CompTIA

Exam Questions N10-009

CompTIA Network+ Exam

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NEW QUESTION 1
- (Exam Topic 1)
An IT director is setting up new disaster and HA policies for a company. Limited downtime is critical to operations. To meet corporate requirements, the director set up two different datacenters across the country that will stay current on data and applications. In the event of an outage, the company can immediately switch from one datacenter to another. Which of the following does this BEST describe?

A. A warm site
B. Data mirroring
C. Multipathing
D. Load balancing
E. A hot site

Answer: E

Explanation:
A hot site is a fully redundant site that can take over operations immediately if the primary site goes down. In this scenario, the company has set up two different datacenters across the country that are current on data and applications, and they can immediately switch from one datacenter to another in case of an outage.
References:
- Network+ N10-008 Objectives: 1.5 Compare and contrast disaster recovery concepts and methodologies.

NEW QUESTION 2
- (Exam Topic 1)
A company built a new building at its headquarters location. The new building is connected to the company's LAN via fiber-optic cable. Multiple users in the new building are unable to access the company's intranet site via their web browser, but they are able to access internet sites. Which of the following describes how the network administrator can resolve this issue?

A. Correct the DNS server entries in the DHCP scope
B. Correct the external firewall gateway address
C. Correct the NTP server settings on the clients
D. Correct a TFTP Issue on the company's server

Answer: A

Explanation:
If multiple users in a new building are unable to access the company's intranet site via their web browser but are able to access internet sites, the network administrator can resolve this issue by correcting the DNS server entries in the DHCP scope. The DHCP scope is responsible for assigning IP addresses and DNS server addresses to clients. If the DNS server entries are incorrect, clients will not be able to access intranet sites.
References:
- CompTIA Network+ Certification Study Guide, Exam N10-007, Fourth Edition, Chapter 4: Network Implementations, Objective 4.4: Explain the purpose and properties of DHCP.

NEW QUESTION 3
- (Exam Topic 1)
Which of the following devices would be used to manage a corporate WLAN?

A. A wireless NAS
B. A wireless bridge
C. A wireless router
D. A wireless controller

Answer: D

Explanation:
A wireless controller is used to manage a corporate WLAN, providing centralized management and configuration of access points. References: CompTIA Network+ Certification Study Guide, Chapter 8: Wireless Networks.

NEW QUESTION 4
- (Exam Topic 1)
Branch users are experiencing issues with videoconferencing. Which of the following will the company MOST likely configure to improve performance for these applications?

A. Link Aggregation Control Protocol
B. Dynamic routing
C. Quality of service
D. Network load balancer
E. Static IP addresses

Answer: C

Explanation:
To improve performance for videoconferencing, the company should configure Quality of Service (QoS). This technology allows for the prioritization of network traffic, ensuring that videoconferencing traffic is given higher priority and therefore better performance. Link Aggregation Control Protocol (LACP), Dynamic routing, Network load balancer, and Static IP addresses are not directly related to improving performance for videoconferencing.
References:
- Network+ N10-007 Certification Exam Objectives, Objective 2.6: Given a scenario, implement and configure the appropriate wireless security and implement the appropriate QoS concepts.

NEW QUESTION 5
- (Exam Topic 1)
Which of the following is used to prioritize Internet usage per application and per user on the network?

A. Bandwidth management
B. Load balance routing
C. Border Gateway Protocol
D. Administrative distance

Answer: A

Explanation:
Bandwidth management is used to prioritize Internet usage per application and per user on the network. This allows an organization to allocate network resources to mission-critical applications and users, while limiting the bandwidth available to non-business-critical applications. References: Network+ Certification Study Guide, Chapter 2: Network Operations

NEW QUESTION 6
- (Exam Topic 1)
Which of the following DNS records works as an alias to another record?

A. AAAA
B. CNAME
C. MX
D. SOA

Answer: B

Explanation:
The DNS record that works as an alias to another record is called CNAME (Canonical Name). CNAME records are used to create an alias for a domain name that points to another domain name.
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.

NEW QUESTION 7
- (Exam Topic 1)
A technician is installing multiple UPS units in a major retail store. The technician is required to keep track of all changes to new and old equipment. Which of the following will allow the technician to record these changes?

A. Asset tags
B. A smart locker
C. An access control vestibule
D. A camera

Answer: A

Explanation:
Asset tags will allow the technician to record changes to new and old equipment when installing multiple UPS units in a major retail store. Asset tags are labels or stickers that are attached to physical assets such as computers, printers, servers, or UPS units. They usually contain information such as asset name, serial number, barcode, QR code, or RFID chip that can be scanned or read by an asset management system or software. Asset tags help track inventory, location, status, maintenance, and ownership of assets. References: https://www.camcode.com/asset-tags/asset-tagging-guide/

NEW QUESTION 8
- (Exam Topic 1)
The management team needs to ensure unnecessary modifications to the corporate network are not permitted and version control is maintained. Which of the following documents would BEST support this?

A. An incident response plan
B. A business continuity plan
C. A change management policy
D. An acceptable use policy

Answer: C

Explanation:
A change management policy is a document that outlines the procedures and guidelines for making changes to a network or system, including how changes are approved, tested, and implemented. By following a change management policy, organizations can ensure that unnecessary modifications to the network are not permitted and version control is maintained. References:
Network+ N10-008 Objectives: 1.6 Given a scenario, implement network configuration and change management best practices.

NEW QUESTION 9
- (Exam Topic 1)
A technician is writing documentation regarding a company's server farm. The technician needs to confirm the server name for all Linux servers. Which of the following commands should the technician run?

A. ipconfig
B. nslookup

C. arp
D. route

Answer: B

Explanation:
The nslookup command should be run to confirm the server name for all Linux servers. Nslookup is a tool that queries DNS servers to resolve hostnames to IP addresses or vice versa. It can also provide other information about DNS records, such as MX, NS, SOA, etc. By running nslookup with the IP address of a Linux server, the technician can obtain its hostname. References:
https://www.howtogeek.com/663056/how-to-use-the-nslookup-command-on-linux/

NEW QUESTION 10
- (Exam Topic 1)
A technician is installing a new fiber connection to a network device in a datacenter. The connection from the device to the switch also traverses a patch panel connection. The chain of connections is in the following order:
Device
LC/LC patch cable Patch panel
Cross-connect fiber cable Patch panel
LC/LC patch cable Switch
The connection is not working. The technician has changed both patch cables with known working patch cables. The device had been tested and was working properly before being installed. Which of the following is the MOST likely cause of the issue?

A. TX/RX is reversed
B. An incorrect cable was used
C. The device failed during installation
D. Attenuation is occurring

Answer: A

Explanation:
The most likely cause of the issue where the fiber connection from a device to a switch is not working is that the TX/RX (transmit/receive) is reversed. When connecting fiber optic cables, it is important to ensure that the TX of one device is connected to the RX of the other device and vice versa. If the TX/RX is reversed, data cannot be transmitted successfully.
References:
> CompTIA Network+ Certification Study Guide, Exam N10-007, Fourth Edition, Chapter 5: Network Operations, Objective 5.1: Given a scenario, use appropriate documentation and diagrams to manage the network.

NEW QUESTION 10
- (Exam Topic 1)
Several WIFI users are reporting the inability to connect to the network. WLAN users on the guest network are able to access all network resources without any performance issues. The following table summarizes the findings after a site survey of the area in question:

Location	AP 1	AP 2	AP 3	AP 4
SSID	Corp1	Corp1	Corp1/Guest	Corp1/Guest
Channel	2	1	5	11
RSSI	-81dBm	-82dBm	-44dBm	-41dBm
Antenna type	Omni	Omni	Directional	Directional

Which of the following should a wireless technician do NEXT to troubleshoot this issue?

A. Reconfigure the channels to reduce overlap
B. Replace the omni antennas with directional antennas
C. Update the SSIDs on all the APs
D. Decrease power in AP 3 and AP 4

Answer: A

Explanation:
Based on the site survey table, we can see that AP 2, AP 3, and AP 4 are all broadcasting on the same channel, which can cause interference and affect performance. Therefore, the next step a wireless technician should take to troubleshoot this issue is to reconfigure the channels to reduce overlap. This will help to improve network performance and eliminate any interference.
References:
> Network+ N10-007 Certification Exam Objectives, Objective 2.8: Given a scenario, troubleshoot common wireless problems and perform site surveys.

NEW QUESTION 12
- (Exam Topic 1)
A store owner would like to have secure wireless access available for both business equipment and patron use. Which of the following features should be configured to allow different wireless access through the same equipment?

A. MIMO
B. TKIP
C. LTE
D. SSID

Answer: D

Explanation:
SSID (Service Set Identifier) is a feature that should be configured to allow different wireless access through the same equipment. SSID is the name of a wireless network that identifies it from other networks in the same area. A wireless access point (AP) can support multiple SSIDs with different security settings and network

policies. For example, a store owner can create one SSID for business equipment and another SSID for patron use, and assign different passwords, VLANs, and QoS levels for each SSID. References: https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/70931-multiple-ssid.html

NEW QUESTION 14
- (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 16
- (Exam Topic 1)
A network administrator is configuring a load balancer for two systems. Which of the following must the administrator configure to ensure connectivity during a failover?

A. VIP
B. NAT
C. APIPA
D. IPv6 tunneling
E. Broadcast IP

Answer: A

Explanation:
A virtual IP (VIP) address must be configured to ensure connectivity during a failover. A VIP address is a single IP address that is assigned to a group of servers or network devices. When one device fails, traffic is automatically rerouted to the remaining devices, and the VIP address is reassigned to the backup device, allowing clients to continue to access the service without interruption.
References:
- CompTIA Network+ Certification Study Guide, Exam N10-007, Fourth Edition, Chapter 6: Network Servers, p. 300

NEW QUESTION 20
- (Exam Topic 1)
Which of the following types of devices can provide content filtering and threat protection, and manage multiple IPSec site-to-site connections?

A. Layer 3 switch
B. VPN headend
C. Next-generation firewall
D. Proxy server
E. Intrusion prevention

Answer: C

Explanation:
Next-generation firewalls can provide content filtering and threat protection, and can manage multiple IPSec site-to-site connections. References: CompTIA Network+ Certification Study Guide, Chapter 5: Network Security.

NEW QUESTION 25
- (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 30
- (Exam Topic 1)
Which of the following is used to track and document various types of known vulnerabilities?

A. CVE
B. Penetration testing
C. Zero-day
D. SIEM
E. Least privilege

Answer: A

Explanation:
CVE stands for Common Vulnerabilities and Exposures, which is a list of publicly disclosed cybersecurity vulnerabilities that is free to search, use, and incorporate into products and services. CVE provides a standardized identifier and description for each vulnerability, as well as references to related sources of information. CVE helps to track and document various types of known vulnerabilities and facilitates communication and coordination among security professionals. References: https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0), https://cve.mitre.org/cve/

NEW QUESTION 31
- (Exam Topic 1)
Which of the following transceiver types can support up to 40Gbps?

A. SFP+
B. QSFP+
C. QSFP
D. SFP

Answer: B

Explanation:
QSFP+ is a transceiver type that can support up to 40Gbps. It stands for Quad Small Form-factor Pluggable Plus and uses four lanes of data to achieve high-speed transmission. It is commonly used for data center and high-performance computing applications. References: https://www.cisco.com/c/en/us/products/collateral/interfaces-modules/transceiver-modules/data_sheet_c78-6600

NEW QUESTION 32
- (Exam Topic 1)
A technician is installing a cable modem in a SOHO. Which of the following cable types will the technician MOST likely use to connect a modem to the ISP?

A. Coaxial
B. Single-mode fiber
C. Cat 6e
D. Multimode fiber

Answer: A

Explanation:
Coaxial cable is a type of cable that consists of a central copper conductor surrounded by an insulating layer and a braided metal shield. Coaxial cable is commonly used to connect a cable modem to an ISP by transmitting data over cable television networks. Coaxial cable can support high bandwidth and long distances with minimal interference or attenuation. References: https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0), https://www.techopedia.com/definition/4027/coaxial-cable

NEW QUESTION 33
- (Exam Topic 1)
Within the realm of network security, Zero Trust:

A. prevents attackers from moving laterally through a system.
B. allows a server to communicate with outside networks without a firewall.
C. block malicious software that is too new to be found in virus definitions.
D. stops infected files from being downloaded via websites.

Answer: A

Explanation:
Zero Trust is a security framework that requires all users, whether in or outside the organization’s network, to be authenticated, authorized, and continuously validated for security configuration and posture before being granted or keeping access to applications and data. Zero Trust prevents attackers from moving laterally through a system by applying granular policies and controls based on the principle of least privilege and by segmenting and encrypting data flows across the network. References: https://partners.comptia.org/docs/default-source/resources/comptia-network-n10-008-exam-objectives-(2-0), https://www.crowdstrike.com/cybersecurity-101/zero-trust-security/

NEW QUESTION 36
- (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 38
- (Exam Topic 1)
Which of the following would need to be configured to ensure a device with a specific MAC address is always assigned the same IP address from DHCP?

A. Scope options
B. Reservation
C. Dynamic assignment
D. Exclusion
E. Static assignment

Answer: B

Explanation:
A reservation should be configured to ensure a device with a specific MAC address is always assigned the same IP address from DHCP. A reservation is a feature of DHCP that allows an administrator to assign a fixed IP address to a device based on its MAC address. This way, the device will always receive the same IP address from the DHCP server, even if it is powered off or disconnected from the network for a long time. References: https://docs.microsoft.com/en-us/windows-server/troubleshoot/configure-dhcp-reservations

NEW QUESTION 39
- (Exam Topic 1)
A client recently added 100 users who are using VMs. All users have since reported slow or unresponsive desktops. Reports show minimal network congestion, zero packet loss, and acceptable packet delay. Which of the following metrics will MOST accurately show the underlying performance issues? (Choose two.)

A. CPU usage
B. Memory
C. Temperature
D. Bandwidth
E. Latency
F. Jitter

Answer: AB

NEW QUESTION 43
- (Exam Topic 1)
A network technician is reviewing the interface counters on a router interface. The technician is attempting to confirm a cable issue. Given the following information:

Metric	Value
Last cleared	7 minutes, 34 seconds
# of packets output	6915
# of packets input	270
CRCs	183
Giants	0
Runts	0
Multicasts	14

Which of the following metrics confirms there is a cabling issue?

A. Last cleared
B. Number of packets output
C. CRCs
D. Giants
E. Multicasts

Answer: C

Explanation:
CRC stands for Cyclic Redundancy Check, and it is a type of error-detecting code used to detect accidental changes to raw data. If the CRC count is increasing on a particular interface, it indicates that there might be an issue with the cabling, which is causing data corruption. References:
Network+ N10-008 Objectives: 2.1 Given a scenario, troubleshoot common physical connectivity issues.

NEW QUESTION 45
- (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 48
- (Exam Topic 1)
An engineer is configuring redundant network links between switches. Which of the following should the engineer enable to prevent network stability issues?

A. 802.1Q
B. STP
C. Flow control
D. CSMA/CD

Answer: B

Explanation:
Spanning Tree Protocol (STP) should be enabled when configuring redundant network links between switches. STP ensures that only one active path is used at a time, preventing network loops and stability issues.
References:
- CompTIA Network+ Certification Study Guide

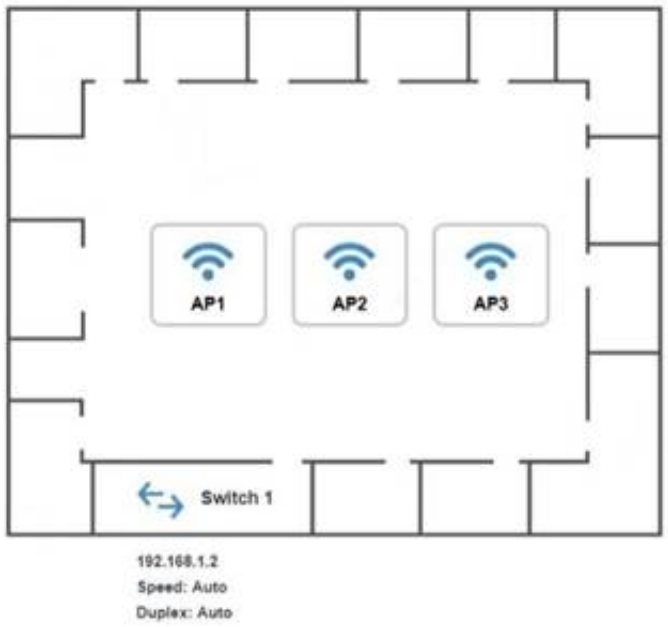
NEW QUESTION 49
- (Exam Topic 1)
Which of the following provides redundancy on a file server to ensure the server is still connected to a LAN even in the event of a port failure on a switch?

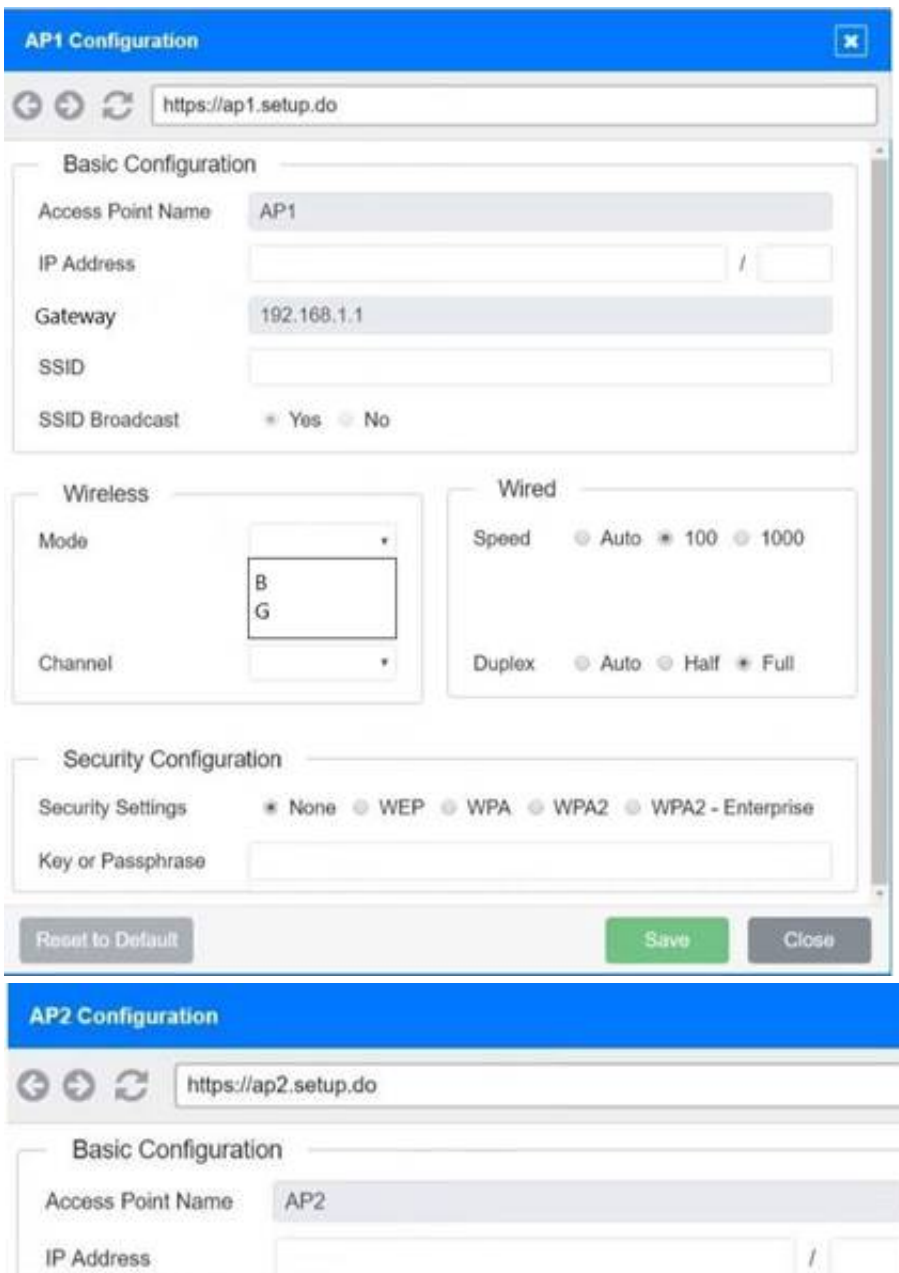
A. NIC teaming
B. Load balancer
C. RAID array
D. PDUs

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 51
- (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.




AP1 Configuration
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Basic Configuration
Access Point Name
AP1
IP Address
Gateway
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SSID
SSID Broadcast
Yes
No
Wireless
Mode
B
G
Channel
Wired
Speed
Auto
100
1000
Duplex
Auto
Half
Full
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Security Settings
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WEP
WPA
WPA2
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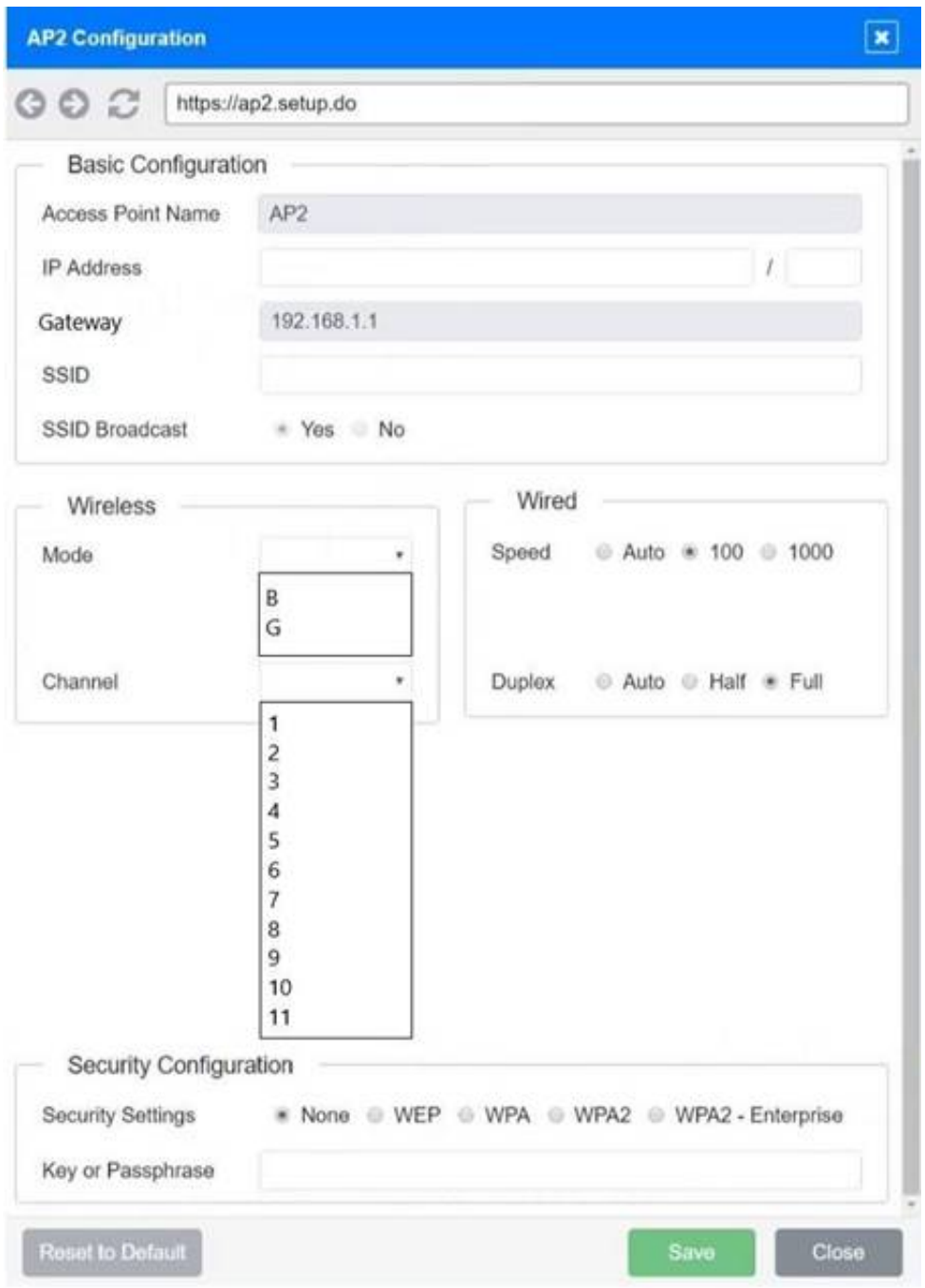
Key or Passphrase
Reset to Default
Save
Close


AP2 Configuration
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Basic Configuration
Access Point Name
AP2
IP Address
Gateway
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SSID
SSID Broadcast
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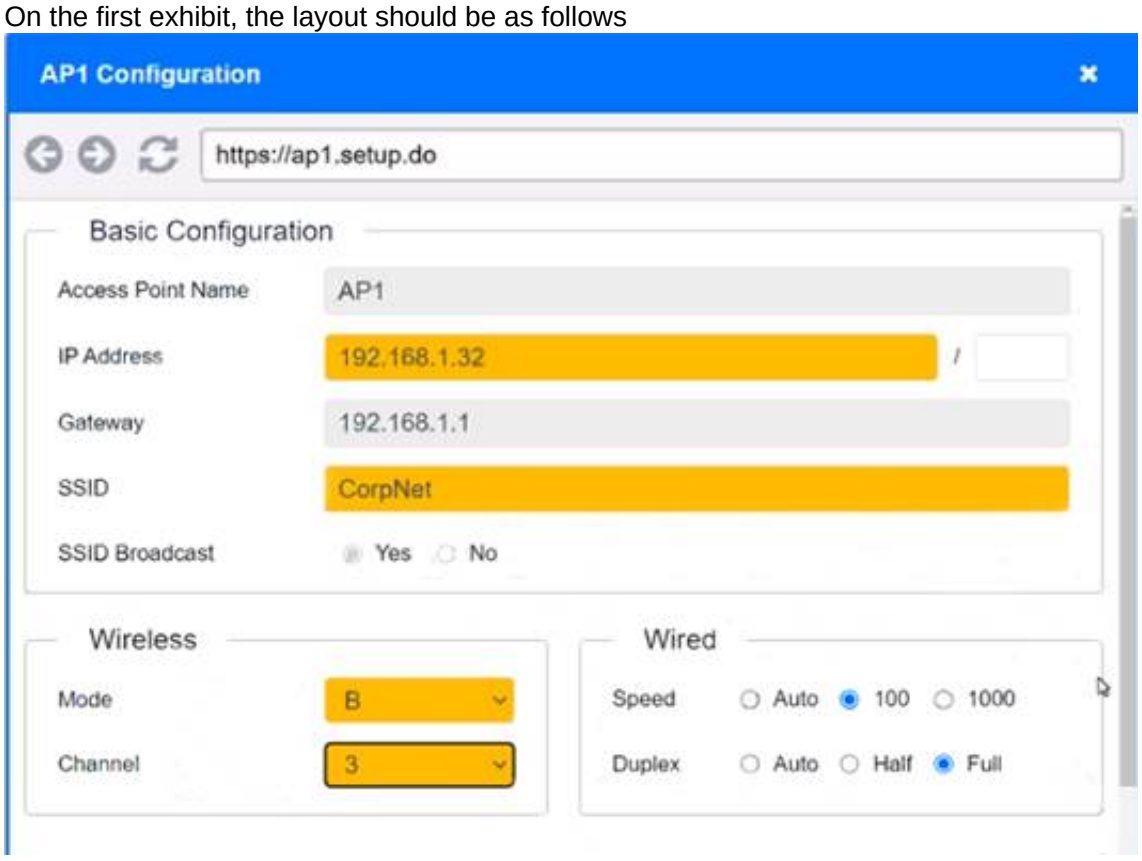
No
Wireless
Mode
B
G
Channel
1
2
3
4
5
6
7
8
9
10
11
Wired
Speed
Auto
100
1000
Duplex
Auto
Half
Full
Security Configuration
Security Settings
None
WEP
WPA
WPA2
WPA2 - Enterprise
Key or Passphrase
Reset to Default
Save
Close

A. Mastered
B. Not Mastered

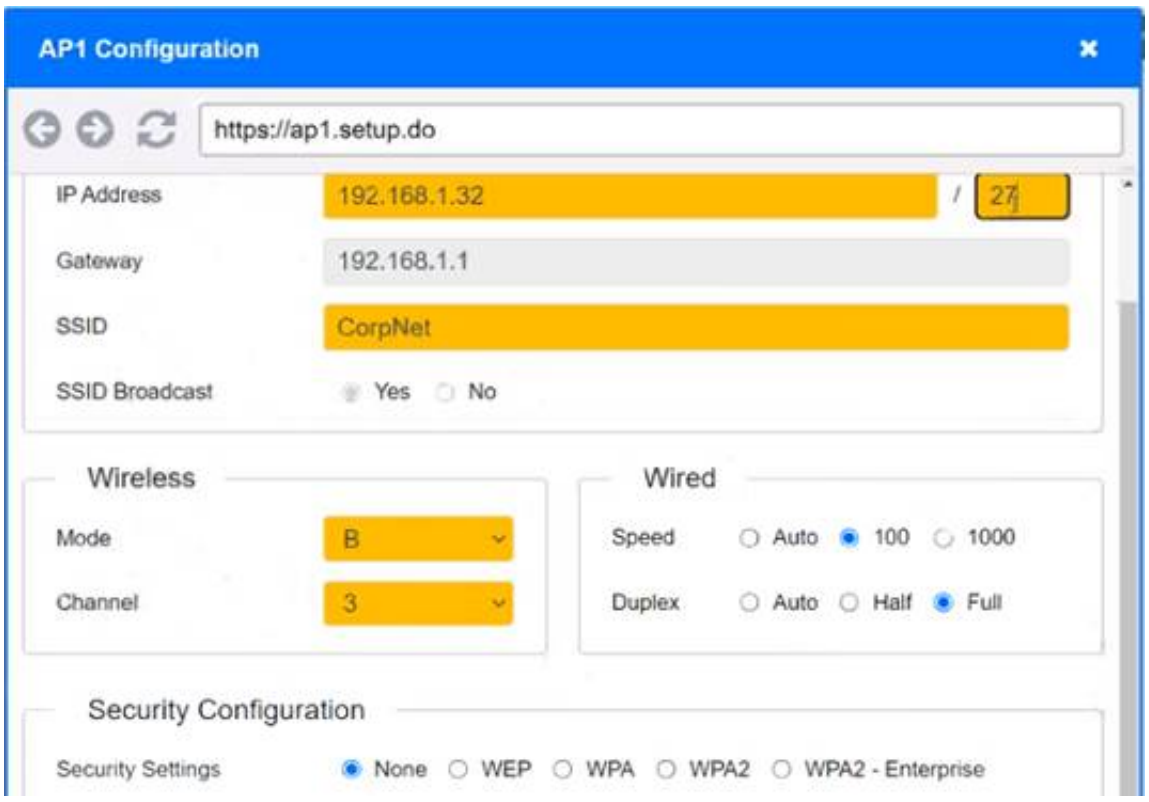
Answer: A

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



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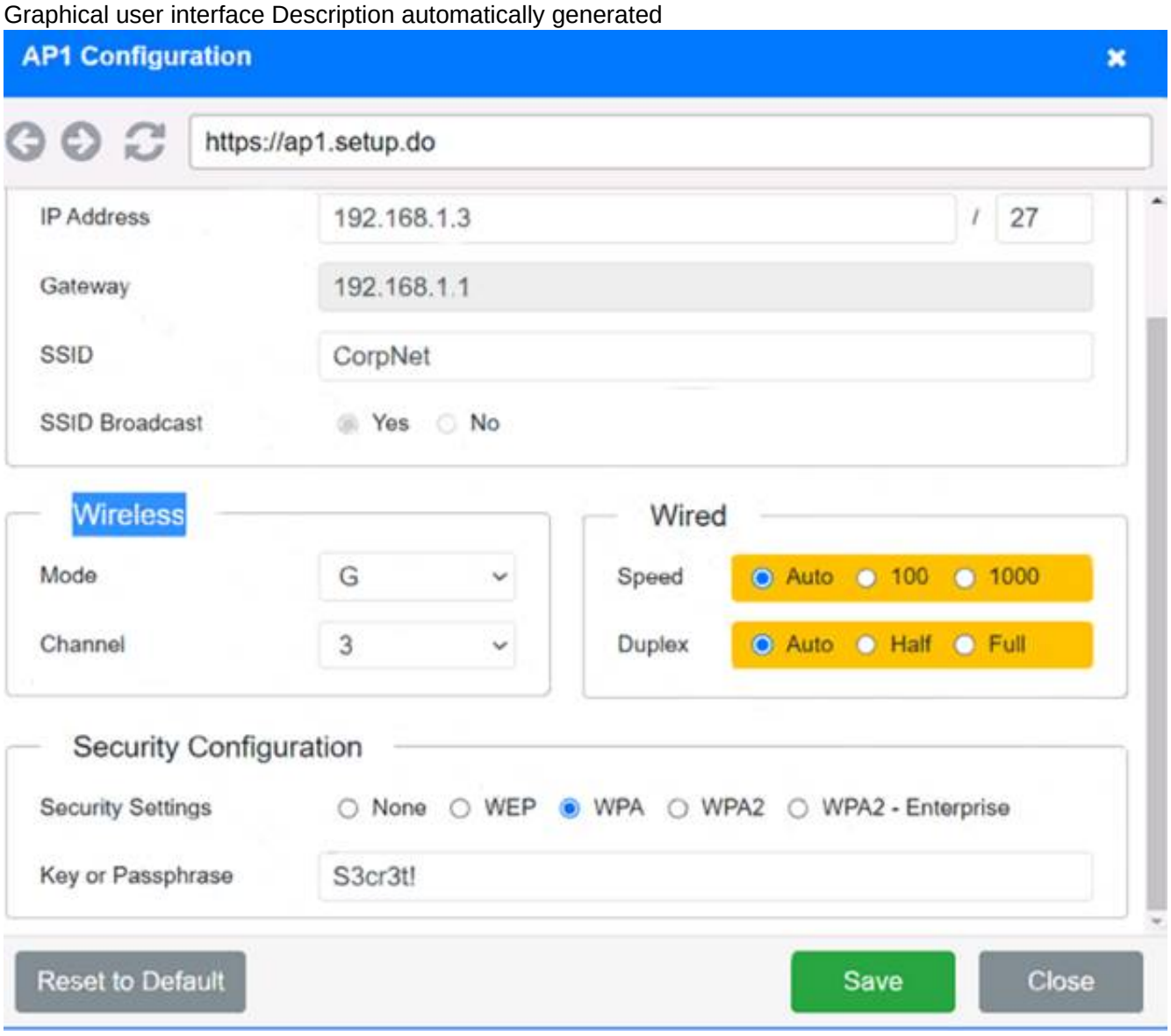

Exhibit 2 as follows Access Point Name AP2
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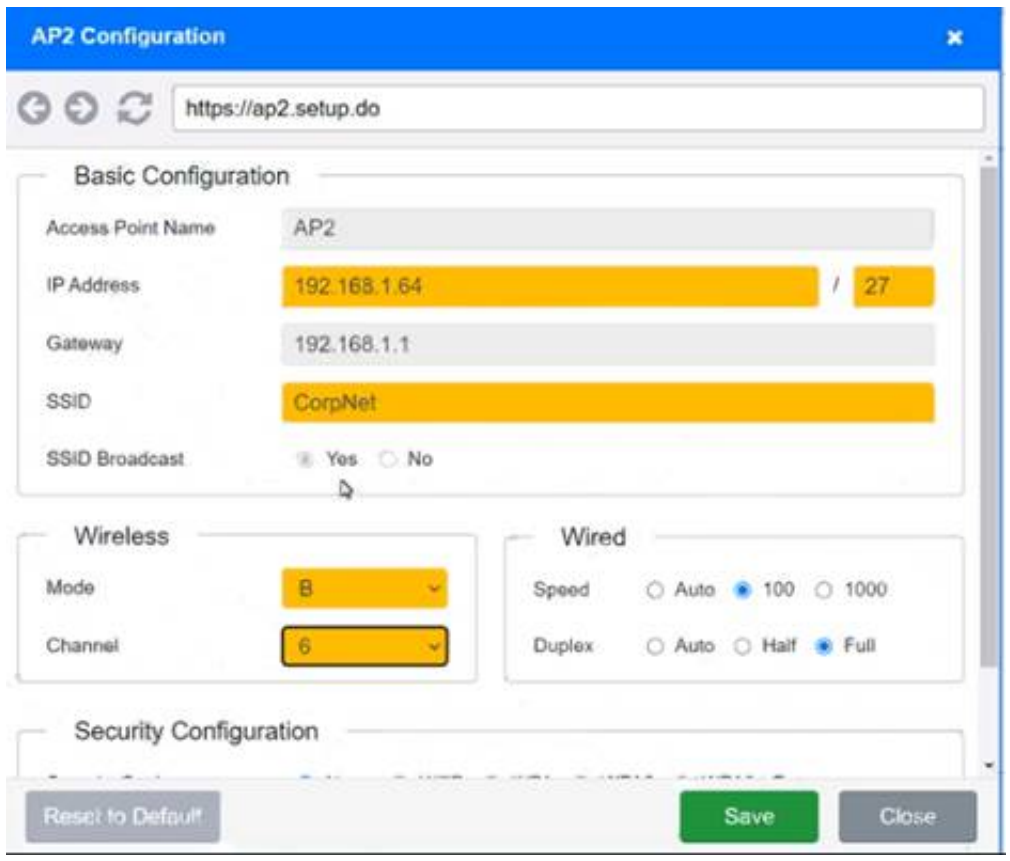

Graphical user interface, text, application, chat or text message Description automatically generated

Graphical user interface Description automatically generated

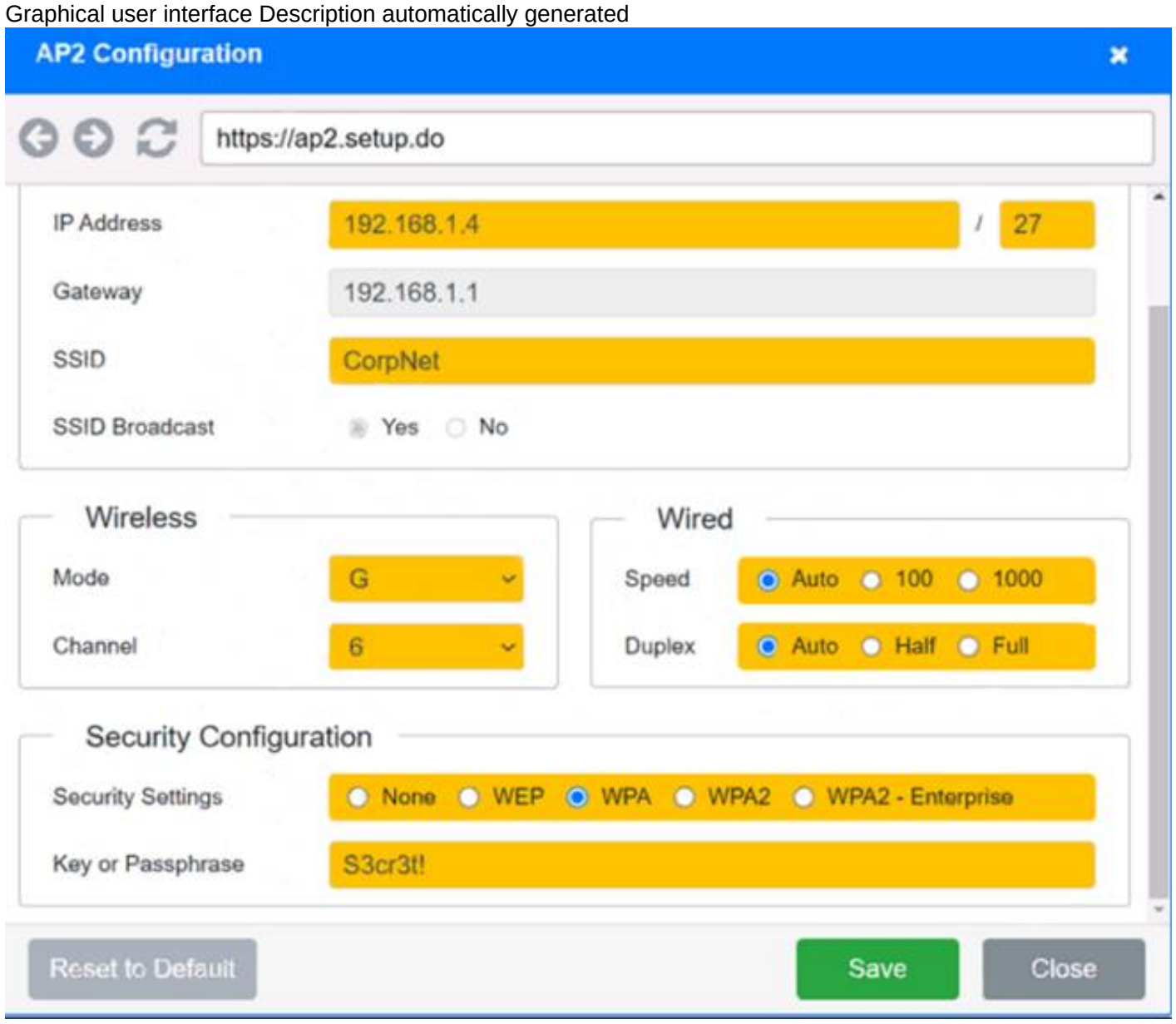

Exhibit 3 as follows Access Point Name AP3
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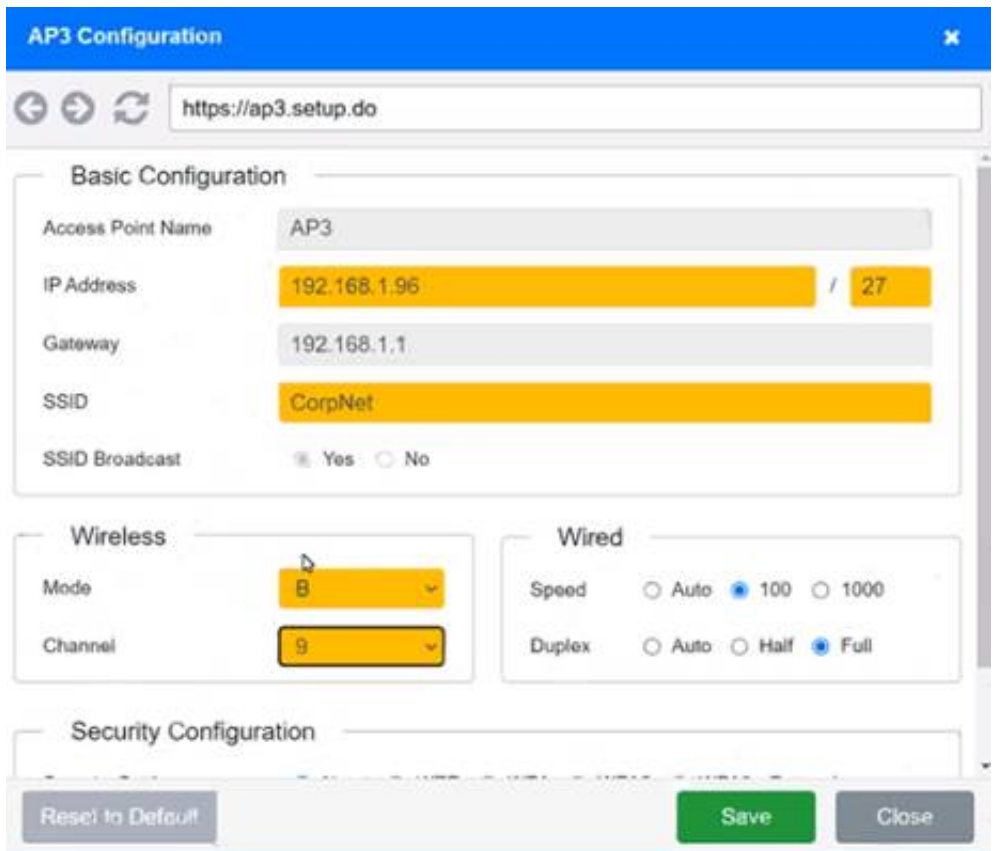

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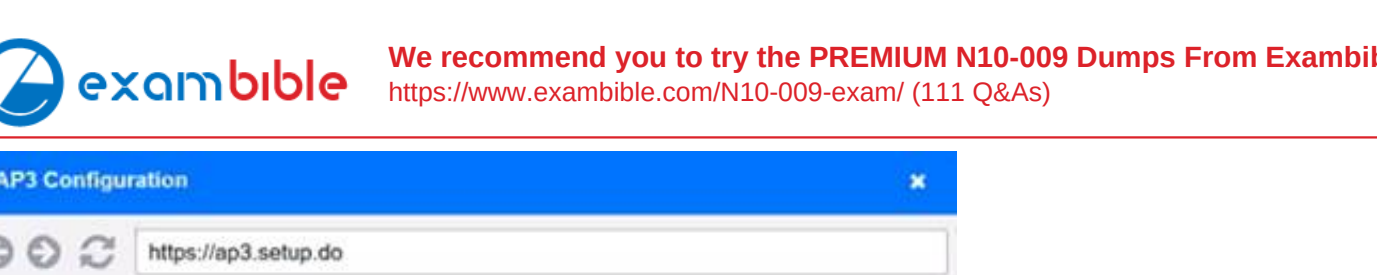
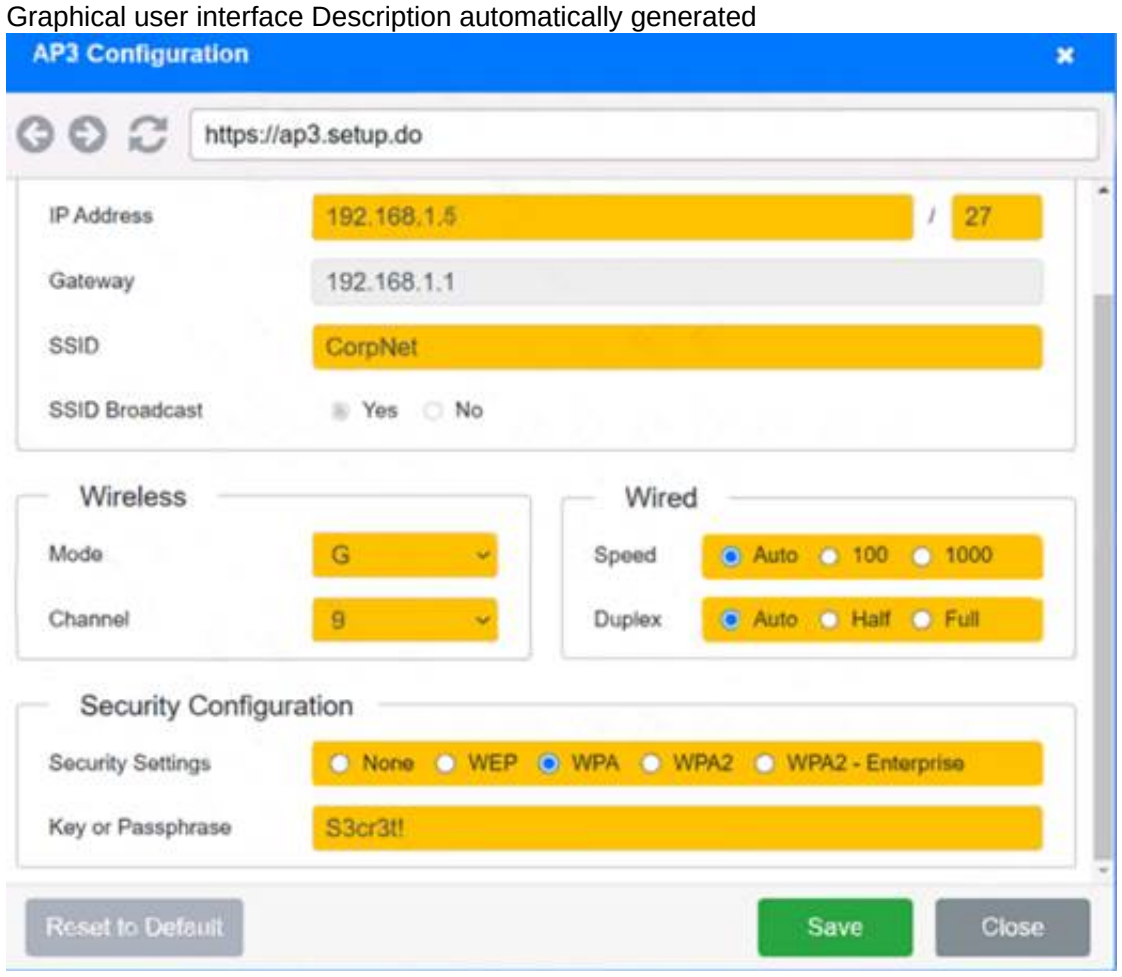


Graphical user interface Description automatically generated



NEW QUESTION 55
- (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 56
- (Exam Topic 1)
Which of the following factors should be considered when evaluating a firewall to protect a datacenter's east-west traffic?

A. Replication traffic between an on-premises server and a remote backup facility
B. Traffic between VMs running on different hosts
C. Concurrent connections generated by Internet DDoS attacks
D. VPN traffic from remote offices to the datacenter's VMs

Answer: B

Explanation:
When evaluating a firewall to protect a datacenter's east-west traffic, it is important to consider traffic between VMs running on different hosts. This type of traffic is referred to as east-west traffic and is often protected by internal firewalls. By implementing firewalls, an organization can protect their internal network against threats such as lateral movement, which can be caused by attackers who have breached a perimeter firewall. References: Network+ Certification Study Guide, Chapter 5: Network Security

NEW QUESTION 57
- (Exam Topic 1)
A user reports being unable to access network resources after making some changes in the office. Which of the following should a network technician do FIRST?

A. Check the system's IP address
B. Do a ping test against the servers
C. Reseat the cables into the back of the PC
D. Ask what changes were made

Answer: D

Explanation:
When a user reports being unable to access network resources after making some changes, the network technician should first ask the user what changes were made. This information can help the technician identify the cause of the issue and determine the appropriate course of action.
References: CompTIA Network+ Certification Study Guide, Sixth Edition by Glen E. Clarke

NEW QUESTION 62
- (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 66
- (Exam Topic 1)
A technician is assisting a user who cannot connect to a network resource. The technician first checks for a link light. According to troubleshooting methodology, this is an example of:

A. using a bottom-to-top approach.
B. establishing a plan of action.
C. documenting a finding.
D. questioning the obvious.

Answer: A

Explanation:
Using a bottom-to-top approach means starting from the physical layer and moving up the OSI model to troubleshoot a network problem. Checking for a link light is a physical layer check that verifies the connectivity of the network cable and device. References:
https://www.professormesser.com/network-plus/n10-007/troubleshooting-methodologies-2/

NEW QUESTION 71
- (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 73
- (Exam Topic 1)
A network technician needs to ensure outside users are unable to telnet into any of the servers at the datacenter. Which of the following ports should be blocked when checking firewall configuration?

A. 22
B. 23
C. 80
D. 3389
E. 8080

Answer: B

Explanation:
Port 23 should be blocked when checking firewall configuration to prevent outside users from telnetting into any of the servers at the datacenter. Port 23 is the default port for Telnet, which is an insecure protocol that allows remote access to servers and network devices. Telnet sends data in clear text, which can be easily intercepted and compromised by attackers. A more secure alternative is SSH, which uses port 22 and encrypts data. References:
https://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13788-3.html

NEW QUESTION 74
- (Exam Topic 1)
A network engineer configured new firewalls with the correct configuration to be deployed to each remote branch. Unneeded services were disabled, and all firewall rules were applied successfully. Which of the following should the network engineer perform NEXT to ensure all the firewalls are hardened successfully?

A. Ensure an implicit permit rule is enabled
B. Configure the log settings on the firewalls to the central syslog server
C. Update the firewalls with current firmware and software
D. Use the same complex passwords on all firewalls

Answer: C

Explanation:
Updating the firewalls with current firmware and software is an important step to ensure all the firewalls are hardened successfully, as it can fix any known vulnerabilities or bugs and provide new features or enhancements. Enabling an implicit permit rule is not a good practice for firewall hardening, as it can allow unwanted traffic to pass through the firewall. Configuring the log settings on the firewalls to the central syslog server is a good practice for monitoring and auditing purposes, but it does not harden the firewalls themselves. Using the same complex passwords on all firewalls is not a good practice for password security, as it can increase the risk of compromise if one firewall is breached. References: CompTIA Network+ Certification Exam Objectives Version 2.0 (Exam Number: N10-006), Domain 3.0 Network Security, Objective 3.3 Given a scenario, implement network hardening techniques.

NEW QUESTION 77
- (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 82
- (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 84
- (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 87
- (Exam Topic 2)
A network technician needs to correlate security events to analyze a suspected intrusion. Which of the following should the technician use?

A. SNMP
B. Log review
C. Vulnerability scanning
D. SIEM

Answer: D

Explanation:
SIEM stands for Security Information and Event Management, which is a tool that collects, analyzes, and correlates data from various network devices and sources to provide alerts and reports on security incidents and events. A network technician can use SIEM to correlate security events to analyze a suspected intrusion, as SIEM can help identify the source, target, method, and impact of an attack, as well as provide recommendations for remediation. References: https://www.comptia.org/blog/what-is-siem

NEW QUESTION 91
- (Exam Topic 2)
Which of the following services can provide data storage, hardware options, and scalability to a third-party company that cannot afford new devices?

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

Answer: B

Explanation:
IaaS stands for Infrastructure as a Service, which is a cloud computing model that provides virtualized computing resources such as servers, storage, and networking over the Internet. IaaS can provide data storage, hardware options, and scalability to a third-party company that cannot afford new devices by allowing them to rent or lease the infrastructure they need from a cloud provider. The company can pay only for what they use and scale up or down as needed. References: https://www.comptia.org/blog/what-is-iaas

NEW QUESTION 92
- (Exam Topic 2)
A network technician is reviewing an upcoming project's requirements to implement IaaS. Which of the following should the technician consider?

A. Software installation processes
B. Type of database to be installed
C. Operating system maintenance
D. Server hardware requirements

Answer: D

Explanation:
IaaS stands for Infrastructure as a Service, which is a cloud computing model that provides virtualized computing resources such as servers, storage, and networking over the Internet. When implementing IaaS, the network technician should consider the server hardware requirements, such as CPU, RAM, disk space, and network bandwidth, that are needed to run the applications and services on the cloud. The other options are not relevant to IaaS, as they are either handled by the cloud provider or by the end-user. References: https://www.comptia.org/blog/what-is-iaas

NEW QUESTION 97
- (Exam Topic 2)

A corporation has a critical system that would cause unrecoverable damage to the brand if it was taken offline. Which of the following disaster recovery solutions should the corporation implement?

A. Full backups
B. Load balancing
C. Hot site
D. Snapshots

Answer: C

Explanation:
A hot site is the disaster recovery solution that the corporation should implement for its critical system that would cause unrecoverable damage to the brand if it was taken offline. A hot site is a fully operational backup site that can take over the primary site's functions in case of a disaster or disruption. A hot site has all the necessary hardware, software, data, network connections, and personnel to resume normal operations with minimal downtime. A hot site is suitable for systems that require high availability and cannot afford any data loss or interruption. References: https://www.enterprisestorageforum.com/management/disaster-recovery-site/ 1

NEW QUESTION 100
- (Exam Topic 2)
A network administrator is downloading a large patch that will be uploaded to several enterprise switches simultaneously during the day's upgrade cycle. Which of the following should the administrator do to help ensure the upgrade process will be less likely to cause problems with the switches?

A. Confirm the patch's MD5 hash prior to the upgrade
B. Schedule the switches to reboot after an appropriate amount of time.
C. Download each switch's current configuration before the upgrade
D. Utilize FTP rather than TFTP to upload the patch

Answer: A

Explanation:
The network administrator should confirm the patch's MD5 hash prior to the upgrade to help ensure the upgrade process will be less likely to cause problems with the switches. MD5 (Message Digest 5) is a cryptographic hash function that produces a 128-bit hash value for any given input. It can be used to verify the integrity and authenticity of a file by comparing its hash value with a known or expected value. If the hash values match, it means that the file has not been corrupted or tampered with during transmission or storage. If the hash values do not match, it means that the file may be damaged or malicious and should not be used for the upgrade. References:
https://www.cisco.com/c/en/us/support/docs/security-vpn/secure-shell-ssh/15292-scp.html

NEW QUESTION 104
- (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 106
- (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 108
- (Exam Topic 2)
A user is having difficulty with video conferencing and is looking for assistance. Which of the following would BEST improve performance?

A. Packet shaping
B. Quality of service
C. Port mirroring
D. Load balancing

Answer: B

Explanation:
Quality of service (QoS) is a mechanism that prioritizes network traffic based on different criteria, such as application type, source and destination address, port number, etc., and allocates bandwidth and resources accordingly. QoS would best improve performance for video conferencing, as it would ensure that video traffic gets higher priority and lower latency than other types of traffic on the network. Packet shaping is a technique that controls the rate or volume of network traffic by delaying or dropping packets that exceed certain thresholds or violate certain policies, which may not improve performance for video conferencing if it causes packet loss or jitter. Port mirroring is a technique that copies traffic from one port to another port on a switch for monitoring or analysis purposes, which does not improve performance for video conferencing at all. Load balancing is a technique that distributes network traffic across multiple servers or devices for improved availability and scalability, which does not

NEW QUESTION 111
- (Exam Topic 2)
An organization wants to implement a method of centrally managing logins to network services. Which of the following protocols should the organization use to allow for authentication, authorization and auditing?

A. MS-CHAP
B. RADIUS
C. LDAPS
D. RSTP

Answer: B

Explanation:
RADIUS (Remote Authentication Dial-In User Service) is a protocol that should be used by the organization to allow for authentication, authorization, and auditing of network services. RADIUS is an AAA (Authentication, Authorization, and Accounting) protocol that manages network access by verifying user credentials, granting access permissions, and logging user activities. RADIUS uses a client-server model where a RADIUS client (such as a router, switch, or VPN server) sends user information to a RADIUS server (such as an authentication server) for verification and authorization. The RADIUS server can also send accounting information to another server for billing or reporting purposes. References:
https://www.cisco.com/c/en/us/support/docs/security-vpn/remote-authentication-dial-user-service-radius/13838

NEW QUESTION 115
- (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 119
- (Exam Topic 2)
A network technician has multimode fiber optic cable available in an existing IDF. Which of the following Ethernet standards should the technician use to connect the network switch to the existing fiber?

A. 10GBaseT
B. 1000BaseT
C. 1000BaseSX
D. 1000BaseLX

Answer: C

Explanation:
1000BaseSX is an Ethernet standard that should be used to connect the network switch to the existing multimode fiber optic cable. 1000BaseSX is a Gigabit Ethernet standard that uses short-wavelength laser (850 nm) over multimode fiber optic cable. It can support distances up to 550 meters depending on the cable type and quality. It is suitable for short-range network segments such as campus or building backbone networks. References:
https://www.cisco.com/c/en/us/products/collateral/interfaces-modules/gigabit-ethernet-gbic-sfp-modules/produc

NEW QUESTION 121
- (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 126
- (Exam Topic 2)
Which of the following is a system that is installed directly on a server's hardware and abstracts the hardware from any guest machines?

A. Storage array
B. Type 1 hypervisor
C. Virtual machine
D. Guest QS

Answer: B

Explanation:
A type 1 hypervisor is a system that is installed directly on a server’s hardware and abstracts the hardware from any guest machines. A hypervisor is a software layer that enables virtualization by creating and managing virtual machines (VMs) on a physical host. A type 1 hypervisor, also known as a bare-metal hypervisor or a native hypervisor, runs directly on the host’s hardware without requiring an underlying operating system (OS). It provides better performance and security than a type 2 hypervisor, which runs on top of an existing OS and relies on it for hardware access. References:
https://www.vmware.com/topics/glossary/content/hypervisor

NEW QUESTION 128
- (Exam Topic 2)
Which of the following security devices would be BEST to use to provide mechanical access control to the MDF/IDF?

A. A smart card
B. A key fob
C. An employee badge
D. A door lock

Answer: D

Explanation:
A door lock would be the best security device to use to provide mechanical access control to the MDF/IDF. A door lock is a device that prevents unauthorized access to a physical area by requiring a key, a code, a card, a biometric scan, or a combination of these factors to open it. A door lock can provide mechanical access control to the MDF/IDF, which are rooms that house network equipment such as switches, routers, servers, or patch panels. A door lock can prevent unauthorized persons from tampering with or stealing the network equipment or data. References:
https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Data_Center/DC_Infra2_5/DCInfra_6.html

NEW QUESTION 133
- (Exam Topic 2)
A technician is troubleshooting a workstation's network connectivity and wants to confirm which switchport corresponds to the wall jack the PC is using Which of the following concepts would BEST help the technician?

A. Consistent labeling
B. Change management
C. Standard work instructions
D. Inventory management
E. Network baseline

Answer: A

Explanation:
Consistent labeling would be the concept that would best help the technician to confirm which switchport corresponds to the wall jack the PC is using. Consistent labeling is a practice of using standardized and descriptive labels for network devices, ports, cables, jacks, and other components. It can help with identifying, locating, and troubleshooting network issues. For example, a technician can use consistent labeling to trace a cable from a PC to a wall jack, and then from a patch panel to a switchport. References: https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Data_Center/DC_Infra2_5/DCInfra_6.html

NEW QUESTION 136
- (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 140
- (Exam Topic 2)
A network administrator is required to ensure that auditors have read-only access to the system logs, while systems administrators have read and write access to the system logs, and operators have no access to the system logs. The network administrator has configured security groups for each of these functional categories. Which of the following security capabilities will allow the network administrator to maintain these permissions with the LEAST administrative effort?

A. Mandatory access control
B. User-based permissions
C. Role-based access
D. Least privilege

Answer: C

Explanation:
Role-based access is a security capability that assigns permissions to users based on their roles or functions within an organization. It allows the network administrator to maintain these permissions with the least administrative effort, as they only need to configure the security groups for each role once and then assign users to those groups. Mandatory access control is a security capability that assigns permissions based on security labels or classifications, which requires more administrative effort to maintain. User-based permissions are a security capability that assigns permissions to individual users, which is not scalable or efficient for large organizations. Least privilege is a security principle that states that users should only have the minimum level of access required to perform their tasks, which is not a security capability by itself.

NEW QUESTION 141
- (Exam Topic 2)
A network technician is configuring a new firewall for a company with the necessary access requirements to be allowed through the firewall. Which of the following would normally be applied as the LAST rule in the firewall?

A. Secure SNMP
B. Port security
C. Implicit deny
D. DHCP snooping

Answer: C

Explanation:
Implicit deny is a firewall rule that blocks all traffic that is not explicitly allowed by other rules. Implicit deny is usually applied as the last rule in the firewall to ensure that only the necessary access requirements are allowed through the firewall and that any unwanted or malicious traffic is rejected. Implicit deny can also provide a default security policy and a baseline for auditing and logging purposes.
Secure SNMP is a protocol that allows network devices to send event messages to a centralized server or console for logging and analysis. Secure SNMP can be used to monitor and manage the status, performance, and configuration of network devices. Secure SNMP can also help to detect and respond to potential problems or faults on the network. However, secure SNMP is not a firewall rule; it is a network management protocol.
Port security is a feature that allows a switch to restrict the devices that can connect to a specific port based on their MAC addresses. Port security can help to prevent unauthorized access, spoofing, or MAC flooding attacks on the switch. However, port security is not a firewall rule; it is a switch feature.
DHCP snooping is a feature that allows a switch to filter DHCP messages and prevent rogue DHCP servers from assigning IP addresses to devices on the network. DHCP snooping can help to prevent IP address conflicts, spoofing, or denial-of-service attacks on the network. However, DHCP snooping is not a firewall rule; it is a switch feature.

NEW QUESTION 145
- (Exam Topic 2)
A network administrator has been directed to present the network alerts from the past week to the company's executive staff. Which of the following will provide the BEST collection and presentation of this data?

A. A port scan printout
B. A consolidated report of various network devices
C. A report from the SIEM tool
D. A report from a vulnerability scan done yesterday

Answer: C

Explanation:
SIEM stands for Security Information and Event Management, which is a tool that collects, analyzes, and correlates data from various network devices and sources to provide alerts and reports on security incidents and events. A report from the SIEM tool can provide a comprehensive overview of the network alerts from the past week to the executive staff, highlighting any potential threats, vulnerabilities, or anomalies. References: https://www.comptia.org/blog/what-is-siem

NEW QUESTION 148
- (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 151
- (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 155
- (Exam Topic 2)
During the security audit of a financial firm the Chief Executive Officer (CEO) questions why there are three employees who perform very distinct functions on the server. There is an administrator for creating users another for assigning the users lo groups and a third who is the only administrator to perform file rights assignment Which of the following mitigation techniques is being applied'

A. Privileged user accounts
B. Role separation
C. Container administration
D. Job rotation

Answer: B

Explanation:
Role separation is a security principle that involves dividing the tasks and privileges for a specific business process among multiple users. This reduces the risk of fraud and errors, as no one user has complete control over the process. In the scenario, there are three employees who perform very distinct functions on the server, which is an example of role separation. References: https://hyperproof.io/resource/segregation-of-duties/

NEW QUESTION 159
- (Exam Topic 2)
A small, family-run business uses a single SOHO router to provide Internet and WiFi to its employees At the start of a new week, employees come in and find their usual WiFi network is no longer available, and there is a new wireless network to which they cannot connect. Given that information, which of the following should have been done to avoid this situation'

A. The device firmware should have been kept current.
B. Unsecure protocols should have been disabled.
C. Parental controls should have been enabled

D. The default credentials should have been changed

Answer: D

Explanation:
The default credentials are the username and password that come with a device or service when it is first installed or configured. They are often easy to guess or find online, which makes them vulnerable to unauthorized access or attacks. The default credentials should be changed to something unique and strong as soon as possible to avoid this situation. If the default credentials were not changed, someone could have accessed the SOHO router and changed the WiFi settings without the employees' knowledge. References: https://www.comptia.org/blog/network-security-basics-6-easy-ways-to-protect-your-network

NEW QUESTION 160
- (Exam Topic 3)
A technician is consolidating a topology with multiple SSIDs into one unique SSID deployment. Which of the following features will be possible after this new configuration?

A. Seamless roaming
B. Basic service set
C. WPA
D. MU-MIMO

Answer: A

NEW QUESTION 165
- (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 166
- (Exam Topic 3)
Which of the following has the capability to centrally manage configuration, logging, and firmware versioning for distributed devices?

A. WLAN controller
B. Load balancer
C. SIEM solution
D. Syslog server

Answer: A

Explanation:
A WLAN controller is a device that manages and controls multiple wireless access points (WAPs) in a wireless LAN (WLAN). A WLAN controller has the capability to centrally manage configuration, logging, and firmware versioning for distributed WAPs. A WLAN controller can also provide load balancing, security, and quality of service (QoS) for the WLAN.
References: Network+ Study Guide Objective 3.1: Explain the purposes and use cases for advanced networking devices.

NEW QUESTION 168
- (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 171
- (Exam Topic 3)
Network connectivity in an extensive forest reserve was achieved using fiber optics. A network fault was detected, and now the repair team needs to check the integrity of the fiber cable. Which of me following actions can reduce repair time?

A. Using a tone generator and wire map to determine the fault location
B. Using a multimeter to locate the fault point
C. Using an OTDR In one end of the optic cable to get the liber length information
D. Using a spectrum analyzer and comparing the current wavelength with a working baseline

Answer: C

NEW QUESTION 173
- (Exam Topic 3)
A network administrator is installing a new server in the data center. The administrator is concerned the amount of traffic generated will exceed 1GB. and higher-throughput NiCs are not available for installation. Which of the following is the BEST solution for this issue?

A. Install an additional NIC and configure LACP.
B. Remove some of the applications from the server.
C. Configure the NIC to use fun duplex
D. Configure port mirroring to send traffic to another server.
E. Install a SSD to decrease data processing time.

Answer: A

NEW QUESTION 177
- (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 178
- (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 182
- (Exam Topic 3)
Which of the following is an example of on-demand scalable hardware that is typically housed in the vendor's data center?

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

Answer: B

NEW QUESTION 183
- (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 188
- (Exam Topic 3)
Which of the following devices Is used to configure and centrally manage access points Installed at different locations?

A. Wireless controller
B. Load balancer
C. Proxy server
D. VPN concentrator

Answer: A

Explanation:
Access points (APs) can be configured and centrally managed using a wireless LAN controller (WLC). A WLC is a device that connects to multiple APs and provides centralized management and control of those APs. The WLC can be used to configure settings such as wireless network parameters, security settings, and quality of service (QoS) policies. Additionally, the WLC can be used to monitor the status of connected APs, track client connections, and gather statistics on network usage. Some vendors such as Cisco, Aruba, Ruckus, etc. provide wireless LAN controllers as part of their wireless networking solutions.

NEW QUESTION 192
- (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 194
- (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 196
- (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 200
- (Exam Topic 3)
Which of the following can be used to limit the ability of devices to perform only HTTPS connections to an internet update server without exposing the devices to the public internet?

A. Allow connections only to an internal proxy server.
B. Deploy an IDS system and place it in line with the traffic.

C. Create a screened network and move the devices to it.
D. Use a host-based network firewall on each device.

Answer: A

Explanation:
An internal proxy server is a server that acts as an intermediary between internal devices and external servers on the internet. An internal proxy server can be used to limit the ability of devices to perform only HTTPS connections to an internet update server by filtering and forwarding the requests and responses based on predefined rules or policies. An internal proxy server can also prevent the devices from being exposed to the public internet by hiding their IP addresses and providing a layer of security and privacy.

NEW QUESTION 204
- (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 208
- (Exam Topic 3)
Many IP security cameras use RTSP to control media playback. Which of the following default transport layer port numbers does RTSP use?

A. 445
B. 554
C. 587
D. 5060

Answer: B

Explanation:
RTSP stands for Real Time Streaming Protocol and is an application-level network protocol designed for controlling media playback on streaming media servers. RTSP uses the default transport layer port number 554 for both TCP and UDP1. Port 445 is used for SMB (Server Message Block), a protocol for file and printer sharing. Port 587 is used for SMTP (Simple Mail Transfer Protocol), a protocol for sending email messages. Port 5060 is used for SIP (Session Initiation Protocol), a protocol for initiating and managing multimedia sessions.
References: 1 Real Time Streaming Protocol - Wikipedia (https://en.wikipedia.org/wiki/Real_Time_Streaming_Protocol)

NEW QUESTION 213
- (Exam Topic 3)
An ISP is providing Internet to a retail store and has terminated its point of connection using a standard Cat 6 pin-out Which of me following terminations should the technician use when running a cable from the ISP's port lo the front desk?

A. F-type connector
B. TIA/E1A-56S-B
C. LC
D. SC

Answer: B

Explanation:
The termination that the technician should use when running a cable from the ISP’s port to the front desk is B. TIA/EIA-568-B. This is a standard pin-out for Cat 6 cables that is used for Ethernet and other network physical layers1. It specifies how to arrange the eight wires in an RJ45 connector, which is a common type of connector for network cables.

NEW QUESTION 217
- (Exam Topic 3)
A help desk technician is concerned that a client's network cable issues may be causing intermittent connectivity. Which of the following would help the technician determine if this is the issue?

A. Run the show interface command on the switch
B. Run the tracerouute command on the server
C. Run iperf on the technician's desktop
D. Ping the client's computer from the router
E. Run a port scanner on the client's IP address

Answer: A

Explanation:

To determine if a client's network cable issues may be causing intermittent connectivity, the help desk technician can run the show interface command on the switch. This command allows the technician to view the status and statistics of the various interfaces on the switch, including the physical link status and the number of transmitted and received packets. If the interface is experiencing a large number of errors or dropped packets, this could indicate a problem with the network cable or with the connection between the client's device and the switch.
"Cisco routers and switches have a show interfaces IOS command that provides interface statistics/status information, including link state (up/down), speed/duplex, send/receive traffic, cyclic redundancy checks (CRCs), and protocol packet and byte counts."

NEW QUESTION 222
- (Exam Topic 3)
An administrator is setting up a multicast server on a network, but the firewall seems to be dropping the traffic. After logging in to the device, me administrator sees me following entries:

Rule	Action	Source	Destination	Port
1	Deny	Any	172.30.10.50	Any
2	Deny	Any	232.1.4.9	Any
3	Deny	Any	242.9.15.4	Any
4	Deny	Any	175.50.10.10	Any

Which of the following firewall rules is MOST likely causing the issue?

A. Rule 1
B. Rule 2
C. Rule 3
D. Rule 4

Answer: A

NEW QUESTION 223
- (Exam Topic 3)
Switch 3 was recently added lo an existing stack to extend connectivity to various parts of the network. After the update, new employees were not able to print to the main networked copiers from then workstations. Following are the port configurations for the switch stack in question:

Switch 1:

	Ports 1–12	Ports 13–24	Ports 25–36	Ports 37–44	Ports 45–48
Description	Workstations	Printers	Workstations	Wireless APs	Uplink
VLAN	20	60	20	80	20/60/80
Duplex	Full	Full	Full	Full	Full
Status	Active	Active	Active	Active	Active

Switch 2:

	Ports 1–12	Ports 13–24	Ports 25–36	Ports 37–44	Ports 45–48
Description	Workstations	Printers	Workstations	Wireless APs	Uplink
VLAN	20	60	20	80	20/60/80
Duplex	Full	Full	Full	Full	Full
Status	Active	Active	Shut down	Active	Active

Switch 3:

	Ports 1–12	Ports 13–24	Ports 25–36	Ports 37–44	Ports 45–48
Description	Workstations	Printers	Workstations	Wireless APs	Uplink
VLAN	20	80	20	80	20/60/80
Duplex	Full	Full	Full	Full	Full
Status	Active	Shut down	Shut down	Shut down	Active

Which of the following should be configured to resolve the issue? (Select TWO).

A. Enable the printer ports on Switch 3.
B. Reconfigure the duplex settings on the printer ports on Switch 3.
C. Reconfigure the VLAN on an printer ports to VLAN 20.
D. Enable all ports that are shut down on me stack.
E. Reconfigure me VLAN on the printer ports on Switch 3.
F. Enable wireless APs on Switch 3.

Answer: AE

NEW QUESTION 224
- (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 229
- (Exam Topic 3)
A technician needs to configure a routing protocol for an internet-facing edge router. Which of the following routing protocols will the technician MOST likely use?

A. BGP
B. RIPv2
C. OSPF
D. EIGRP

Answer: A

NEW QUESTION 231
- (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 234
- (Exam Topic 3)
Which of the following protocols can be routed?

A. FCoE
B. Fibre Channel
C. iSCSI
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 237
- (Exam Topic 3)
A security administrator is trying to prevent incorrect IP addresses from being assigned to clients on the network. Which of the following would MOST likely prevent this and allow the network to continue to operate?

A. Configuring DHCP snooping on the switch
B. Preventing broadcast messages leaving the client network
C. Blocking ports 67/68 on the client network
D. Enabling port security on access ports

Answer: A

Explanation:
To prevent incorrect IP addresses from being assigned to clients on the network and allow the network to continue to operate, the security administrator should consider configuring DHCP (Dynamic Host Configuration Protocol) snooping on the switch. DHCP snooping is a security feature that is used to prevent unauthorized DHCP servers from operating on a network. It works by allowing the switch to monitor and validate DHCP traffic on the network, ensuring that only legitimate DHCP messages are forwarded to clients. This can help to prevent incorrect IP addresses from being assigned to clients, as it ensures that only authorized DHCP servers are able to provide IP addresses to clients on the network.

NEW QUESTION 242

- (Exam Topic 3)
A user calls the IT department to report being unable to log in after locking the computer The user resets the password, but later in the day the user is again unable to log in after locking the computer Which of the following attacks against the user IS MOST likely taking place?

A. Brute-force
B. On-path
C. Deauthentication
D. Phishing

Answer: A

NEW QUESTION 247
- (Exam Topic 3)
A network technician receives a report about a performance issue on a client PC that is connected to port 1/3 on a network switch. The technician observes the following configuration output from the switch:

1/1	Client PC	Connected	Full	1000
1/2	Client PC	Connected	Full	1000
1/3	Client PC	Connected	Full	10

Which of the following is a cause of the issue on port 1/3?

A. Speed
B. Duplex
C. Errors
D. VLAN

Answer: A

NEW QUESTION 249
- (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 250
- (Exam Topic 3)
A company cell phone was stolen from a technician's vehicle. The cell phone has a passcode, but it contains sensitive information about clients and vendors. Which of the following should also be enabled?

A. Factory reset
B. Autolock
C. Encryption
D. Two-factor authentication

Answer: C

NEW QUESTION 252
- (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 254
- (Exam Topic 3)

The Chief Executive Officer of a company wants to ensure business operations are not disrupted in the event of a disaster. The solution must have fully redundant equipment, real-time synchronization, and zero data loss. Which Of the following should be prepared?

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

Answer: C

Explanation:
A hot site is a backup site that is fully equipped and ready to take over the operations of the primary site in the event of a disaster. A hot site has real-time synchronization with the primary site and can provide zero data loss. A hot site is the most expensive and reliable option for disaster recovery.
References: Network+ Study Guide Objective 5.3: Explain common scanning, monitoring and patching processes and summarize their expected outputs.

NEW QUESTION 258
- (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 260
- (Exam Topic 3)
A network technician is having issues connecting an loT sensor to the internet The WLAN settings were enabled via a custom command line, and a proper IP address assignment was received on the wireless interlace. However, when trying to connect to the internet, only HTTP redirections are being received when data Is requested. Which of the following will point to the root cause of the Issue?

A. Verifying if an encryption protocol mismatch exists.
B. Verifying If a captive portal is active for the WLAN.
C. Verifying the minimum RSSI for operation in the device's documentation
D. Verifying EIRP power settings on the access point.

Answer: C

Explanation:
A captive portal is a web page that is displayed to a user before they can access the internet or other network resources. This is often used in public or guest networks to present users with a login or terms and conditions page before they can access the internet. If a captive portal is active on the WLAN, it would explain why the IoT sensor is only receiving HTTP redirections when trying to connect to the internet.

NEW QUESTION 265
- (Exam Topic 3)
Which of the following is considered a physical security detection device?

A. Cameras
B. Biometric readers
C. Access control vestibules
D. Locking racks

Answer: A

NEW QUESTION 270
- (Exam Topic 3)
An administrator would like to allow Windows clients from outside me office to access workstations without using third-party software. Which or the following access methods would meet this requirement?

A. Remote desktop gateway
B. Spit tunnel
C. Site-to-site VPN
D. VNC

Answer: A

Explanation:
To allow Windows clients from outside the office to access workstations without using third-party software, the administrator can use the Remote Desktop Protocol (RDP). RDP is a built-in feature of the Windows operating system that allows users to remotely connect to and control other Windows computers over a network connection.

To use RDP, the administrator will need to enable the Remote Desktop feature on the workstations that need to be accessed, and ensure that the appropriate firewall rules are in place to allow RDP traffic to pass through. The administrator will also need to provide the remote users with the necessary credentials to access the workstations.
Once RDP is set up and configured, the remote users can use the Remote Desktop client on their own computers to connect to the workstations and access them as if they were physically present in the office. This allows the administrator to provide remote access to the workstations without the need for any additional software or third-party tools.

NEW QUESTION 274
- (Exam Topic 3)
Which of the following can be used to decrease latency during periods of high utilization of a firewall?

A. Hot site
B. NIC teaming
C. HA pair
D. VRRP

Answer: B

Explanation:
NIC Teaming, also known as load balancing and failover (LBFO), allows multiple network adapters on a computer to be placed into a team for the following purposes: (https://www.bing.com/search?q=what+is+nic+teaming+used+for%3F&form=QBLH&sp=-1&pq=what+is+nic

NEW QUESTION 277
- (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 280
- (Exam Topic 3)
Which of the following is used when a workstation sends a DHCP broadcast to a server on another LAN?

A. Reservation
B. Dynamic assignment
C. Helper address
D. DHCP offer

Answer: C

Explanation:
A helper address is an IP address that is configured on a router interface to forward DHCP broadcast messages to a DHCP server on another LAN. A DHCP broadcast message is a message that a workstation sends when it needs to obtain an IP address from a DHCP server. Since broadcast messages are not routed across different networks, a helper address is needed to relay the DHCP broadcast message to the DHCP server on another network. References: https://www.comptia.org/training/books/network-n10-008-study-guide (page 199)

NEW QUESTION 285
- (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 289
- (Exam Topic 3)
An AP uses a 98ft (30m) Cat 6 cable to connect to an access switch. The cable is wired through a duct close to a three-phase motor installation. Anytime the three-phase is turned on, all users connected to the switch experience high latency on the network. Which Of the following is MOST likely the cause Of the issue?

A. Interference
B. Attenuation
C. Open circuit
D. Short circuit

Answer: A

Explanation:
Interference is a phenomenon that occurs when unwanted signals or noise affect the transmission or reception of data signals on a network. Interference can cause network issues such as high latency, low throughput, packet loss, or errors. Interference can be caused by various sources, such as electromagnetic fields, radio waves, power lines, or electrical devices. In this scenario, the three-phase motor installation is a source of interference that affects the Cat 6 cable that connects the AP to the access switch. The cable is wired through a duct close to the motor installation, which exposes it to the electromagnetic fields generated by the motor. Anytime the motor is turned on, the interference causes high latency for all users connected to the switch.

NEW QUESTION 290
- (Exam Topic 3)
An administrator notices that after contact with several switches in an MDF they failed due to electrostatic discharge. Which of the Mowing sensors should the administrator deploy to BEST monitor static electricity conditions in the MDF?

A. Temperature
B. Humidity
C. Smoke
D. Electrical

Answer: B

Explanation:
"Humidity control prevents the buildup of static electricity and reduces the chances of electronic components becoming vulnerable to damage from electrostatic shock; not only can very low humidity lead to increased static electricity, but it can also contribute to health problems, such as skin irritation."

NEW QUESTION 294
- (Exam Topic 3)
Which of the following topologies is designed to fully support applications hosted in on-premises data centers, public or private clouds, and SaaS services?

A. SDWAN
B. MAN
C. PAN
D. MPLS

Answer: A

NEW QUESTION 295
- (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 298
- (Exam Topic 3)
A network administrator is troubleshooting a client's device that cannot connect to the network. A physical inspection of the switch shows the RJ45 is connected. The NIC shows no activity lights. The network administrator moves the device to another location and connects to the network without issues. Which Of the following tools would be the BEST option for the network administrator to use to further troubleshoot?

A. Tone generator
B. Multimeter

C. Optical time-domain reflectometer
D. Cable tester

Answer: D

Explanation:
A cable tester is a tool that can verify the integrity and functionality of a network cable. It can measure the electrical characteristics of the cable, such as resistance, capacitance, and impedance, and detect any faults or defects, such as shorts, opens, or crosstalk. A cable tester can help the network administrator troubleshoot the problem by determining if the cable is faulty or not. A tone generator is a tool that can send an audible signal through a cable to help locate and identify it. A multimeter is a tool that can measure voltage, current, and resistance of electrical circuits. An optical time-domain reflectometer (OTDR) is a tool that can test the quality and length of fiber optic cables.
References: CompTIA Network+ Certification Exam Objectives Version 7.0 (N10-007), Objective 2.3: Given a scenario, use the appropriate tool to support wired or wireless networks.

NEW QUESTION 303
- (Exam Topic 3)
A Wi-Fi network was recently deployed in a new, multilevel budding. Several issues are now being reported related to latency and drops in coverage. Which of the following is the FIRST step to troubleshoot the issues?

A. Perform a site survey.
B. Review the AP placement
C. Monitor channel utilization.
D. Test cable attenuation.

Answer: A

NEW QUESTION 306
- (Exam Topic 3)
An ISP configured an internet connection to provide 20Mbps, but actual data rates are occurring at 10Mbps and causing a significant delay in data transmission. Which of the following specifications should the ISP check?

A. Throughput
B. Latency
C. Bandwidth
D. Jitter

Answer: A

Explanation:
Throughput is the actual amount of data that can be transferred over a network in a given time. Throughput can be affected by various factors such as congestion, interference, errors, or hardware limitations. If the throughput is lower than the configured internet connection speed, it can cause a significant delay in data transmission. The ISP should check the throughput and identify the source of the problem.
References: Network+ Study Guide Objective 2.2: Explain the concepts and characteristics of routing and switching.

NEW QUESTION 307
- (Exam Topic 3)
Which of the following is the NEXT step to perform network troubleshooting after identifying an issue?

A. Implement a solution.
B. Establish a theory.
C. Escalate the issue.
D. Document the findings.

Answer: B

Explanation:
1 Identify the Problem. 2 Develop a Theory.
3 Test the Theory. 4 Plan of Action.
5 Implement the Solution.
6 Verify System Functionality. 7 Document the Issue.

NEW QUESTION 310
- (Exam Topic 3)
A new student is given credentials to log on to the campus Wi-Fi. The student stores the password in a laptop and is able to connect; however, the student is not able to connect with a phone when only a short distance from the laptop. Given the following information:

Signal strength	90%
Coverage	80%
Interference	15%
Number of connection attempts	10

Which of the following is MOST likely causing this connection failure?

A. Transmission speed
B. Incorrect passphrase
C. Channel overlap
D. Antenna cable attenuation/signal loss

Answer: B

NEW QUESTION 311
- (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 313
- (Exam Topic 3)
A network engineer receives the following when connecting to a switch to configure a port:

```
telnet 10.1.200.1
Connecting to 10.1.200.1...Could not open connection to the host, on port 23: Connect failed.
```

Which of the following is the MOST likely cause for the failure?

A. The network engineer is using the wrong protocol
B. The network engineer does not have permission to configure the device
C. SNMP has been secured with an ACL
D. The switchport the engineer is trying to configure is down

Answer: D

NEW QUESTION 316
- (Exam Topic 3)
Which of the following types of attacks can be used to gain credentials by setting up rogue APs with identical corporate SSIDs?

A. VLAN hopping
B. Evil twin
C. DNS poisoning
D. Social engineering

Answer: B

NEW QUESTION 319
- (Exam Topic 3)
Two users on a LAN establish a video call. Which of the following OSI model layers ensures the initiation coordination, and termination of the call?

A. Session
B. Physical
C. Transport
D. Data link

Answer: A

Explanation:
The OSI model layer that ensures the initiation, coordination, and termination of a video call is the session layer. The session layer is responsible for establishing, maintaining, and terminating communication sessions between two devices on a network.

NEW QUESTION 320
- (Exam Topic 3)
Which of the following issues are present with RIPv2? (Select TWO).

A. Route poisoning
B. Time to converge
C. Scalability
D. Unicast
E. Adjacent neighbors
F. Maximum transmission unit

Answer: BC

Explanation:
The disadvantages of RIP (Routing Information Protocol) include the following.
---Outdated, insecure, and slow. This is your parents' protocol. It was a thing before the Web was born.
---The more well-known problem of the 15 hop limitation in which data must travel
---Convergence time is terrible for information propagation in a network
---Metrics. It determines the number of hops from source to destination, and gives no regard to other factors when determining the best path for data to travel
---Overhead. A good example would be routing tables. These are broadcast at half-minute intervals to other routers regardless of whether the data has changed or not. It's essentially like those old cartoons where the
town guard in the walled city cries out, '10 o' the clock and all is well!'.
RIPv2 introduced more security and reduced broadcast traffic, which is relevant for some available answers here.

NEW QUESTION 322
- (Exam Topic 3)
After HVAC failures caused network outages, the support team decides to monitor the temperatures of all the devices. The network administrator cannot find a command that will display this information. Which of the following will retrieve the necessary information?

A. SNMP OID values
B. NetFlow data export
C. Network baseline configurations
D. Security information and event management

Answer: A

Explanation:
The network administrator can use the Simple Network Management Protocol (SNMP) to monitor the temperatures of all the devices. SNMP is a widely-used protocol for managing and monitoring network devices, such as routers, switches, servers, and other networking equipment. SNMP allows network administrators to gather information about the performance and status of devices on the network, including temperature readings.
To retrieve the temperature information, the administrator will have to configure SNMP on the devices and configure SNMP manager software on their computer. Once the SNMP manager software is configured, it will be able to send SNMP requests to the devices and retrieve information such as temperature, voltage, fan speeds, etc. Many network devices have built-in SNMP support, and the administrator may also need to install SNMP agent software on the devices to enable SNMP monitoring.
The administrator can also use some specific command or tool like IPMI (Intelligent Platform Management Interface) or DCIM (Data Center Infrastructure Management) tools for monitoring the temperatures of all the devices.

NEW QUESTION 327
- (Exam Topic 3)
Which of the following would be increased by adding encryption to data communication across the network?

A. Availability
B. Integrity
C. Accountability
D. Confidentiality

Answer: D

Explanation:
Confidentiality is the property of preventing unauthorized access or disclosure of data. Encryption is a method of transforming data into an unreadable format that can only be decrypted by authorized parties who have the correct key. Encryption can increase the confidentiality of data communication across the network by making it harder for attackers to intercept or eavesdrop on the data. References: Network+ Study Guide Objective 4.1: Summarize the purposes of physical security devices. Subobjective: Encryption.

NEW QUESTION 330
- (Exam Topic 3)
Which of the following DHCP settings would be used to ensure a device gets the same IP address each time it is connected to the network?

A. Scope options
B. Reservation
C. Exclusion
D. Relay
E. Pool

Answer: A

NEW QUESTION 332
- (Exam Topic 3)
A company's primary ISP is experiencing an outage. However, the network administrator notices traffic continuing to flow through a secondary connection to the same ISP. Which of the following BEST describes this configuration?

A. Diverse paths
B. Load balancing
C. Multipathing
D. Virtual Router Redundancy Protocol

Answer: A

NEW QUESTION 337
- (Exam Topic 3)
Which of the following is a valid and cost-effective solution to connect a fiber cable into a network switch without available SFP ports?

A. Use a media converter and a UTP cable
B. Install an additional transceiver module and use GBICs
C. Change the type of connector from SC to F-type
D. Use a loopback adapter to make the connection

Answer: A

NEW QUESTION 340
- (Exam Topic 3)
A network technician has determined the cause of a network disruption. Which of the following is the NEXT step for the technician to perform?

A. Validate the findings in a top-to-bottom approach
B. Duplicate the issue, if possible
C. Establish a plan of action to resolve the issue
D. Document the findings and actions

Answer: C

NEW QUESTION 341
- (Exam Topic 3)
A network technician receives a report from the server team that a server's network connection is not working correctly. The server team confirms the server is operating correctly except for the network connection. The technician checks the switchport connected to the server and reviews the following data;

Metric	Value
Bytes input	441,164,698
Bytes output	2,625,115,257
Runts	0
CRCs	5,489
Collisions	1
MDIX	On
Speed	1,000
Duplex	Full

Which of the following should the network technician perform to correct the issue?

A. Replace the Cat 5 patch cable with a Cat 6 cable
B. Install a crossover cable between the server and the switch
C. Reset the switchport configuration.
D. Use NetFlow data from the switch to isolate the issue.
E. Disable MDIX on the switchport and reboot the server.

Answer: A

Explanation:
"Bad cables, incorrect pinouts, or bent pins: Faulty cables (with electrical characteristics preventing successful transmission) or faulty connectors (which do not properly make connections) can prevent successful data transmission at Layer 1. A bad cable could simply be an incorrect category of cable being used for a specific purpose. For example, using a Cat 5 cable (instead of a Cat 6 or higher cable) to connect two 1000BASE-TX devices would result in data corruption. Bent pins in a connector or incorrect pinouts could also cause data to become corrupted."

NEW QUESTION 343
- (Exam Topic 3)
Several users with older devices are reporting intermittent connectivity while in an outdoor patio area. After some research, the network administrator determines that an outdoor WAP might help with the issue. However, the company does not want the signal to bleed into the building and cause interference. Which of the following should the network administrator perform to BEST resolve the issue?

A. Disable the SSID broadcast on the WAP in the patio area.
B. Install a WAP and enable 5GHz only within the patio area.
C. Install a directional WAP in the direction of the patio.
D. Install a repeater on the back wall of the patio area.

Answer: C

NEW QUESTION 346
- (Exam Topic 3)
Which of the following will reduce routing table lookups by performing packet forwarding decisions independently of the network layer header?

A. MPLS
B. mGRE
C. EIGRP
D. VRRP

Answer: A

Explanation:
Multiprotocol Label Switching, or MPLS, is a networking technology that routes traffic using the shortest path based on “labels,” rather than network addresses, to handle forwarding over private wide area networks. As a scalable and protocol-independent solution, MPLS assigns labels to each data packet, controlling the path the packet follows. MPLS greatly improves the speed of traffic, so users don’t experience downtime when connected to the network.

NEW QUESTION 349
- (Exam Topic 3)
A technician is troubleshooting a connectivity issue with an end user. The end user can access local network shares and intranet pages but is unable to access the internet or remote resources. Which of the following needs to be reconfigured?

A. The IP address
B. The subnet mask
C. The gateway address
D. The DNS servers

Answer: C

NEW QUESTION 351
- (Exam Topic 3)
An organization is interested in purchasing a backup solution that supports the organization's goals. Which of the following concepts would specify the maximum duration that a given service can be down before impacting operations?

A. MTTR
B. RTO
C. MTBF
D. RPO

Answer: B

Explanation:
The maximum duration that a given service can be down before it impacts operations is often referred to as the Recovery Time Objective (RTO). RTO is a key consideration in any backup and disaster recovery plan, as it determines how quickly the organization needs to be able to recover from a disruption or failure. It is typically expressed in terms of time, and it helps to inform the design and implementation of the backup solution. For example, if an organization has a critical service that must be available 24/7, it may have a very low RTO, requiring that the service be restored within a matter of minutes or even seconds. On the other hand, if the service can be down for a longer period of time without significantly impacting operations, the organization may have a higher RTO. When selecting a backup solution, it is important to consider the organization's RTO requirements and ensure that the solution is capable of meeting those needs. A solution that does not meet the organization's RTO requirements may not be sufficient to ensure the availability of critical services in the event of a disruption or failure.

NEW QUESTION 355
- (Exam Topic 3)
A company streams video to multiple devices across a campus. When this happens, several users report a degradation of network performance. Which of the following would MOST likely address this issue?

A. Enable IGMP snooping on the switches.
B. Implement another DHCP server.
C. Reconfigure port tagging for the video traffic.
D. Change the SSID of the APs

Answer: A

NEW QUESTION 359
- (Exam Topic 3)
A PC and a network server have no network connectivity, and a help desk technician is attempting to resolve the issue. The technician plans to run a constant ping command from a Windows workstation while testing various possible reasons for the connectivity issue. Which of the following should the technician use?

A. ping —w
B. ping -i
C. ping —s
D. ping —t

Answer: D

Explanation:
ping -t is an option for the ping command in Windows that allows the user to send continuous ping requests to a target until stopped by pressing Ctrl-C. This can help the technician run a constant ping command while testing various possible reasons for the connectivity issue. ping -w is an option for the ping command in Windows that allows the user to specify a timeout value in milliseconds for each ping request. ping -i is an option for the ping command in Linux that allows the user to specify the time interval in seconds between each ping request. ping -s is an option for the ping command in Linux that allows the user to specify the size of the data payload in bytes for each ping request.
References: How to Use the Ping Command in Windows - Lifewire (https://www.lifewire.com/ping-command-2618099)

NEW QUESTION 363
- (Exam Topic 3)
A network administrator is given the network 80.87.78.0/26 for specific device assignments. Which of the following describes this network?

A. 80.87.78 0 - 80.87.78.14
B. 80.87.78 0 - 80.87.78.110
C. 80.87.78 1 - 80.87.78.62
D. 80.87.78.1 - 80.87.78.158

Answer: C

Explanation:
The network 80.87.78.0/26 is a Class A network with a subnet mask of /26, which means that it contains 26 bits of network information and 6 bits of host

information. The range of valid host addresses for this network is 80.87.78.1 to 80.87.78.62. Any addresses outside of this range are reserved for special purposes or are not used.

NEW QUESTION 365
- (Exam Topic 3)
A network engineer needs to reduce the overhead of file transfers. Which of the following configuration changes would accomplish that goal?

A. Link aggregation
B. Jumbo frames
C. Port security
D. Flow control
E. Lower FTP port

Answer: A

NEW QUESTION 369
- (Exam Topic 3)
A company wants to set up a backup data center that can become active during a disaster. The site needs to contain network equipment and connectivity. Which of the following strategies should the company employ?

A. Active-active
B. Warm
C. Cold
D. Cloud

Answer: B

Explanation:
Active-active refers to more than one NIC being active at the same time. In my opinion, this question is referring to a recovery site (hot, warm, cold, cloud)

NEW QUESTION 371
- (Exam Topic 3)
Which of the following documents would be used to define uptime commitments from a provider, along with details on measurement and enforcement?

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

Answer: B

Explanation:
A service level agreement (SLA) is a document that is used to define uptime commitments from a provider, along with details on measurement and enforcement. An SLA is a contract between a service provider and a customer that outlines the level of service that the provider is committed to providing and the terms under which that service will be delivered.

NEW QUESTION 373
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Relate Links

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