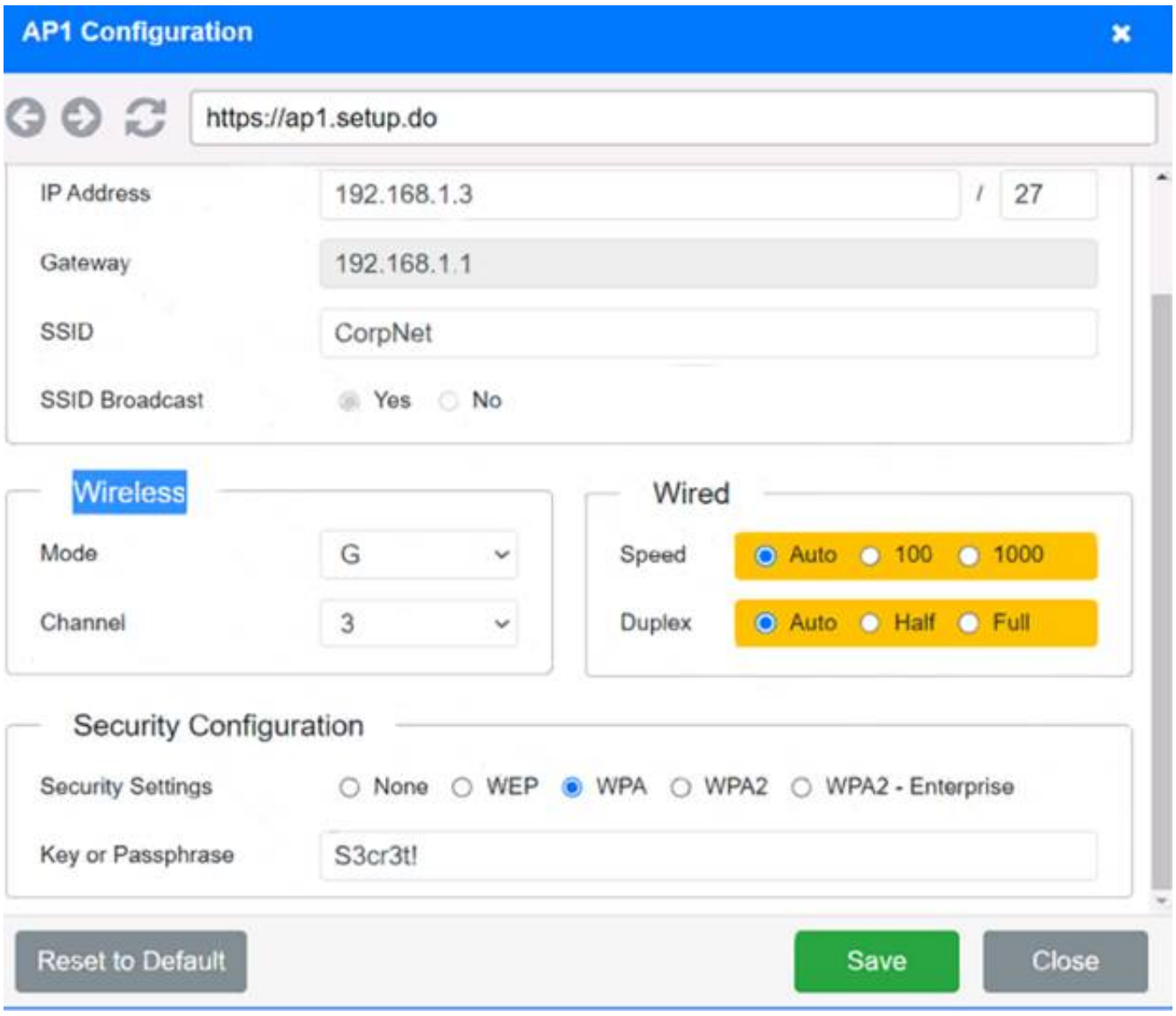
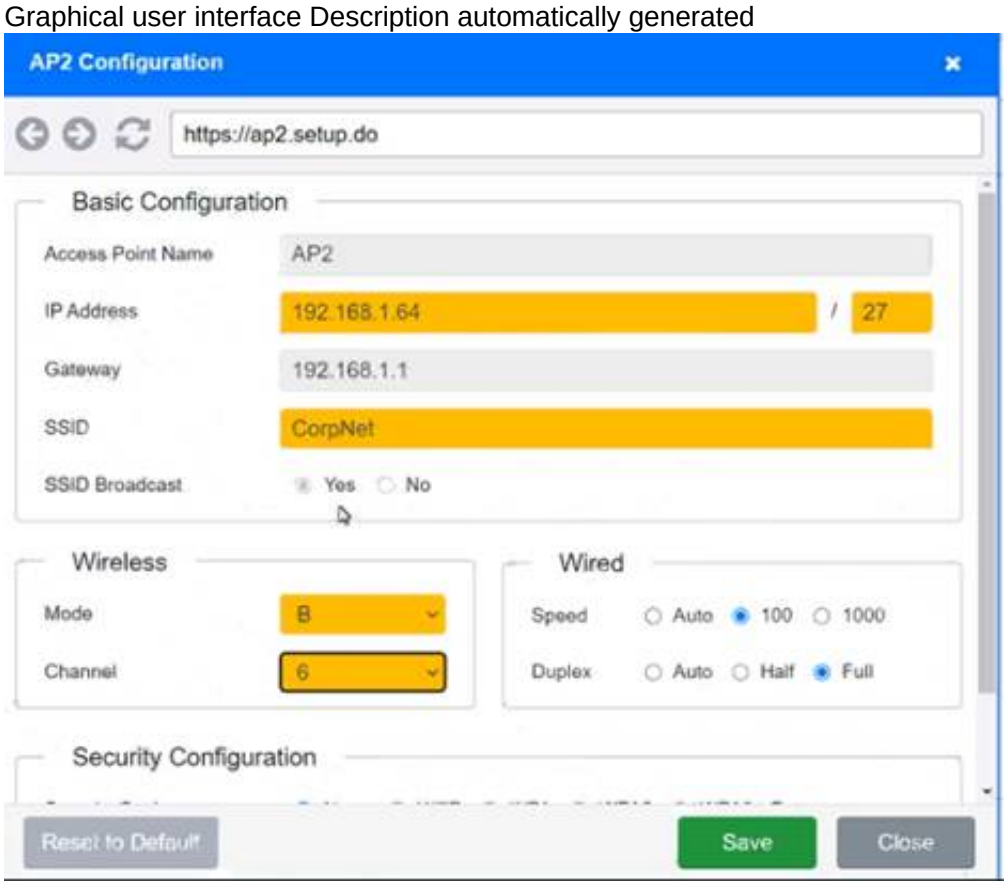


Exhibit 2 as follows Access Point Name AP2
Graphical user interface Description automatically generated



Graphical user interface, text, application, chat or text message Description automatically generated

Graphical user interface Description automatically generated

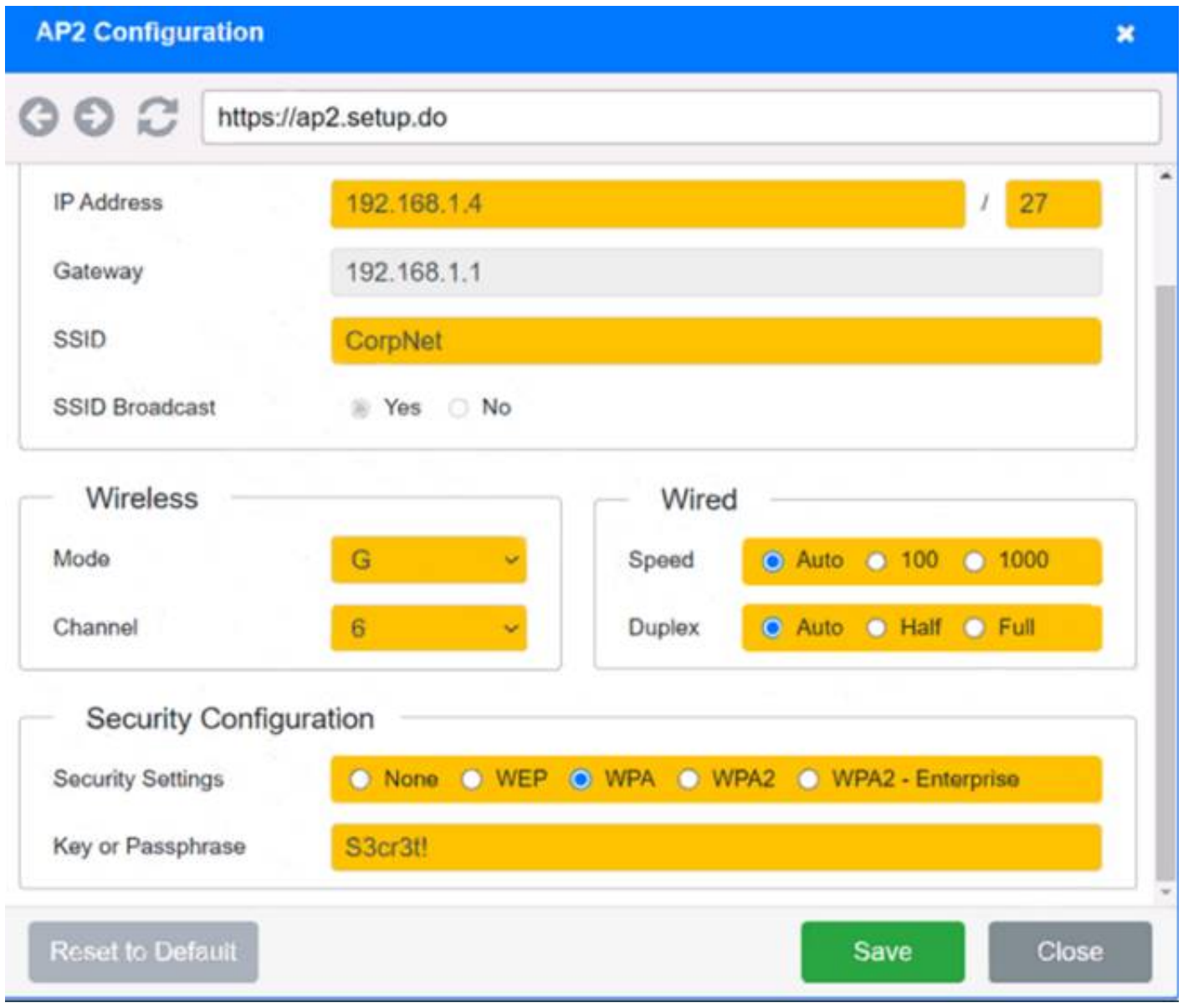
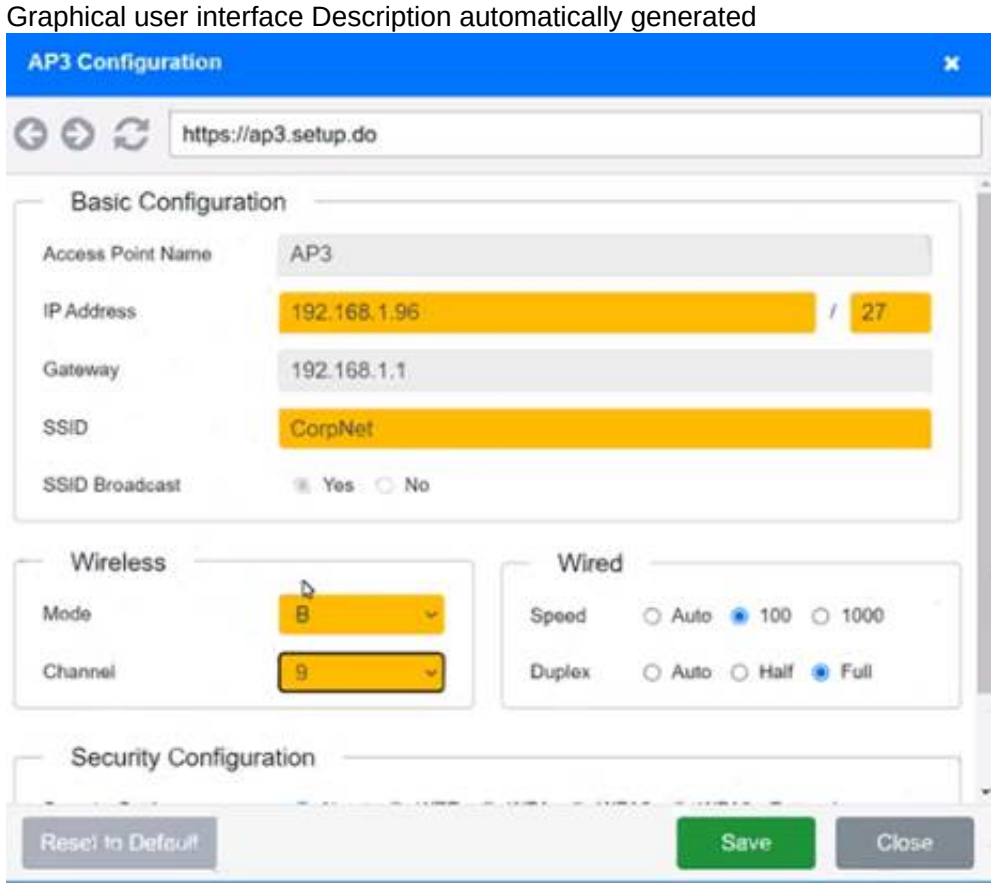
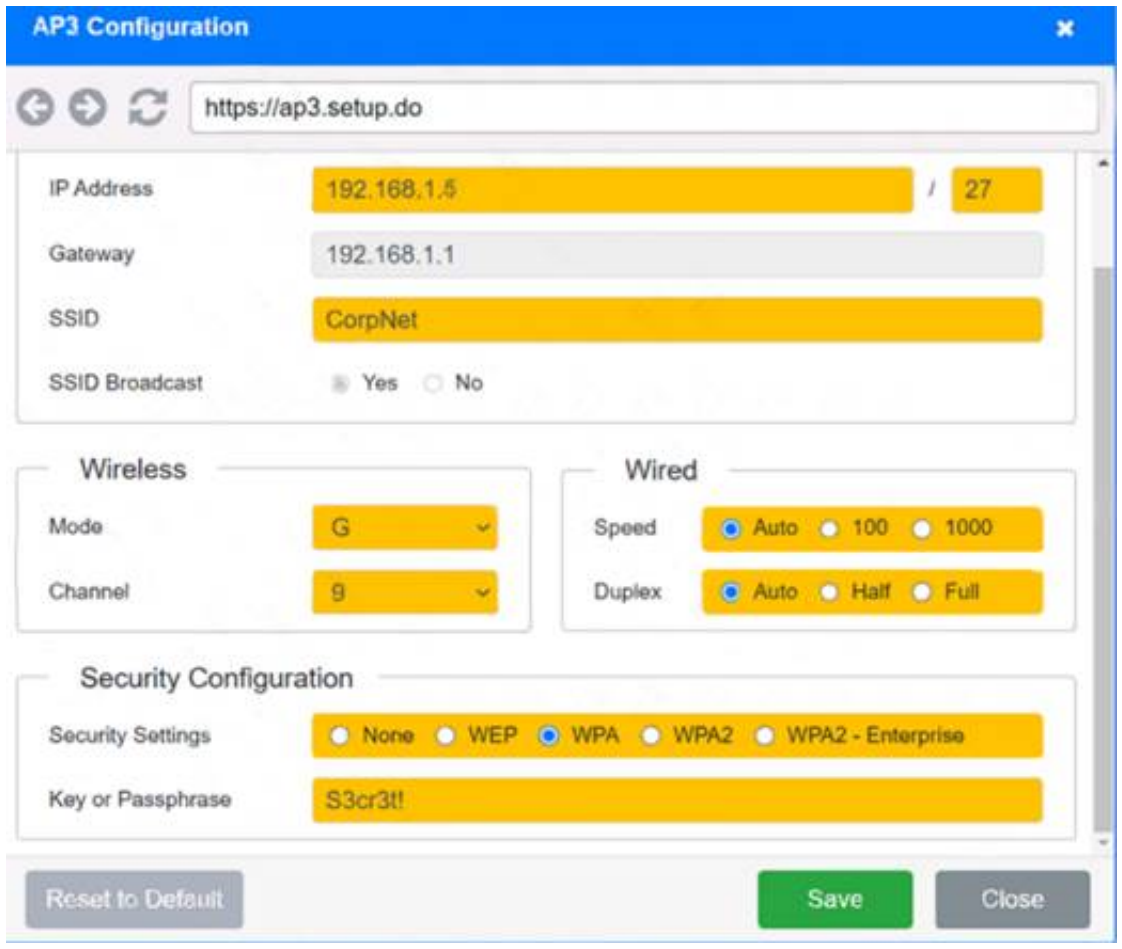


Exhibit 3 as follows Access Point Name AP3
Graphical user interface Description automatically generated



Graphical user interface, text, application, chat or text message Description automatically generated

Graphical user interface Description automatically generated



NEW QUESTION 39
- (Exam Topic 1)
Which of the following routing protocols is used to exchange route information between public autonomous systems?

A. OSPF
B. BGP
C. EGRIP
D. RIP

Answer: B

Explanation:
BGP (Border Gateway Protocol) is a routing protocol used to exchange route information between public autonomous systems (AS). OSPF (Open Shortest Path First), EGRIP (Enhanced Interior Gateway Routing Protocol), and RIP (Routing Information Protocol) are all used for internal routing within a single AS. Therefore, BGP is the correct option to choose for this question.
References:
- Network+ N10-007 Certification Exam Objectives, Objective 3.3: Given a scenario, configure and apply the appropriate routing protocol.
- Cisco: Border Gateway Protocol (BGP) Overview

NEW QUESTION 42
- (Exam Topic 1)
A network administrator walks into a datacenter and notices an unknown person is following closely. The administrator stops and directs the person to the security desk. Which of the following attacks did the network administrator prevent?

A. Evil twin
B. Tailgating
C. Piggybacking
D. Shoulder surfing

Answer: B

Explanation:
:
Tailgating is a physical security attack where an unauthorized person follows an authorized person into a restricted area without proper identification or authorization. The network administrator prevented this attack by stopping and directing the person to the security desk. References: CompTIA Network+ Certification Exam Objectives Version 2.0 (Exam Number: N10-006), Domain 3.0 Network Security, Objective 3.1 Compare and contrast risk-related concepts.

NEW QUESTION 47
- (Exam Topic 1)
A fiber link connecting two campus networks is broken. Which of the following tools should an engineer use to detect the exact break point of the fiber link?

A. OTDR
B. Tone generator
C. Fusion splicer
D. Cable tester
E. PoE injector

Answer: A

Explanation:
To detect the exact break point of a fiber link, an engineer should use an OTDR (Optical Time Domain Reflectometer). This device sends a series of pulses into

the fiber, measuring the time it takes for the pulses to reflect back, and can pinpoint the exact location of the break.
References:
- Network+ N10-007 Certification Exam Objectives, Objective 2.5: Given a scenario, troubleshoot copper cable issues.
- FS: OTDR (Optical Time Domain Reflectometer) Testing Principle and Applications

NEW QUESTION 50
- (Exam Topic 1)
An IT organization needs to optimize speeds for global content distribution and wants to reduce latency in high-density user locations. Which of the following technologies BEST meets the organization's requirements?

A. Load balancing
B. Geofencing
C. Public cloud
D. Content delivery network
E. Infrastructure as a service

Answer: D

Explanation:
A content delivery network (CDN) is a distributed network of servers that delivers web content to users based on their geographic location. By replicating content across multiple servers in various locations, a CDN can optimize speed and reduce latency in high-density user locations.

NEW QUESTION 54
- (Exam Topic 1)
Client devices cannot enter a network, and the network administrator determines the DHCP scope is exhausted. The administrator wants to avoid creating a new DHCP pool. Which of the following can the administrator perform to resolve the issue?

A. Install load balancers
B. Install more switches
C. Decrease the number of VLANs
D. Reduce the lease time

Answer: D

Explanation:
To resolve the issue of DHCP scope exhaustion without creating a new DHCP pool, the administrator can reduce the lease time. By decreasing the lease time, the IP addresses assigned by DHCP will be released back to the DHCP scope more quickly, allowing them to be assigned to new devices.
References:
- CompTIA Network+ Certification Study Guide, Exam N10-007, Fourth Edition, Chapter 2: The OSI Model and Networking Protocols, Objective 2.3: Given a scenario, implement and configure the appropriate addressing schema.
- https://www.networkcomputing.com/data-centers/10-tips-optimizing-dhcp-performance

NEW QUESTION 59
- (Exam Topic 1)
A systems administrator needs to improve WiFi performance in a densely populated office tower and use the latest standard. There is a mix of devices that use 2.4 GHz and 5 GHz. Which of the following should the
systems administrator select to meet this requirement?

A. 802.11ac
B. 802.11ax
C. 802.11g
D. 802.11n

Answer: B

Explanation:
* 802.11 ax is the latest WiFi standard that improves WiFi performance in densely populated environments and supports both 2.4 GHz and 5 GHz bands. 802.11ac is the previous standard that only supports 5 GHz band. 802.11g and 802.11n are older standards that support 2.4 GHz band only or both bands respectively.
References:
https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0),
https://www.techtarget.com/searchnetworking/tip/Whats-the-difference-between-80211ax-vs-80211ac

NEW QUESTION 61
- (Exam Topic 1)
Which of the following BEST describes a network appliance that warns of unapproved devices that are accessing the network?

A. Firewall
B. AP
C. Proxy server
D. IDS

Answer: D

Explanation:
IDS stands for intrusion detection system, which is a network appliance that monitors network traffic and alerts administrators of any suspicious or malicious activity. An IDS can warn of unapproved devices that are accessing the network by detecting anomalies, signatures, or behaviors that indicate unauthorized access attempts or attacks. References:
https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0), https://www.cisco.com/c/en/us/products/security/what-

is-an-intrusion-detection-system-ids.html

NEW QUESTION 66
- (Exam Topic 1)
A branch of a company recently switched to a new ISP. The network engineer was given a new IP range to assign. The ISP assigned 196.26.4.0/26, and the branch gateway router now has the following configurations on the interface that peers to the ISP:

```
IP address:          196.26.4.30
Subnet mask:         255.255.255.224
Gateway:             196.24.4.1
```

The network engineer observes that all users have lost Internet connectivity. Which of the following describes the issue?

A. The incorrect subnet mask was configured
B. The incorrect gateway was configured
C. The incorrect IP address was configured
D. The incorrect interface was configured

Answer: C

Explanation:
The IP address configured on the router interface is 196.26.4.1/26, which belongs to the IP range assigned by the ISP (196.26.4.0/26). However, this IP address is not valid for this interface because it is the network address of the subnet, which cannot be assigned to any host device. The network address is the first address of a subnet that identifies the subnet itself. The valid IP addresses for this subnet are from 196.26.4.1 to 196.26.4.62, excluding the network address (196.26.4.0) and the broadcast address (196.26.4.63). The router interface should be configured with a valid IP address within this range to restore Internet connectivity for all users. References:
https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0), https://www.techopedia.com/definition/24136/network-address

NEW QUESTION 68
- (Exam Topic 1)
Which of the following connector types would have the MOST flexibility?

A. SFP
B. BNC
C. LC
D. RJ45

Answer: A

Explanation:
SFP (Small Form-factor Pluggable) is a connector type that has the most flexibility. It is a hot-swappable transceiver that can support different speeds, distances, and media types depending on the module inserted. It can be used for both copper and fiber connections and supports various protocols such as Ethernet, Fibre Channel, and SONET. References: https://www.fs.com/what-is-sfp-transceiver-aid-11.html

NEW QUESTION 69
- (Exam Topic 1)
A network administrator redesigned the positioning of the APs to create adjacent areas of wireless coverage. After project validation, some users still report poor connectivity when their devices maintain an association to a distanced AP. Which of the following should the network administrator check FIRST?

A. Validate the roaming settings on the APs and WLAN clients
B. Verify that the AP antenna type is correct for the new layout
C. Check to see if MU-MIMO was properly activated on the APs
D. Deactivate the 2.4GHz band on the APS

Answer: A

Explanation:
The network administrator should check the roaming settings on the APs and WLAN clients first. Roaming is the process of switching from one AP to another without losing connectivity. If the roaming settings are not configured properly, some users may experience poor connectivity when their devices stay connected to a distant AP instead of switching to a closer one. References: https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/82068-roam-faq.html

NEW QUESTION 74
- (Exam Topic 1)
Which of the following would MOST likely be used to review previous upgrades to a system?

A. Business continuity plan
B. Change management
C. System life cycle
D. Standard operating procedures

Answer: B

Explanation:
Change management is the process of reviewing previous upgrades to a system. It is a systematic approach to managing changes to an organization's IT systems and infrastructure. Change management involves the assessment of potential risks associated with a change, as well as the identification of any necessary resources required to implement the change. References: Network+ Certification Study Guide, Chapter 8: Network Troubleshooting

NEW QUESTION 75
- (Exam Topic 1)
The following configuration is applied to a DHCP server connected to a VPN concentrator:

```
IP address:          10.0.0.1
Subnet mask:         255.255.255.0
Gateway:             10.0.0.254
```

There are 300 non-concurrent sales representatives who log in for one hour a day to upload reports, and 252 of these representatives are able to connect to the VPN without any Issues. The remaining sales representatives cannot connect to the VPN over the course of the day. Which of the following can be done to resolve the issue without utilizing additional resources?

A. Decrease the lease duration
B. Reboot the DHCP server
C. Install a new VPN concentrator
D. Configure a new router

Answer: A

Explanation:
Decreasing the lease duration on the DHCP server will cause clients to renew their IP address leases more frequently, freeing up IP addresses for other clients to use. References: CompTIA Network+ Certification Study Guide, Chapter 3: IP Addressing.

NEW QUESTION 77
- (Exam Topic 1)
Which of the following technologies provides a failover mechanism for the default gateway?

A. FHRP
B. LACP
C. OSPF
D. STP

Answer: A

Explanation:
First Hop Redundancy Protocol (FHRP) provides a failover mechanism for the default gateway, allowing a backup gateway to take over if the primary gateway fails. References: CompTIA Network+ Certification Study Guide, Chapter 4: Infrastructure.

NEW QUESTION 82
- (Exam Topic 2)
A network engineer is designing a new secure wireless network. The engineer has been given the following requirements:
* 1 Must not use plaintext passwords
* 2 Must be certificate based
* 3. Must be vendor neutral
Which of the following methods should the engineer select?

A. TWP-RC4
B. CCMP-AES
C. EAP-TLS
D. WPA2

Answer: C

Explanation:
EAP-TLS is the method that should be selected to meet the requirements for designing a new secure wireless network. EAP-TLS (Extensible Authentication Protocol - Transport Layer Security) is an authentication protocol that uses X.509 digital certificates for both clients and servers. It provides strong security and mutual authentication by using TLS encryption and public key cryptography. It does not use plaintext passwords or shared secrets that can be compromised or guessed. It is also an open standard that is vendor neutral and supported by most wireless devices1. References: https://www.securew2.com/blog/what-is-eap-tls 1

NEW QUESTION 85
- (Exam Topic 2)
Which of the following uses the destination IP address to forward packets?

A. A bridge
B. A Layer 2 switch
C. A router
D. A repeater

Answer: C

Explanation:
A router is a device that uses the destination IP address to forward packets between different networks. A bridge and a Layer 2 switch operate at the data link layer and use MAC addresses to forward frames within the same network. A repeater is a device that amplifies or regenerates signals at the physical layer.

NEW QUESTION 87
- (Exam Topic 2)
A SaaS provider has decided to leave an unpatched VM available via a public DMZ port. With which of the following concepts is this technique MOST closely

associated?

A. Insider threat
B. War driving
C. Evil twin
D. Honeypot

Answer: D

Explanation:
A honeypot is a decoy system that is intentionally left vulnerable or exposed to attract attackers and divert them from the real targets. A honeypot can also be used to collect information about the attackers' techniques and motives. In the scenario, the SaaS provider has left an unpatched VM available via a public DMZ port, which could be a honeypot technique to lure attackers and monitor their activities. References: https://www.comptia.org/blog/what-is-a-honeypot

NEW QUESTION 88
- (Exam Topic 2)
A network technician is observing the behavior of an unmanaged switch when a new device is added to the network and transmits data. Which of the following BEST describes how the switch processes this information?

A. The data is flooded out of every por
B. including the one on which it came in.
C. The data is flooded out of every port but only in the VLAN where it is located.
D. The data is flooded out of every port, except the one on which it came in
E. The data is flooded out of every port, excluding the VLAN where it is located

Answer: C

Explanation:
The switch processes the data by flooding it out of every port, except the one on which it came in. Flooding is a process where a switch sends a data frame to all ports except the source port when it does not have an entry for the destination MAC address in its MAC address table. Flooding allows the switch to learn the MAC addresses of the devices connected to its ports and update its MAC address table accordingly. Flooding also ensures that the data frame reaches its intended destination, even if the switch does not know its location. References: https://www.cisco.com/c/en/us/support/docs/lan-switching/spanning-tree-protocol/10556-16.html

NEW QUESTION 90
- (Exam Topic 2)
A network technician was troubleshooting an issue for a user who was being directed to cloned websites that were stealing credentials. The URLs were correct for the websites but an incorrect IP address was revealed when the technician used ping on the user's PC After checking the is setting, the technician found the DNS server address was incorrect Which of the following describes the issue?

A. Rogue DHCP server
B. Misconfigured HSRP
C. DNS poisoning
D. Exhausted IP scope

Answer: C

Explanation:
DNS poisoning is a type of attack that modifies the DNS records of a domain name to point to a malicious IP address instead of the legitimate one. This can result in users being directed to cloned websites that are stealing credentials, even if they enter the correct URL for the website. The incorrect DNS server address on the user's PC could be a sign of DNS poisoning, as the attacker could have compromised the DNS server or spoofed its response to redirect the user's queries. References: https://www.comptia.org/blog/what-is-dns-poisoning

NEW QUESTION 91
- (Exam Topic 2)
A technician is troubleshooting a previously encountered issue. Which of the following should the technician reference to find what solution was implemented to resolve the issue?

A. Standard operating procedures
B. Configuration baseline documents
C. Work instructions
D. Change management documentation

Answer: D

Explanation:
Change management documentation is a record of the changes that have been made to a system or process, including the reason, date, time, and impact of each change. A technician can reference this documentation to find what solution was implemented to resolve a previously encountered issue, as well as any potential side effects or dependencies of the change. References: https://www.comptia.org/blog/what-is-change-management

NEW QUESTION 94
- (Exam Topic 2)
There are two managed legacy switches running that cannot be replaced or upgraded. These switches do not support cryptographic functions, but they are password protected. Which of the following should a network administrator configure to BEST prevent unauthorized access?

A. Enable a management access list
B. Disable access to unnecessary services.
C. Configure a stronger password for access
D. Disable access to remote management

E. Use an out-of-band access method.

Answer: E

Explanation:
Using an out-of-band access method is the best way to prevent unauthorized access to the legacy switches that do not support cryptographic functions. Out-of-band access is a method of accessing a network device through a dedicated channel that is separate from the main network traffic. Out-of-band access can use physical connections such as serial console ports or dial-up modems, or logical connections such as VPNs or firewalls. Out-of-band access provides more security and reliability than in-band access, which uses the same network as the data traffic and may be vulnerable to attacks or failures. References: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/fundamentals/configuration/15mt/fundamentals-15-mt-book/

NEW QUESTION 98
- (Exam Topic 2)
A lab environment hosts Internet-facing web servers and other experimental machines, which technicians use for various tasks A technician installs software on one of the web servers to allow communication to the company's file server, but it is unable to connect to it Other machines in the building are able to retrieve files from the file server. Which of the following is the MOST likely reason the web server cannot retrieve the files, and what should be done to resolve the problem?

A. The lab environment's IDS is blocking the network traffic 1 he technician can whitelist the new application in the IDS
B. The lab environment is located in the DM2, and traffic to the LAN zone is denied by defaul
C. The technician can move the computer to another zone or request an exception from the administrator.
D. The lab environment has lost connectivity to the company router, and the switch needs to be rebooted.The technician can get the key to the wiring closet and manually restart the switch
E. The lab environment is currently set up with hubs instead of switches, and the requests are getting bounced back The technician can submit a request for upgraded equipment to management.

Answer: B

Explanation:
The lab environment is located in the DMZ, and traffic to the LAN zone is denied by default. This is the most likely reason why the web server cannot retrieve files from the file server, and the technician can either move the computer to another zone or request an exception from the administrator to resolve the problem. A DMZ (Demilitarized Zone) is a network segment that separates the internal network (LAN) from the external network (Internet). It usually hosts public-facing servers such as web servers, email servers, or FTP servers that need to be accessed by both internal and external users. A firewall is used to control the traffic between the DMZ and the LAN zones, and usually denies traffic from the DMZ to the LAN by default for security reasons. Therefore, if a web server in the DMZ needs to communicate with a file server in the LAN, it would need a special rule or permission from the firewall administrator. References: https://www.cisco.com/c/en/us/support/docs/ip/access-lists/13608-21.html

NEW QUESTION 100
- (Exam Topic 2)
Which of the following protocol types describes secure communication on port 443?

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

Answer: C

Explanation:
TCP is the protocol type that describes secure communication on port 443. TCP (Transmission Control Protocol) is a connection-oriented protocol that provides reliable and ordered delivery of data packets over an IP network. TCP uses port numbers to identify different applications or services on a device. Port 443 is the default port for HTTPS (Hypertext Transfer Protocol Secure), which is an extension of HTTP that uses SSL (Secure Sockets Layer) or TLS (Transport Layer Security) encryption to protect data in transit between a web server and a web browser. References: https://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13788-3.html

NEW QUESTION 102
- (Exam Topic 2)
Two remote offices need to be connected securely over an untrustworthy MAN. Each office needs to access network shares at the other site. Which of the following will BEST provide this functionality?

A. Client-to-site VPN
B. Third-party VPN service
C. Site-to-site VPN
D. Split-tunnel VPN

Answer: C

Explanation:
A site-to-site VPN is a type of VPN that connects two or more remote offices securely over an untrustworthy network, such as the Internet. A site-to-site VPN allows each office to access network shares and resources at the other site, as if they were on the same local network. A site-to-site VPN encrypts and tunnels the traffic between the offices, ensuring privacy and integrity of the data. References: https://www.comptia.org/blog/what-is-a-site-to-site-vpn

NEW QUESTION 103
- (Exam Topic 2)
A technician wants to install a WAP in the center of a room that provides service in a radius surrounding a radio. Which of the following antenna types should the AP utilize?

A. Omni
B. Directional
C. Yagi

D. Parabolic

Answer: A

Explanation:
An omni antenna should be used by the AP to provide service in a radius surrounding a radio. An omni antenna is a type of antenna that has a 360-degree horizontal radiation pattern. It can provide wireless coverage in all directions from the antenna with varying degrees of vertical coverage. It is suitable for indoor environments where users are located around the AP1. References: https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/82068-omni-vs-direct.html 1

NEW QUESTION 107
- (Exam Topic 2)
A wireless network was installed in a warehouse for employees to scan crates with a wireless handheld scanner. The wireless network was placed in the corner of the building near the ceiling for maximum coverage However users in the offices adjacent lo the warehouse have noticed a large amount of signal overlap from the new network Additionally warehouse employees report difficulty connecting to the wireless network from the other side of the building; however they have no issues when Ihey are near the antenna Which of the following is MOST likely the cause?

A. The wireless signal is being refracted by the warehouse's windows
B. The antenna's power level was set too high and is overlapping
C. An omnidirectional antenna was used instead of a unidirectional antenna
D. The wireless access points are using channels from the 5GHz spectrum

Answer: C

Explanation:
An omnidirectional antenna was used instead of a unidirectional antenna, which is most likely the cause of the wireless network issues. An omnidirectional antenna provides wireless coverage in all directions from the antenna, which can cause signal overlap with adjacent offices and interference with other wireless networks. A unidirectional antenna, on the other hand, provides wireless coverage in a specific direction from the antenna, which can reduce signal overlap and interference and increase signal range and quality. A unidirectional antenna would be more suitable for a warehouse environment where users are located on one side of the building1. References:
https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/82068-omni-vs-direct.html 1

NEW QUESTION 111
- (Exam Topic 2)
A network technician is investigating an IP phone that does not register in the VoIP system Although it received an IP address, it did not receive the necessary DHCP options The information that is needed for the registration is distributes by the OHCP scope All other IP phones are working properly. Which of the following does the technician need to verify?

A. VLAN mismatch
B. Transceiver mismatch
C. Latency
D. DHCP exhaustion

Answer: A

Explanation:
A VLAN mismatch is the most likely reason why an IP phone does not receive the necessary DHCP options for registration. A VLAN mismatch occurs when a device is connected to a switch port that belongs to a different VLAN than the device’s intended VLAN. This can cause communication problems or prevent access to network resources. For example, if an IP phone is connected to a switch port that belongs to the data VLAN instead of the voice VLAN, it may not receive the DHCP options that contain information such as the TFTP server address, the NTP server address, or the default gateway address for the voice VLAN. These DHCP options are essential for the IP phone to register with the VoIP system and function properly. References:
https://www.cisco.com/c/en/us/support/docs/voice-unified-communications/unified-communications-manager-c

NEW QUESTION 113
- (Exam Topic 2)
An ARP request is broadcasted and sends the following request. "Who is 192.168.1.200?
Tell 192.168.1.55"
At which of the following layers of the OSI model does this request operate?

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

Answer: B

Explanation:
An ARP request operates at the data link layer of the OSI model. ARP (Address Resolution Protocol) is a protocol that maps IP addresses to MAC addresses on a local area network. It allows devices to communicate with each other without knowing their MAC addresses beforehand. ARP operates at the data link layer (layer 2) of the OSI model, which is responsible for framing and addressing data packets on a physical medium.
References: https://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13788-3.html

NEW QUESTION 115
- (Exam Topic 2)
Which of the following policies is MOST commonly used for guest captive portals?

A. AUP
B. DLP

C. BYOD
D. NDA

Answer: A

Explanation:
AUP stands for Acceptable Use Policy, which is a policy that defines the rules and guidelines for using a network or service. A guest captive portal is a web page that requires users to agree to the AUP before accessing the Internet or other network resources. This is a common way to enforce security and legal compliance for guest users. References:
https://www.arubanetworks.com/techdocs/Instant_87_WebHelp/Content/instant-ug/captive-portal/captive-portal

NEW QUESTION 120
- (Exam Topic 2)
Which of the following attacks encrypts user data and requires a proper backup implementation to recover?

A. DDoS
B. Phishing
C. Ransomware
D. MAC spoofing

Answer: C

Explanation:
Ransomware is a type of malware that encrypts user data and demands a ransom for its decryption. Ransomware can prevent users from accessing their files and applications, and cause data loss or corruption. A proper backup implementation is essential to recover from a ransomware attack, as it can help restore the encrypted data without paying the ransom or relying on the attackers' decryption key. References: https://www.comptia.org/blog/what-is-ransomware

NEW QUESTION 121
- (Exam Topic 2)
A local firm has hired a consulting company to clean up its IT infrastructure. The consulting company notices remote printing is accomplished by port forwarding via publicly accessible IPs through the firm's firewall Which of the following would be the MOST appropriate way to enable secure remote printing?

A. SSH
B. VPN
C. Telnet
D. SSL

Answer: B

Explanation:
VPN (Virtual Private Network) is the most appropriate way to enable secure remote printing. VPN is a technology that creates a secure and encrypted tunnel over a public network such as the Internet. It allows remote users or sites to access a private network as if they were directly connected to it. VPN can be used for various purposes such as accessing corporate resources, bypassing geo-restrictions, or enhancing privacy and security. VPN can also be used for remote printing by allowing users to connect to a printer on the private network and send print jobs securely over the VPN tunnel. References:
https://www.cisco.com/c/en/us/support/docs/security-vpn/ipsec-negotiation-ike-protocols/14106-how-vpn-work

NEW QUESTION 124
- (Exam Topic 2)
Given the following output:

```
192.168.22.1     00-13-5d-00-c6-23
192.168.22.15    00-15-88-00-58-00
192.168.22.10    00-13-5d-00-c6-23
192.168.22.100   00-13-5d-00-c6-23
```

Which of the following attacks is this MOST likely an example of?

A. ARP poisoning
B. VLAN hopping
C. Rogue access point
D. Amplified DoS

Answer: A

Explanation:
The output is most likely an example of an ARP poisoning attack. ARP poisoning, also known as ARP spoofing, is a type of attack that exploits the ARP protocol to associate a malicious device's MAC address with a legitimate IP address on a local area network. This allows the attacker to intercept, modify, or redirect network traffic between two devices without their knowledge. The output shows that there are multiple entries for the same IP address (192.168.1.1) with different MAC addresses in the ARP cache of the device. This indicates that an attacker has sent fake ARP replies to trick the device into believing that its MAC address is associated with the IP address of another device (such as the default gateway). References: https://www.cisco.com/c/en/us/about/security-center/arp-spoofing.html

NEW QUESTION 126
- (Exam Topic 2)
A network administrator decided to use SLAAC in an extensive IPv6 deployment to alleviate IP address management. The devices were properly connected into the LAN but autoconfiguration of the IP address did not occur as expected. Which of the following should the network administrator verify?

A. The network gateway is configured to send router advertisements.
B. A DHCP server is present on the same broadcast domain as the clients.

C. The devices support dual stack on the network layer.
D. The local gateway supports anycast routing.

Answer: A

Explanation:
SLAAC (Stateless Address Autoconfiguration) is a method for IPv6 devices to automatically configure their IP addresses based on the network prefix advertised by a router. The router sends periodic router advertisements (RAs) that contain the network prefix and other parameters for the devices to use. If the network gateway is not configured to send RAs, then SLAAC will not work. A DHCP server is not needed for SLAAC, as the devices generate their own addresses without relying on a server. Dual stack and anycast routing are not related to SLAAC.

NEW QUESTION 129
- (Exam Topic 2)
An IDS was installed behind the edge firewall after a network was breached. The network was then breached again even though the IDS logged the attack. Which of the following should be used in place of these devices to prevent future attacks?

A. A network tap
B. A proxy server
C. A UTM appliance
D. A content filter

Answer: C

Explanation:
A UTM appliance stands for Unified Threat Management appliance, which is a device that combines multiple security functions into one solution. A UTM appliance can provide firewall, IDS/IPS, antivirus, VPN, web filtering, and other security features. A network technician can use a UTM appliance in place of an edge firewall and an IDS to prevent future attacks, as a UTM appliance can block malicious traffic and detect and respond to intrusions more effectively. References: https://www.comptia.org/blog/what-is-utm

NEW QUESTION 132
- (Exam Topic 2)
An organization with one core and five distribution switches is transitioning from a star to a full-mesh topology Which of the following is the number of additional network connections needed?

A. 5
B. 7
C. 10
D. 15

Answer: C

Explanation:
10 additional network connections are needed to transition from a star to a full-mesh topology. A star topology is a network topology where each device is connected to a central device, such as a switch or a hub. A full-mesh topology is a network topology where each device is directly connected to every other device. The number of connections needed for a full-mesh topology can be calculated by the formula n(n-1)/2, where n is the number of devices. In this case, there are six devices (one core and five distribution switches), so the number of connections needed for a full-mesh topology is 6(6-1)/2 = 15. Since there are already five connections in the star topology (one from each distribution switch to the core switch), the number of additional connections needed is 15 - 5 = 10. References: https://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13788-3.html

NEW QUESTION 135
- (Exam Topic 2)
A company requires a disaster recovery site to have equipment ready to go in the event of a disaster at its main datacenter. The company does not have the budget to mirror all the live data to the disaster recovery site. Which of the following concepts should the company select?

A. Cold site
B. Hot site
C. Warm site
D. Cloud site

Answer: C

Explanation:
A warm site is a type of disaster recovery site that has equipment ready to go in the event of a disaster at the main datacenter, but does not have live data or applications. A warm site requires some time and effort to restore the data and services from backups, but it is less expensive than a hot site that has live data and applications. A cold site is a disaster recovery site that has no equipment or data, and requires a lot of time and money to set up after a disaster. A cloud site is a disaster recovery site that uses cloud computing resources to provide data and services, but it may have issues with bandwidth, latency, security, and cost. References: https://www.comptia.org/blog/what-is-a-warm-site

NEW QUESTION 139
- (Exam Topic 2)
The following instructions were published about the proper network configuration for a videoconferencing device:
"Configure a valid static RFC1918 address for your network. Check the option to use a connection over NAT." Which of the following is a valid IP address configuration for the device?

A. FE80::1
B. 100.64.0.1
C. 169.254.1.2
D. 172.19.0.2
E. 224.0.0.12

Answer: D

Explanation:
* 172.19.0.2 is a valid IP address configuration for the device that uses a static RFC1918 address for the network and allows for a connection over NAT (Network Address Translation). RFC1918 addresses are private IP addresses that are not routable on the public Internet and are used for internal networks. The RFC1918 address ranges are 10.0.0.0/8, 172.16.0.0/12, and 192.168.0.0/16. NAT is a technique that translates private IP addresses to public IP addresses when communicating with external networks, such as the Internet. FE80::1 is an IPv6 link-local address that is not a static RFC1918 address and does not allow for a connection over NAT. 100.64.1.1 is an IPv4 address that belongs to the shared address space range (100.64.0.0/10) that is used for carrier-grade NAT (CGN) between service providers and subscribers, which is not a static RFC1918 address and does not allow for a connection over NAT. 169.254.1.2 is an IPv4 link-local address that is automatically assigned by a device when it cannot obtain an IP address from a DHCP server or manual configuration, which is not a static RFC1918 address and does not allow for a connection over NAT. 224.0.0.12 is an IPv4 multicast address that is used for VRRP (Virtual Router Redundancy Protocol), which is not a static RFC1918 address and does not allow for a connection over NAT.

NEW QUESTION 144
- (Exam Topic 2)
A network requirement calls for segmenting departments into different networks. The campus network is set up with users of each department in multiple buildings. Which of the following should be configured to keep the design simple and efficient?

A. MDIX
B. Jumbo frames
C. Port tagging
D. Flow control

Answer: C

Explanation:
Port tagging is a technique that involves adding a tag or identifier to the frames or packets that belong to a certain VLAN. A VLAN is a logical segment of a network that isolates traffic between different groups of devices. Port tagging allows devices on different physical ports or switches to communicate with each other as if they were on the same port or switch. Port tagging can help keep the design simple and efficient by reducing the number of physical ports and switches needed to segment departments into different networks. References: https://www.comptia.org/blog/what-is-port-tagging

NEW QUESTION 148
- (Exam Topic 2)
An IT technician suspects a break in one of the uplinks that provides connectivity to the core switch. Which of the following command-line tools should the technician use to determine where the incident is occurring?

A. nslookup
B. show config
C. netstat
D. show interface
E. show counters

Answer: D

Explanation:
show interface is a command-line tool that displays information about the status, configuration, and statistics of an interface on a network device. A technician can use show interface to determine where the incident is occurring in a network by checking the uplink status, speed, duplex mode, errors, collisions, and other parameters of each interface. References: https://www.comptia.org/blog/what-is-show-interface

NEW QUESTION 153
- (Exam Topic 2)
A network administrator needs to implement an HDMI over IP solution. Which of the following will the network administrator MOST likely use to ensure smooth video delivery?

A. Link aggregation control
B. Port tagging
C. Jumbo frames
D. Media access control

Answer: C

Explanation:
Giants are packets that exceed the configured MTU (Maximum Transmission Unit) of a switchport or interface, which causes them to be dropped or fragmented by the switch or router. The MTU is the maximum size of a packet that can be transmitted without fragmentation on a given medium or protocol. Giants can indicate misconfiguration or mismatch of MTU values between devices or interfaces on a network, which can cause performance issues or errors. CRC errors are errors that occur when the cyclic redundancy check (CRC) value of a packet does not match the calculated CRC value at the destination, which indicates corruption or alteration of data during transmission due to noise, interference, faulty cabling, etc., but not necessarily exceeding MTU values. Runts are packets that are smaller than the minimum size allowed by the medium or protocol, which causes them to be dropped or ignored by the switch or router. Flooding is a technique where a switch sends packets to all ports except the source port when it does not have an entry for the destination MAC address in its MAC address table, which can cause congestion or broadcast storms on a network.

NEW QUESTION 156
- (Exam Topic 2)
A systems administrator is running a VoIP network and is experiencing jitter and high latency. Which of the following would BEST help the administrator determine the cause of these issues?

A. Enabling RADIUS on the network
B. Configuring SNMP traps on the network
C. Implementing LDAP on the network

D. Establishing NTP on the network

Answer: B

Explanation:
SNMP (Simple Network Management Protocol) is a protocol that allows network devices to communicate with a network management system (NMS) for monitoring and configuration purposes. SNMP traps are unsolicited messages sent by network devices to the NMS when certain events or conditions occur, such as errors, failures, or thresholds. Configuring SNMP traps on the network would best help the administrator determine the cause of jitter and high latency on a VoIP network, as they would provide real-time alerts and information about the network performance and status. Enabling RADIUS on the network is not relevant to troubleshooting VoIP issues, as RADIUS is a protocol that provides authentication, authorization, and accounting services for network access. Implementing LDAP on the network is also not relevant to troubleshooting VoIP issues, as LDAP is a protocol that provides directory services for storing and querying information about users, groups, devices, etc. Establishing NTP on the network is not directly related to troubleshooting VoIP issues, as NTP is a protocol that synchronizes the clocks of network devices.

NEW QUESTION 157
- (Exam Topic 2)
A company that uses VoIP telephones is experiencing intermittent issues with one-way audio and dropped conversations The manufacturer says the system will work if ping times are less than 50ms. The company has recorded the following ping times:

10ms	10ms	10ms	100ms	70ms	5ms	5ms	80ms	100ms	5ms	5ms

Which of the following is MOST likely causing the issue?

A. Attenuation
B. Latency
C. VLAN mismatch
D. Jitter

Answer: D

Explanation:
Jitter is most likely causing the issue of intermittent one-way audio and dropped conversations for the company that uses VoIP telephones. Jitter is a variation in delay of packets arriving at the destination. It can
cause choppy or distorted audio quality for VoIP applications, especially over WAN links that have limited bandwidth and high latency. The recommended jitter for VoIP is less than 10m1s. The company has recorded ping times that exceed 50ms, which indicates high jitter and latency on their network. References: https://www.voip-info.org/voip-jitter/ 1

NEW QUESTION 159
- (Exam Topic 3)
A network administrator views a network pcap and sees a packet containing the following:

```
community: public
request-id: 13438
get-response 1.3.6.1.2.1.1.3.0 Value:206801150
```

Which of the following are the BEST ways for the administrator to secure this type of traffic? (Select TWO).

A. Migrate the network to IPv6.
B. Implement 802.1 X authentication
C. Set a private community siring
D. Use SNMPv3.
E. Incorporate SSL encryption
F. Utilize IPSec tunneling.

Answer: CD

Explanation:
The packet shown in the image is an SNMP (Simple Network Management Protocol) packet, which is used to monitor and manage network devices. SNMP uses community strings to authenticate requests and responses between SNMP agents and managers. However, community strings are sent in clear text and can be easily intercepted by attackers. Therefore, one way to secure SNMP traffic is to set a private community string that is not the default or well-known value. Another way to secure SNMP traffic is to use SNMPv3, which is the latest version of the protocol that supports encryption and authentication of SNMP messages. References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 2.5: Given a scenario, use remote access methods.

NEW QUESTION 161
- (Exam Topic 3)
Which of the following is used to elect an STP root?

A. A bridge ID
B. A bridge protocol data unit
C. Interface port priority
D. A switch's root port

Answer: B

Explanation:
"Using special STP frames known as bridge protocol data units (BPDUs), switches communicate with other switches to prevent loops from happening in the first place. Configuration BPDUs establish the topology,
where one switch is elected root bridge and acts as the center of the STP universe. Each switch then uses the root bridge as a reference point to maintain a loop-free topology."

NEW QUESTION 166
- (Exam Topic 3)

A company is reviewing ways to cut the overall cost of Its IT budget. A network technician suggests removing various computer programs from the IT budget and only providing these programs on an as-needed basis. Which of the following models would meet this requirement?

A. Multitinency
B. laaS
C. SaaS
D. VPN

Answer: C

Explanation:
SaaS stands for Software as a Service and is a cloud computing model where software applications are hosted and delivered over the internet by a service provider. SaaS can help the company cut the overall cost of its IT budget by eliminating the need to purchase, install, update, and maintain various computer programs on its own devices. The company can access the programs on an as-needed basis and pay only for what it uses. Multitenancy is a feature of cloud computing where multiple customers share the same physical or virtual resources. IaaS stands for Infrastructure as a Service and is a cloud computing model where computing resources such as servers, storage, and networking are provided over the internet by a service provider. VPN stands for Virtual Private Network and is a technology that creates a secure and encrypted connection over a public network.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 1.9: Compare and contrast common network service types.

NEW QUESTION 171
- (Exam Topic 3)
An administrator is investigating reports of network slowness in a building. While looking at the uplink interface statistics In the switch's CLI, the administrator discovers the uplink Is at 100% utilization However, the administrator is unsure how to Identify what traffic is causing the saturation. Which of the following tools should the administrator utilize to identify the source and destination addresses of the traffic?

A. SNMP
B. Traps
C. Syslog
D. NetFlow

Answer: D

Explanation:
To identify the source and destination addresses of the traffic causing network saturation, the network administrator should use a network protocol analyzer that supports the NetFlow protocol. NetFlow is a network protocol that collects IP traffic information as it enters or exits an interface and sends it to a NetFlow collector for analysis. This data includes the source and destination addresses of the traffic, the ports used, and the number of bytes and packets transferred.
Therefore, the correct answer is option D, NetFlow.
Reference: CompTIA Network+ Study Guide, Exam N10-007, Fourth Edition, by Todd Lammle (Chapter 6: Network Devices)

NEW QUESTION 172
- (Exam Topic 3)
A company needs a redundant link to provide a channel to the management network in an incident response scenario. Which of the following remote access methods provides the BEST solution?

A. Out-of-band access
B. Split-tunnel connections
C. Virtual network computing
D. Remote desktop gateways

Answer: A

Explanation:
Out-of-band access is a remote access method that provides a separate, independent channel for accessing network devices and systems. Out-of-band access uses a dedicated network connection or a separate communication channel, such as a dial-up or cellular connection, to provide access to network devices and systems. This allows an administrator to access the management network even if the primary network connection is unavailable or impaired. Out-of-band access is a good solution for providing a redundant link to the management network in an incident response scenario because it can be used to access the network even if the primary connection is unavailable or impaired.

NEW QUESTION 176
- (Exam Topic 3)
A technician is checking network devices to look for opportunities to improve security Which of the following toots would BEST accomplish this task?

A. Wi-Fi analyzer
B. Protocol analyzer
C. Nmap
D. IP scanner

Answer: B

Explanation:
A protocol analyzer is a tool that can capture and analyze network traffic and identify security issues such as unauthorized devices, malicious packets, or misconfigured settings.
A Wi-Fi analyzer is a tool that can measure the signal strength, interference, and channel usage of wireless networks, but it cannot provide detailed information about network security.
Nmap and IP scanner are tools that can scan network hosts and ports for open services, vulnerabilities, or operating systems, but they cannot monitor network traffic in real time.

NEW QUESTION 181
- (Exam Topic 3)

A technician manages a DHCP scope but needs to allocate a portion of the scope's subnet for statically assigned devices. Which of the following DHCP concepts would be BEST to use to prevent IP address conflicts?

A. Dynamic assignment
B. Exclusion range
C. Address reservation
D. IP helper

Answer: B

Explanation:
To prevent IP address conflicts when allocating a portion of a DHCP scope's subnet for statically assigned devices, it is recommended to use the concept of DHCP exclusion ranges. DHCP exclusion ranges allow a DHCP administrator to specify a range of IP addresses within the scope that should not be assigned to DHCP clients. This can be useful in situations where some devices on the network need to be assigned static IP addresses, as it ensures that the statically assigned addresses do not overlap with addresses assigned by the DHCP server. To set up a DHCP exclusion range, the administrator needs to specify the start and end IP addresses of the range, as well as the subnet mask. The DHCP server will then exclude the specified range of addresses from its pool of available addresses, and will not assign them to DHCP clients. By using DHCP exclusion ranges, the technician can ensure that the statically assigned addresses do not conflict with addresses assigned by the DHCP server, and can prevent IP address conflicts on the network.
Anthony Sequeira
"Another frequent configuration you might make in a DHCP implementation is to configure an exclusion range. This is a portion of the address pool that you never want leased out to clients in the network. Perhaps you have numbered your servers 192.168.1.1–192.168.1.10. Because the servers are statically configured with these addresses, you exclude these addresses from the 192.168.1.0/24 pool of addresses."
Mike Meyers
"Exclusion ranges represent an IP address or range of IP addresses from the pool of addresses that are not to be given out by the DHCP server. Exclusions should be made for the static addresses manually configured on servers and router interfaces, so these IP addresses won't be offered to DHCP clients."

NEW QUESTION 185
- (Exam Topic 3)
A technician is investigating an issue with connectivity at customer's location. The technician confirms that users can access resources locally but not over the internet The technician theorizes that the local router has failed and investigates further. The technician's testing results show that the route is functional: however, users still are unable to reach resources on the internal. Which of the following describes what the technician should do NEXT?

A. Document the lessons learned
B. Escalate the issue
C. identify the symptoms.
D. Question users for additional information

Answer: C

Explanation:
According to the CompTIA Network+ troubleshooting model123, this is the first step in troubleshooting a
network problem. The technician should gather information about the current state of the network, such as error messages, device status, network topology, and user feedback. This can help narrow down the scope of the problem and eliminate possible causes.

NEW QUESTION 186
- (Exam Topic 3)
During a recent security audit, a contracted penetration tester discovered the organization uses a number of insecure protocols. Which of the following ports should be disallowed so only encrypted protocols are allowed? (Select TWO).

A. 22
B. 23
C. 69
D. 443
E. 587
F. 8080

Answer: BC

NEW QUESTION 190
- (Exam Topic 3)
A network technician needs to ensure that all files on a company's network can be moved in a safe and protected manner without interception from someone who is not the intended recipient. Which of the following would allow the network technician to meet these requirements?

A. FTP
B. TFTP
C. SMTP
D. SFTP

Answer: D

NEW QUESTION 191
- (Exam Topic 3)
Which of the following provides guidance to an employee about restricting non-business access to the company's videoconferencing solution?

A. Acceptable use policy
B. Data loss prevention
C. Remote access policy
D. Standard operating procedure

Answer: A

Explanation:
An acceptable use policy (AUP) is a set of rules that outline the proper and improper use of an organization's resources, such as its videoconferencing solution. An AUP can provide guidance to employees about what is expected of them when using the organization's videoconferencing solution, including restricting non-business access to it.

NEW QUESTION 192
- (Exam Topic 3)
A security vendor needs to add a note to the DNS to validate the ownership of a company domain before services begin. Which of the following records did the security company MOST likely ask the company to configure?

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

Answer: A

Explanation:
TXT stands for Text and is a type of DNS record that can store arbitrary text data associated with a domain name. TXT records can be used for various purposes, such as verifying the ownership of a domain, providing information about a domain, or implementing security mechanisms such as SPF (Sender Policy Framework) or DKIM (DomainKeys Identified Mail). In this scenario, the security company most likely asked the company to configure a TXT record with a specific value that can prove the ownership of the domain. AAAA stands for IPv6 Address and is a type of DNS record that maps a domain name to an IPv6 address. CNAME stands for Canonical Name and is a type of DNS record that maps an alias name to another name. SRV stands for Service and is a type of DNS record that specifies the location of a service on a network.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 1.8: Explain the purposes and use cases for advanced networking devices.

NEW QUESTION 196
- (Exam Topic 3)
A large number of PCs are obtaining an APIPA IP address, and a number of new computers were added to the network. Which of the following is MOST likely causing the PCs to obtain an APIPA address?

A. Rogue DHCP server
B. Network collision
C. Incorrect DNS settings
D. DHCP scope exhaustion

Answer: D

Explanation:
DHCP scope exhaustion means that there are no more available IP addresses in the DHCP server’s pool of addresses to assign to new devices on the network. When this happens, the devices will use APIPA (Automatic Private IP Addressing) to self-configure an IP address in the range of 169.254.0.1 to 169.254.255.2541. These addresses are not routable and can only communicate with other devices on the same local network.
A rogue DHCP server (A) is an unauthorized DHCP server that can cause IP address conflicts or security issues by assigning IP addresses to devices on the network. A network collision (B) is a situation where two or more devices try to send data on the same network segment at the same time, causing interference and data loss. Incorrect DNS settings © can prevent devices from resolving domain names to IP addresses, but they do not affect the DHCP process.

NEW QUESTION 200
- (Exam Topic 3)
A technician thinks one of the router ports is flapping. Which of the following available resources should the technician use in order to determine if the router is flapping?

A. Audit logs
B. NetFlow
C. Syslog
D. Traffic logs

Answer: C

Explanation:
Syslog is a protocol that allows network devices to send event messages to a centralized server or console for logging and analysis1. Syslog can help a technician to determine if a router port is flapping by providing timestamps, severity levels, and descriptions of the events that occur on the router, such as interface up or down, link state change, or error messages. Syslog can also help to identify the cause and frequency of the port flapping and troubleshoot the issue.
Audit logs are records of actions or events that occur on a system or network, such as user login, file access, configuration change, or policy violation. Audit logs can help to monitor and verify the activities and behaviors of users, devices, or applications on a system or network. Audit logs can also help to detect and investigate security incidents, compliance issues, or performance problems. However, audit logs do not provide detailed information about router port flapping.
NetFlow is a protocol that collects and analyzes network traffic data for monitoring and troubleshooting purposes2. NetFlow can help to identify the sources, destinations, volumes, and types of traffic on a network. NetFlow can also help to optimize network performance, security, and capacity planning. However, NetFlow does not provide detailed information about router port flapping.
Traffic logs are records of network traffic that pass through a device or application, such as a firewall, proxy, or web server. Traffic logs can help to monitor and filter the network traffic based on rules or policies. Traffic logs can also help to detect and prevent malicious traffic, such as malware, attacks, or unauthorized access. However, traffic logs do not provide detailed information about router port flapping.

NEW QUESTION 204
- (Exam Topic 3)
A network is experiencing extreme latency when accessing a particular website. Which of the following commands will BEST help identify the issue?

A. ipconfig
B. netstat
C. tracert
D. ping

Answer: C

NEW QUESTION 205
- (Exam Topic 3)
A network technician is troubleshooting an area where the wireless connection to devices is poor. The technician theorizes that the signal-to-noise ratio in the area is causing the issue. Which of the following should the technician do NEXT?

A. Run diagnostics on the relevant devices.
B. Move the access point to a different location.
C. Escalate the issue to the vendor's support team.
D. Remove any electronics that might be causing interference.

Answer: D

NEW QUESTION 210
- (Exam Topic 3)
Due to a surge in business, a company is onboarding an unusually high number of salespeople. The salespeople are assigned desktops that are wired to the network. The last few salespeople to be onboarded are able to access corporate materials on the network but not sales-specific resources. Which of the following is MOST likely the cause?

A. The switch was configured with port security.
B. Newly added machines are running into DHCP conflicts.
C. The IPS was not configured to recognize the new users.
D. Recently added users were assigned to the wrong VLAN

Answer: D

NEW QUESTION 214
- (Exam Topic 3)
Which of the following is the MOST cost-effective alternative that provides proper cabling and supports gigabit Ethernet devices?

A. Twisted cable with a minimum Cat 5e certification
B. Multimode fiber with an SC connector
C. Twinaxial cabling using an F-type connector
D. Cable termination using TIA/EIA-568-B

Answer: A

Explanation:
twisted cable with a minimum Cat 5e certification is the MOST cost-effective alternative that provides proper cabling and supports gigabit Ethernet devices.

NEW QUESTION 219
- (Exam Topic 3)
An administrator needs to connect two laptops directly to each other using 802.11ac but does not have an AP available. Which of the following describes this configuration?

A. Basic service set
B. Extended service set
C. Independent basic service set
D. MU-MIMO

Answer: C

NEW QUESTION 222
- (Exam Topic 3)
During a risk assessment which of the following should be considered when planning to mitigate high CPU utilization of a firewall?

A. Recovery time objective
B. Uninterruptible power supply
C. NIC teaming
D. Load balancing

Answer: D

Explanation:
The recovery time objective (RTO) is the maximum tolerable length of time that a computer, system, network or application can be down after a failure or disaster occurs. This does nothing to help with CPU utilization. Load balancing does this.

NEW QUESTION 227
- (Exam Topic 3)

Which of the following commands can be used to display the IP address, subnet address, gateway address, and DNS address on a Windows computer?

A. netstat -a
B. ifconfig
C. ip addr
D. ipconfig /all

Answer: D

Explanation:
The ipconfig command is a utility that allows you to view and modify the network configuration of a Windows computer. By running the command "ipconfig /all", you can view detailed information about the network configuration of your computer, including the IP address, subnet mask, default gateway, and DNS server addresses.
Option A (netstat -a) is a command that displays active network connections and their status, but it does not display IP address or other network configuration information. Option B (ifconfig) is a command used on Linux and Unix systems to view and modify network configuration, but it is not available on Windows. Option C (ip addr) is a command used on Linux and Unix systems to view and modify network configuration, but it is not available on Windows.

NEW QUESTION 229
- (Exam Topic 3)
A network administrator installed an additional IDF during a building expansion project. Which of the following documents need to be updated to reflect the change? (Select TWO).

A. Data loss prevention policy
B. BYOD policy
C. Acceptable use policy
D. Non-disclosure agreement
E. Disaster recovery plan
F. Physical network diagram

Answer: BF

NEW QUESTION 232
- (Exam Topic 3)
An administrator would like to create a fault-tolerant ring between three switches within a Layer 2 network. Which of the following Ethernet features should the administrator employ?

A. Spanning Tree Protocol
B. Open Shortest Path First
C. Port mirroring
D. An interior gateway protocol

Answer: A

Explanation:
Spanning Tree Protocol (STP) is a network protocol that ensures a loop-free topology in Ethernet networks by actively blocking certain links and enabling others. STP prevents loops by putting some of the links in a blocking state, effectively creating a loop-free topology. This ensures that there is only one active path between two devices, which helps prevent network loops and the associated problems (such as broadcast storms) that can result from them. STP is used to create a fault-tolerant ring between three switches within a Layer 2 network.

NEW QUESTION 237
- (Exam Topic 3)
A new global ISP needs to connect from central offices in North America to the United Kingdom. Which of the following would be the BEST cabling solution for this project?

A. Single-mode
B. Coaxial
C. Cat 6a
D. Twinaxial

Answer: A

Explanation:
For a new global ISP to connect from central offices in North America to the United Kingdom, the best cabling solution would be single-mode fiber optic cable. Single-mode fiber optic cable is a type of cable that is used to transmit data over long distances using light signals. It is typically used in long-haul communication networks, such as those that connect different countries or continents.

NEW QUESTION 239
- (Exam Topic 3)
Which of the following allows for an devices within a network to share a highly reliable time source?

A. NTP
B. SNMP
C. SIP
D. DNS

Answer: A

Explanation:
Network Time Protocol (NTP) is a protocol used to maintain a highly accurate and reliable clock time on all devices within a network. NTP works by synchronizing

the time of all the devices within a network to a single, highly accurate time source. This allows for the time of all the devices to be kept in sync with each other, ensuring a consistent and reliable time source for all devices within the network.

NEW QUESTION 240
- (Exam Topic 3)
Due to concerns around single points of failure, a company decided to add an additional WAN to the network. The company added a second MPLS vendor to the current MPLS WAN and deployed an additional WAN router at each site. Both MPLS providers use OSPF on the WAN network, and EIGRP is run internally. The first site to go live with the new WAN is successful, but when the second site is activated significant network issues occur. Which of the following is the MOST likely cause for the WAN instability?

A. A routing loop
B. Asymmetrical routing
C. A switching loop
D. An incorrect IP address

Answer: B

Explanation:
Asymmetrical routing is the most likely cause for the WAN instability. When two different routing protocols are used, like OSPF and EIGRP, it can cause asymmetrical routing, which results in traffic being routed differently in each direction. This can lead to instability in the WAN. A CDP neighbor change, a switching loop, or an incorrect IP address are not likely causes for WAN instability.

NEW QUESTION 241
- (Exam Topic 3)
A company is opening a new building on the other side of its campus. The distance from the closest building to the new building is 1,804ft (550m). The company needs to connect the networking equipment in the new building to the Other buildings on the campus without using a repeater. Which Of the following transceivers should the company use?

A. 10GBASE-SW
B. 10GBASE-LR
C. 10GBASE-LX4 over multimode fiber
D. 10GBASE-SR

Answer: B

Explanation:
10GBASE-LR is a standard for 10 Gbps Ethernet over single-mode fiber optic cable. It can support a maximum distance of 6.2 miles (10 km), which is much longer than the distance between the buildings. 10GBASE-SW, 10GBASE-LX4, and 10GBASE-SR are all standards for 10 Gbps Ethernet over multimode fiber optic cable, which have shorter maximum distances ranging from 984ft (300m) to 1,312ft (400m).
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 1.5: Compare and contrast network cabling types, standards and speeds.

NEW QUESTION 244
- (Exam Topic 3)
Which of the following describes the ability of a corporate IT department to expand its cloud-hosted VM environment with minimal effort?

A. Scalability
B. Load balancing
C. Multitenancy
D. Geo-redundancy

Answer: A

Explanation:
Scalability is the ability of a corporate IT department to expand its cloud-hosted virtual machine (VM) environment with minimal effort. This allows IT departments to quickly and easily scale up their cloud environment to meet increased demand. Scalability also allows for the efficient use of resources, as IT departments can quickly and easily scale up or down as needed.

NEW QUESTION 245
- (Exam Topic 3)
Which of the following protocols can be routed?

A. FCoE
B. Fibre Channel
C. iSCSl
D. NetBEUI

Answer: C

Explanation:
iSCSI (Internet Small Computer System Interface) is a protocol that allows SCSI commands to be transported over IP networks1. iSCSI can be routed because it contains a network address and a device address, as required by a routable protocol2. iSCSI can be used to access block-level storage devices over a network, such as SAN (Storage Area Network).
FCoE (Fibre Channel over Ethernet) is a protocol that allows Fibre Channel frames to be encapsulated and transported over Ethernet networks1. FCoE cannot be routed because it does not contain a network address, only a device address. FCoE operates at the data link layer and requires special switches and adapters to support it. FCoE can also be used to access block-level storage devices over a network, such as SAN.
Fibre Channel is a protocol that provides high-speed and low-latency communication between servers and storage devices1. Fibre Channel cannot be routed because it does not use IP networks, but rather its own dedicated network infrastructure. Fibre Channel operates at the physical layer and the data link layer and requires special cables, switches, and adapters to support it. Fibre Channel can also be used to access block-level storage devices over a network, such as SAN.

NetBEUI (NetBIOS Extended User Interface) is an old protocol that provides session-level communication between devices on a local network1. NetBEUI cannot be routed because it does not contain a network address, only a device address. NetBEUI operates at the transport layer and relies on NetBIOS for name resolution. NetBEUI is obsolete and has been replaced by other protocols, such as TCP/IP.

NEW QUESTION 250
- (Exam Topic 3)
A technician discovered that some information on the local database server was changed during a tile transfer to a remote server. Which of the following should concern the technician the MOST?

A. Confidentiality
B. Integrity
C. DDoS
D. On-path attack

Answer: B

Explanation:
The technician should be most concerned about data integrity and security. If information on the local database server was changed during a file transfer to a remote server, it could indicate that unauthorized access or modifications were made to the data. It could also indicate a failure in the file transfer process, which could result in data loss or corruption. The technician should investigate the cause of the changes and take steps to prevent it from happening again in the future. Additionally, they should verify the integrity of the data and restore it from a backup if necessary to ensure that the correct and complete data is available. The technician should also take appropriate actions such as notifying the system administrator and management of the incident, and following the incident management process to minimize the damage caused by the incident.

NEW QUESTION 253
- (Exam Topic 3)
Which of the following is used to provide disaster recovery capabilities to spin up an critical devices using internet resources?

A. Cloud site
B. Hot site
C. Cold site
D. Warm site

Answer: A

NEW QUESTION 254
- (Exam Topic 3)
A new company recently moved into an empty office space Within days, users in the next office began noticing increased latency and packet drops with their Wi-Fi-connected devices. Which of the following is the MOST likely reason for this issue?

A. Channel overlap
B. Distance from the AP
C. Bandwidth latency
D. RF attenuation
E. Network congestion

Answer: A

NEW QUESTION 257
- (Exam Topic 3)
An IT technician needs to increase bandwidth to a server. The server has multiple gigabit ports. Which of the following can be used to accomplish this without replacing hardware?

A. STP
B. 802. IQ
C. Duplex
D. LACP

Answer: D

Explanation:
LACP stands for Link Aggregation Control Protocol and is a protocol that allows multiple physical ports to be combined into a single logical port. This can increase bandwidth, redundancy, and load balancing for a server. LACP is part of the IEEE 802.3ad standard for link aggregation. STP stands for Spanning Tree Protocol and is a protocol that prevents loops in a network by blocking redundant links. 802.1Q is a standard for VLAN (Virtual Local Area Network) tagging, which allows multiple logical networks to share the same physical infrastructure. Duplex is a mode of communication that determines how data is transmitted and received on a link. Full duplex allows simultaneous transmission and reception, while half duplex allows only one direction at a time.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 1.5: Compare and contrast network cabling types, standards and speeds.

NEW QUESTION 261
- (Exam Topic 3)
Which of the following protocols is widely used in large-scale enterprise networks to support complex networks with multiple routers and balance traffic load on multiple links?

A. OSPF
B. RIPv2
C. QoS
D. STP

Answer: A

NEW QUESTION 263
- (Exam Topic 3)
A company is undergoing expansion but does not have sufficient rack space in its data center. Which of the following would be BEST to allow the company to host its new equipment without a major investment in facilities?

A. Using a colocation service
B. Using available rack space in branch offices
C. Using a flat network topology
D. Reorganizing the network rack and installing top-of-rack switching

Answer: A

Explanation:
A colocation service is a service that provides rack space, power, cooling, security, and connectivity for a company's network equipment in a data center. A colocation service can be used when a company does not have sufficient rack space in its own data center and does not want to invest in building or expanding its own facilities. By using a colocation service, a company can host its new equipment in a professional and reliable environment without a major investment in facilities. References: https://www.comptia.org/training/books/network-n10-008-study-guide (page 414)

NEW QUESTION 267
- (Exam Topic 3)
Which of the following bandwidth management techniques uses buffers al the client side to prevent TCP retransmissions from occurring when the ISP starts to drop packets of specific types that exceed the agreed traffic rate?

A. Traffic shaping
B. Traffic policing
C. Traffic marking
D. Traffic prioritization

Answer: D

NEW QUESTION 269
- (Exam Topic 3)
A Wi-Fi network was originally configured to be able to handle interference from a microwave oven. The microwave oven was recently removed from the office. Now the network administrator wants to optimize the system to maximize the range of the signal. The main sources of signal degradation are the numerous cubicles and wooden walls between the WAP and the intended destination. Which of the following actions should the administrator take?

A. Implement CDMA.
B. Change from omni to directional.
C. Change the SSID.
D. Change the frequency.

Answer: D

Explanation:
- the microwave was already removed from the office
- the signal is OK now
- Notice that the question mentions "numerous cubicles and wooden walls" - meaning the signal now won't have the interference as before
- KEY POINT: the admin wants to "maximize the range of the signal:"
Manually change the frequency to 2.4 GHz for more reliable speeds and range. While 5 GHz gives you a stronger signal, it doesn't travel through walls or ceilings as well, so it doesn't give you the best range.
"Microwave ovens: Older microwave ovens, which might not have sufficient shielding, can emit relatively high-powered signals in the 2.4GHz band, resulting in significant interference with WLAN devices operating in the 2.4GHz band."

NEW QUESTION 274
- (Exam Topic 3)
A technician is trying to determine whether an LACP bundle is fully operational. Which of the following commands will the technician MOST likely use?

A. show interface
B. show config
C. how route
D. show arp

Answer: A

Explanation:
https://www.cisco.com/c/en/us/td/docs/optical/cpt/r9_3/command/reference/cpt93_cr/cpt93_cr_chapter_01000.h

NEW QUESTION 279
- (Exam Topic 3)
A systems administrator wants to use the least amount of equipment to segment two departments that nave cables terminating in the same room. Which of the following would allow this to occur?

A. A load balancer
B. A proxy server
C. A Layer 3 switch
D. A hub

E. A Layer 7 firewall
F. The RSSI was not strong enough on the link

Answer: C

NEW QUESTION 284
- (Exam Topic 3)
ARP spoofing would normally be a part of:

A. an on-path attack.
B. DNS poisoning.
C. a DoS attack.
D. a rogue access point.

Answer: A

NEW QUESTION 286
- (Exam Topic 3)
A network technician is selecting a replacement for a damaged fiber cable that goes directly to an SFP transceiver on a network switch. Which of the following cable connectors should be used?

A. RJ45
B. LC
C. MT
D. F-type

Answer: C

NEW QUESTION 291
- (Exam Topic 3)
An IT technician successfully connects to the corporate wireless network at a hank. While performing some tests, the technician observes that the physical address of the DHCp server has changed even though the network connection has not been lost. Which of the following would BEST explain this change?

A. Server upgrade
B. Duplicate IP address
C. Scope exhaustion
D. Rogue server

Answer: D

Explanation:
A rogue server is a DHCP server on a network that is not under the administrative control of the network staff 1. It may provide incorrect IP addresses or other network configuration information to devices on the network, causing them to lose connectivity or be vulnerable to attacks2. The physical address of the DHCP server may change if a rogue server takes over the role of assigning IP addresses to devices on the network. This can be detected by monitoring DHCP traffic or using tools such as RogueChecker2.

NEW QUESTION 296
- (Exam Topic 3)
Which of the following is an advanced distance vector routing protocol that automates routing tables and also uses some features of link-state routing protocols?

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

Answer: C

Explanation:
EIGRP is an advanced distance vector routing protocol that is able to automatically update routing tables and also uses features of link-state routing protocols, such as the ability to send updates about the current topology of the network. EIGRP also has the ability to use a variety of algorithms to determine the best route for a packet to take, allowing for more efficient routing across the network.

NEW QUESTION 301
- (Exam Topic 3)
A network technician recently installed 35 additional workstations. After installation, some users are unable to access network resources. Many of the original workstations that are experiencing the network access issue were offline when the new workstations were turned on. Which of the following is the MOST likely cause of this issue?

A. Incorrect VLAN setting
B. Insufficient DHCP scope
C. Improper NIC setting
D. Duplicate IP address

Answer: B

NEW QUESTION 304

- (Exam Topic 3)
A network technician is working at a new office location and needs to connect one laptop to another to transfer files. The laptops are newer models and do not have Ethernet ports. Access points are not available either. Which Of the following types Of wireless network SSIDs does the network technician need to configure to be able to connect the laptops together?

A. Independent Basic Service Set
B. Extended Service Set
C. Distribution System Service
D. Basic Service Set

Answer: A

Explanation:
An Independent Basic Service Set (IBSS) is a type of wireless network that does not require an access point or a wired network. An IBSS allows wireless devices to communicate directly with each other using ad hoc mode. An IBSS is also known as an ad hoc network or a peer-to-peer network. A network technician can configure an IBSS to connect two laptops together and transfer files.
References: Network+ Study Guide Objective 1.4: Explain the properties and characteristics of TCP/IP

NEW QUESTION 308
- (Exam Topic 3)
A network administrator wants to test the throughput of a new metro Ethernet circuit to verify that its
performance matches the requirements specified m the SLA. Which of the following would BEST help measure the throughput?

A. iPerf
B. Ping
C. NetFlow
D. Netstat

Answer: A

NEW QUESTION 312
- (Exam Topic 3)
A network engineer needs to create a subnet that has the capacity for five VLANs. with the following number of clients lo be allowed on each:

VLAN 10	50 users
VLAN 20	35 users
VLAN 30	20 users
VLAN 40	75 users
VLAN 50	130 users

Which of the following is the SMALLEST subnet capable of this setup that also has the capacity to double the number of clients in the future?

A. 10.0.0.0/21
B. 10.0.0.0/22
C. 10.0.0.0/23
D. 10.0.0.0/24

Answer: B

NEW QUESTION 314
- (Exam Topic 3)
An employee working in a warehouse facility is experiencing interruptions in mobile applications while walking around the facility. According to a recent site survey, the WLAN comprises autonomous APs that are directly connected to the internet, providing adequate signal coverage. Which of the following is the BEST solution to improve network stability?

A. Implement client roaming using an extended service deployment employing a wireless controller.
B. Remove omnidirectional antennas and adopt a directional bridge.
C. Ensure all APs of the warehouse support MIMO and Wi-Fi 4.
D. Verify that the level of EIRP power settings is set to the maximum permitted by regulations.

Answer: A

Explanation:
Client roaming refers to the ability of a wireless device to seamlessly connect to a different access point (AP) as the user moves around the facility. This can help to improve network stability and reduce interruptions in mobile applications. An extended service deployment is a type of wireless network configuration that uses multiple APs to cover a large area, such as a warehouse facility. By using a wireless controller to manage the APs, the network can be better optimized for client roaming, which can improve network stability.
"Roaming With multiple WAPs in an ESS, clients will connect to whichever WAP has the strongest signal. As clients move through the space covered by the broadcast area, they will change WAP connections seamlessly, a process called roaming."

NEW QUESTION 319
- (Exam Topic 3)
While waking from the parking lot lo an access-controlled door an employee sees an authorized user open the door. Then the employee notices that another person catches the door before It closes and goes inside Which of the following attacks Is taking place?

A. Tailgating
B. Pipgybacking
C. Shoulder surfing
D. Phisning

Answer: A

Explanation:
The difference between piggybacking and tailgaiting is that with piggybacking, the person is willfully and intentionally letting you in. In this particular case, the person caught the door before it closed, so it is tailgating.
Tailgating is a physical security attack that occurs when an unauthorized person follows an authorized person through a secured door or gate without their knowledge or consent. Tailgating can allow an attacker to bypass access control mechanisms and gain entry to restricted areas or resources. Tailgating can also pose a safety risk for the authorized person and other occupants of the facility.
Piggybacking is a physical security attack that occurs when an unauthorized person follows an authorized person through a secured door or gate with their knowledge or consent. Piggybacking can also allow an attacker to bypass access control mechanisms and gain entry to restricted areas or resources. Piggybacking can also violate security policies and compromise the accountability of the authorized person.
Shoulder surfing is a physical security attack that occurs when an unauthorized person observes or records an authorized person's confidential information, such as passwords, PINs, or credit card numbers. Shoulder surfing can allow an attacker to steal credentials and access sensitive data or systems. Shoulder surfing can also violate privacy and confidentiality rights of the authorized person.
Phishing is a cyber security attack that occurs when an unauthorized person sends fraudulent emails or messages that appear to come from legitimate sources, such as banks, companies, or government agencies. Phishing can trick recipients into clicking on malicious links, opening malicious attachments, or providing personal or financial information. Phishing can allow an attacker to install malware, steal credentials, or perform identity theft. Phishing does not involve physical access to secured doors or gates.

NEW QUESTION 324
- (Exam Topic 3)
A network administrator is investigating reports about network performance and finds high utilization on a switch uplink. The administrator is unsure whether this is an anomaly or normal behavior that will require an upgrade to resolve. Which Of the following should the administrator reference to gain historical perspective?

A. Device configuration review
B. ARP table export
C. Service-level agreement
D. Network performance baseline

Answer: D

Explanation:
A network performance baseline is a set of metrics that represents the normal or expected behavior of a network under various conditions and scenarios. A network performance baseline can help a network administrator to investigate reports about network performance by comparing the current metrics with the historical metrics and identifying any deviations or anomalies. A network performance baseline can also help to plan and justify network upgrades by showing the trends and patterns of network utilization and performance over time.
A device configuration review is a process that involves checking and verifying the settings and parameters of a network device, such as a switch, router, firewall, or server. A device configuration review can help a network administrator to troubleshoot network issues by finding and fixing any errors, inconsistencies, or vulnerabilities in the device configuration. A device configuration review can also help to ensure compliance with security policies and best practices by applying the latest updates and patches to the device.
An ARP table export is a file that contains the contents of the ARP (Address Resolution Protocol) table of a network device. The ARP table is a data structure that maps IP addresses to MAC addresses on a local network. An ARP table export can help a network administrator to monitor and manage the network devices on a local network by showing their IP addresses and MAC addresses. An ARP table export can also help to detect and prevent ARP spoofing attacks by identifying any duplicate or malicious entries in the ARP table.
A service-level agreement (SLA) is a contract that defines the expectations and responsibilities of both parties in terms of service quality, availability, performance, and response time. An SLA can help a network administrator to provide and maintain a satisfactory level of service to the customers or users of the network by setting and measuring specific goals and metrics. An SLA can also help to resolve any disputes or issues that may arise between the service provider and the service consumer by establishing clear terms and conditions for the service delivery.

NEW QUESTION 328
- (Exam Topic 3)
An engineer needs to restrict the database servers that are in the same subnet from communicating with each other. The database servers will still need to communicate with the application servers in a different subnet. In some cases, the database servers will be clustered, and the servers will need to communicate with other cluster members. Which of the following technologies will be BEST to use to implement this filtering without creating rules?

A. Private VLANs
B. Access control lists
C. Firewalls
D. Control plane policing

Answer: A

Explanation:
"Use private VLANs: Also known as port isolation, creating a private VLAN is a method of restricting switch ports (now called private ports) so that they can communicate only with a particular uplink. The private VLAN usually has numerous private ports and only one uplink, which is usually connected to a router, or firewall."

NEW QUESTION 330
- (Exam Topic 3)
A company's web server is hosted at a local ISP. This is an example of:

A. allocation.
B. an on-premises data center.
C. a branch office.
D. a cloud provider.

Answer: D

NEW QUESTION 333

- (Exam Topic 3)
Which of the following is most likely to have the HIGHEST latency while being the most accessible?

A. Satellite
B. DSL
C. Cable
D. 4G

Answer: A

NEW QUESTION 338
- (Exam Topic 3)
Which of the following BEST describes a spirt-tunnel client-to-server VPN connection?

A. The client sends an network traffic down the VPN tunnel
B. The client has two different IP addresses that can be connected to a remote site from two different ISPs to ensure availability
C. The client sends some network traffic down the VPN tunnel and other traffic to the local gateway.
D. The client connects to multiple remote sites at the same time

Answer: C

Explanation:
In a split-tunnel VPN, the client can access both the local network and the remote network simultaneously, with some network traffic sent through the VPN tunnel and other traffic sent to the local gateway. This approach allows for more efficient use of bandwidth and reduces the load on the VPN server. It also allows the client to continue accessing local resources while connected to the remote network.

NEW QUESTION 343
- (Exam Topic 3)
A network administrator is implementing process changes based on recommendations following a recent penetration test. The testers used a method to gain access to the network that involved exploiting a publicly available and fixed remote code execution vulnerability in the VPN appliance. Which of the following should the administrator do to BEST prevent this from happening again?

A. Change default passwords on internet-facing hardware.
B. Implement robust ACLs with explicit deny-all entries.
C. Create private VLANs for management plane traffic.
D. Routinely upgrade all network equipment firmware.

Answer: D

Explanation:
Firmware is the software that runs on network equipment such as routers, switches, and VPN appliances. Firmware updates often contain bug fixes, security patches, and performance improvements that can prevent or mitigate vulnerabilities and attacks. By routinely upgrading all network equipment firmware, a network administrator can ensure that the network devices are running the latest and most secure versions of firmware and avoid exploiting known and fixed remote code execution vulnerabilities in the VPN appliance. References: https://www.comptia.org/training/books/network-n10-008-study-guide (page 462)

NEW QUESTION 344
- (Exam Topic 3)
A technician was cleaning a storage closet and found a box of transceivers labeled 8Gbps. Which of the following protocols uses those transceivers?

A. Coaxial over Ethernet
B. Internet Small Computer Systems Interface
C. Fibre Channel
D. Gigabit interface converter

Answer: C

Explanation:
The transceivers labeled 8Gbps are likely to be used with the Fibre Channel protocol. Fibre Channel is a high-speed networking technology that is primarily used to connect storage devices to servers in storage area networks (SANs). It is capable of transmitting data at speeds of up to 8 Gbps (gigabits per second), and uses specialized transceivers to transmit and receive data over fiber optic cables.
Coaxial over Ethernet (CoE) is a networking technology that uses coaxial cables to transmit data, and is not related to the transceivers in question. Internet Small Computer Systems Interface (iSCSI) is a protocol that allows devices to communicate over a network using the SCSI protocol, and does not typically use specialized transceivers. Gigabit interface converter (GBIC) is a type of transceiver used to transmit and receive data over fiber optic cables, but it is not capable of transmitting data at 8 Gbps.

NEW QUESTION 346
- (Exam Topic 3)
A switch is connected to another switch. Incompatible hardware causes a surge in traffic on both switches. Which of the following configurations will cause traffic to pause, allowing the switches to drain buffers?

A. Speed
B. Flow control
C. 802.1Q
D. Duplex

Answer: B

Explanation:
Flow control is a mechanism that allows a network device to regulate the amount of traffic it can receive or send. Flow control can help prevent congestion and

buffer overflow by sending pause frames or signals to the sender when the receiver's buffer is full or nearly full. Flow control can cause traffic to pause, allowing the switches to drain buffers and resume normal operation. Speed is a parameter that determines the data transfer rate of a network link. 802.1Q is a standard for VLAN (Virtual Local Area Network) tagging, which allows multiple logical networks to share the same physical infrastructure. Duplex is a mode of communication that determines how data is transmitted and received on a link. Full duplex allows simultaneous transmission and reception, while half duplex allows only one direction at a time.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 1.5: Compare and contrast network cabling types, standards and speeds.

NEW QUESTION 348
- (Exam Topic 3)
To comply with an industry regulation, all communication destined to a secure server should be logged and archived on a storage device. Which of the Mowing can be configured to fulfill this requirement?

A. QoS traffic classification
B. Port mirroring
C. Flow control
D. Link Aggregation Control Protocol

Answer: B

NEW QUESTION 353
- (Exam Topic 3)
A new office space is being designed. The network switches are up. but no services are running yet A network engineer plugs in a laptop configured as a DHCP client to a switch Which ol the following IP addresses should be assigned to the laptop?

A. 10.1.1.1
B. 169.254.1.128
C. 172 16 128 128
D. 192 168.0.1

Answer: B

Explanation:
When a DHCP client is connected to a network and no DHCP server is available, the client can automatically configure a link-local address in the 169.254.0.0/16 range using the Automatic Private IP Addressing (APIPA) feature. So, the correct answer is option B, 169.254.1.128. This is also known as an APIPA address.
Reference: CompTIA Network+ Study Guide, Exam N10-007, Fourth Edition, by Todd Lammle (Chapter 4: IP Addressing)

NEW QUESTION 358
- (Exam Topic 3)
An engineer needs to verity the external record tor SMTP traffic. The engineer logged in to the server and entered the nslookup command. Which of the following commands should the engineer send before entering the DNS name?

A. set type=A
B. is -d company-mail.com
C. set domain=company.mail.com
D. set querytype=Mx

Answer: D

NEW QUESTION 359
- (Exam Topic 3)
A newly installed VoIP phone is not getting the DHCP IP address it needs to connect to the phone system. Which of the following tasks needs to be completed to allow the phone to operate correctly?

A. Assign the phone's switchport to the correct VLAN
B. Statically assign the phone's gateway address.
C. Configure a route on the VoIP network router.
D. Implement a VoIP gateway

Answer: A

NEW QUESTION 363
- (Exam Topic 3)
An IT technician installs five old switches in a network. In addition to the low port rates on these switches, they also have improper network configurations. After three hours, the network becomes overwhelmed by continuous traffic and eventually shuts down. Which Of the following is causing the issue?

A. Broadcast storm
B. Collisions
C. IP settings
D. Routing loops

Answer: A

Explanation:
A broadcast storm is a situation where a network is flooded with broadcast packets, which are sent to all devices on the network. This can consume bandwidth, cause congestion, and degrade performance. A broadcast storm can be caused by improper network configurations, such as loops or misconfigured switches. In this scenario, the old switches may have created loops or failed to filter broadcast packets, resulting in a broadcast storm that overwhelmed the network.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 2.4: Given a scenario, use appropriate software tools to

troubleshoot connectivity issues.

NEW QUESTION 365
- (Exam Topic 3)
A technician is configuring a static IP address on a new device in a newly created subnet. The work order specifies the following requirements:
• The IP address should use the highest address available in the subnet.
• The default gateway needs to be set to 172.28.85.94.
• The subnet mask needs to be 255.255.255.224.
Which of the following addresses should the engineer apply to the device?

A. 172.28.85.93
B. 172.28.85.95
C. 172.28.85.254
D. 172.28.85.255

Answer: A

Explanation:
https://www.tunnelsup.com/subnet-calculator/ IP Address: 172.28.85.95/27
Netmask: 255.255.255.224
Network Address: 172.28.85.64
Usable Host Range: 172.28.85.65 - 172.28.85.94
Broadcast Address: 172.28.85.95

NEW QUESTION 369
- (Exam Topic 3)
A network technician 13 troubleshooting a specific port on a switch. Which of the following commands should the technician use to see the port configuration?

A. show route
B. show Interface
C. show arp
D. show port

Answer: B

Explanation:
To see the configuration of a specific port on a switch, the network technician should use the "show interface" command. This command provides detailed information about the interface, including the current configuration, status, and statistics for the interface.

NEW QUESTION 373
- (Exam Topic 3)
A network security engineer locates an unapproved wireless bridge connected to the corporate LAN that is broadcasting a hidden SSID, providing unauthenticated access to internal resources. Which of the following types of attacks BEST describes this finding?

A. Rogue access point Most Voted
B. Evil twin
C. ARP spoofing
D. VLAN hopping

Answer: A

Explanation:
A rogue access point is an illegitimate access point plugged into a network to create a bypass from outside into the legitimate network. By contrast, an evil twin is a copy of a legitimate access point.

NEW QUESTION 378
- (Exam Topic 3)
During the troubleshooting of an E1 line, the point-to-point link on the core router was accidentally unplugged and left unconnected for several hours. However, the network management team was not notified. Which of the following could have been configured to allow early detection and possible resolution of the issue?

A. Traps
B. MIB
C. OID
D. Baselines

Answer: A

Explanation:
Traps are unsolicited messages sent by network devices to a network management system (NMS) when an event or a change in status occurs. Traps can help notify the network management team of any issues or problems on the network, such as a link failure or a device reboot. Traps can also trigger actions or alerts on the NMS, such as sending an email or logging the event. MIB stands for Management Information Base and is a database of information that can be accessed and managed by an NMS using SNMP (Simple Network Management Protocol). OID stands for Object Identifier and is a unique name that identifies a specific variable in the MIB. Baselines are measurements of normal network performance and behavior that can be used for comparison and analysis.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 2.5: Given a scenario, use remote access methods.

NEW QUESTION 382
- (Exam Topic 3)
A client who shares office space and an IT closet with another company recently reported connectivity issues throughout the network. Multiple third-party vendors

regularly perform on-site maintenance in the shared IT closet. Which of the following security techniques would BEST secure the physical networking equipment?

A. Disabling unneeded switchports
B. Implementing role-based access
C. Changing the default passwords
D. Configuring an access control list

Answer: B

Explanation:
Role-based access is a security technique that assigns permissions and privileges to users or groups based on their roles or functions within an organization. Role-based access can help secure the physical networking equipment by limiting who can access, modify, or manage the devices in the shared IT closet. Only authorized personnel with a valid role and credentials should be able to access the networking equipment. Disabling unneeded switchports is a security technique that prevents unauthorized devices from connecting to the network by turning off unused ports on a switch. Changing the default passwords is a security technique that prevents unauthorized access to network devices by replacing the factory-set passwords with strong and unique ones. Configuring an access control list is a security technique that filters network traffic by allowing or denying packets based on criteria such as source and destination IP addresses, ports, or protocols.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 3.2: Given a scenario, use appropriate network hardening techniques.

NEW QUESTION 387
.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questons and Answers in PDF Format

N10-009 Practice Exam Features:

* N10-009 Questions and Answers Updated Frequently

* N10-009 Practice Questions Verified by Expert Senior Certified Staff

* N10-009 Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* N10-009 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
Order The N10-009 Practice Test Here