

## N10-006 CompTIA EnsurePass Network+ Certification Exam

Passing Score: 800

Time Limit: 120 min



<http://www.gratisexam.com/>

**These questions are all derived from the  
network, the exchange of personal use only,  
do not used for commercial purposes !!**



## **Exam A**

### **QUESTION 1**

A technician has verified that a recent loss of network connectivity to multiple workstations is due to a bad CAT5 cable in the server room wall. Which of the following tools can be used to locate its physical location within the wall?

- A. Cable certifier
- B. Multimeter
- C. Cable tester
- D. Toner probe

**Correct Answer:** D

**Section:** (none)

**Explanation**

### **QUESTION 2**

Which of the following is used to authenticate remote workers who connect from offsite? (Select TWO).

- A. OSPF
- B. VTP trunking
- C. Virtual PBX
- D. RADIUS
- E. 802.1x

**Correct Answer:** DE

**Section:** (none)

**Explanation**

### **QUESTION 3**

Which of the following network infrastructure implementations would be used to support files being transferred between Bluetooth-enabled smartphones?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 4**

Which of the following would be used in an IP-based video conferencing deployment? (Select TWO).



<http://www.gratisexam.com/>

- A. RS-232
- B. 56k modem
- C. Bluetooth
- D. Codec
- E. SIP

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 5**

Which of the following helps prevent routing loops?

- A. Routing table
- B. Default gateway
- C. Route summarization
- D. Split horizon

**Correct Answer:** D

**Section:** (none)

## **Explanation**

### **QUESTION 6**

Which of the following is MOST likely to use an RJ-11 connector to connect a computer to an ISP using a POTS line?

- A. Multilayer switch
- B. Access point
- C. Analog modem
- D. DOCSIS modem

**Correct Answer: C**

**Section: (none)**

## **Explanation**

### **QUESTION 7**

An administrator has a virtualization environment that includes a vSAN and iSCSI switching. Which of the following actions could the administrator take to improve the performance of data transfers over iSCSI switches?

- A. The administrator should configure the switch ports to auto-negotiate the proper Ethernet settings.
- B. The administrator should configure each vSAN participant to have its own VLAN.
- C. The administrator should connect the iSCSI switches to each other over inter-switch links (ISL).
- D. The administrator should set the MTU to 9000 on the each of the participants in the vSAN.

**Correct Answer: D**

**Section: (none)**

## **Explanation**

### **QUESTION 8**

A network topology that utilizes a central device with point-to-point connections to all other devices is which of the following?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 9**

A technician is connecting a NAS device to an Ethernet network. Which of the following technologies will be used to encapsulate the frames?

- A. HTTPS
- B. Fibre channel
- C. iSCSI
- D. MS-CHAP

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 10**

The network install is failing redundancy testing at the MDF. The traffic being transported is a mixture of multicast and unicast signals. Which of the following would BEST handle the rerouting caused by the disruption of service?

- A. Layer 3 switch
- B. Proxy server
- C. Layer 2 switch
- D. Smart hub

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 11**

A company wants to create highly available datacenters. Which of the following will allow the company to continue to maintain an Internet presence at all sites in the event that a WAN circuit at one site goes down?

- A. Load balancer
- B. VRRP
- C. OSPF

D. BGP

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 12**

A training class is being held in an auditorium. Hard-wired connections are required for all laptops that will be used. The network technician must add a switch to the room through which the laptops will connect for full network access. Which of the following must the technician configure on a switch port, for both switches, in order to create this setup?

- A. DHCP
- B. Split horizon
- C. CIDR
- D. TRUNK

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 13**

Which of the following communication technologies would MOST likely be used to increase bandwidth over an existing fiber optic network by combining multiple signals at different wavelengths?

- A. DWDM
- B. SONET
- C. ADSL
- D. LACP

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 14**

Which of the following WAN technologies is associated with high latency?



<http://www.gratisexam.com/>

- A. T1
- B. Satellite
- C. Cable
- D. OCx

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 15

Which of the following provides accounting, authorization, and authentication via a centralized privileged database, as well as, challenge/response and password encryption?

- A. Multifactor authentication
- B. ISAKMP
- C. TACACS+
- D. Network access control

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### QUESTION 16

Which of the following is used to define how much bandwidth can be used by various protocols on the network?

- A. Traffic shaping
- B. High availability
- C. Load balancing
- D. Fault tolerance

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 17**

Which of the following network topologies has a central, single point of failure?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 18**

A technician is helping a SOHO determine where to install the server. Which of the following should be considered FIRST?

- A. Compatibility requirements
- B. Environment limitations
- C. Cable length
- D. Equipment limitations

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 19**

When convergence on a routed network occurs, which of the following is true?



- A. All routers are using hop count as the metric
- B. All routers have the same routing table
- C. All routers learn the route to all connected networks
- D. All routers use route summarization

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 20**

A technician has been given a list of requirements for a LAN in an older building using CAT6 cabling. Which of the following environmental conditions should be considered when deciding whether or not to use plenum-rated cables?

- A. Workstation models
- B. Window placement
- C. Floor composition
- D. Ceiling airflow condition

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 21**

A company has a new offering to provide access to their product from a central location rather than clients internally hosting the product on the client network. The product contains sensitive corporate information that should not be accessible from one client to another. This is an example of which of the following?



<http://www.gratisexam.com/>

- A. Public SaaS
- B. Private SaaS

- C. Hybrid IaaS
- D. Community IaaS

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 22**

Which of the following refers to a network that spans several buildings that are within walking distance of each other?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.ensurepass.com>

#### **QUESTION 23**

An administrator notices an unused cable behind a cabinet that is terminated with a DB-9 connector. Which of the following protocols was MOST likely used on this cable?

- A. RS-232
- B. 802.3
- C. ATM
- D. Token ring

**Correct Answer:** A

**Section:** (none)

**Explanation**

**QUESTION 24**

Which of the following describes an IPv6 address of ::1?

- A. Broadcast
- B. Loopback
- C. Classless
- D. Multicast

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 25**

A SQL server needs several terabytes of disk space available to do an uncompressed backup of a database. Which of the following devices would be the MOST cost efficient to use for this backup?

- A. iSCSI SAN
- B. FCoE SAN
- C. NAS
- D. USB flash drive

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 26**

A technician needs to set aside addresses in a DHCP pool so that certain servers always receive the same address. Which of the following should be configured?

- A. Leases
- B. Helper addresses
- C. Scopes
- D. Reservations

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 27**

Which of the following network elements enables unified communication devices to connect to and traverse traffic onto the PSTN?

- A. Access switch
- B. UC gateway
- C. UC server
- D. Edge router

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 28**

A network technician receives the following alert from a network device:

"High utilizations threshold exceeded on gi1/0/24 : current value 9413587.54"

Which of the following is being monitored to trigger the alarm?

- A. Speed and duplex mismatch
- B. Wireless channel utilization
- C. Network device CPU
- D. Network device memory
- E. Interface link status

**Correct Answer:** E

**Section:** (none)

**Explanation**

**QUESTION 29**

A technician is configuring a managed switch and needs to enable 802.3af. Which of the following should the technician enable?

- A. PoE

- B. Port bonding
- C. VLAN
- D. Trunking

**Correct Answer:** A  
**Section:** (none)  
**Explanation**

### QUESTION 30

Which of the following protocols must be implemented in order for two switches to share VLAN information?

- A. VTP
- B. MPLS
- C. STP
- D. PTP

**Correct Answer:** A  
**Section:** (none)  
**Explanation**

### QUESTION 31

After a recent breach, the security technician decides the company needs to analyze and aggregate its security logs. Which of the following systems should be used?



<http://www.gratisexam.com/>

- A. Event log
- B. Syslog
- C. SIEM
- D. SNMP

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 32**

A network technician is diligent about maintaining all system servers' at the most current service pack level available. After performing upgrades, users experience issues with server-based applications. Which of the following should be used to prevent issues in the future?

- A. Configure an automated patching server
- B. Virtualize the servers and take daily snapshots
- C. Configure a honeypot for application testing
- D. Configure a test lab for updates

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 33**

A company has implemented the capability to send all log files to a central location by utilizing an encrypted channel. The log files are sent to this location in order to be reviewed. A recent exploit has caused the company's encryption to become unsecure. Which of the following would be required to resolve the exploit?

- A. Utilize a FTP service
- B. Install recommended updates
- C. Send all log files through SMTP
- D. Configure the firewall to block port 22

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 34**

The RAID controller on a server failed and was replaced with a different brand. Which of the following will be needed after the server has been rebuilt and joined to the domain?

- A. Vendor documentation
- B. Recent backups
- C. Physical IP address
- D. Physical network diagram

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 35**

A network technician has been tasked with designing a WLAN for a small office. One of the requirements of this design is that it is capable of supporting HD video streaming to multiple devices. Which of the following would be the appropriate wireless technology for this design?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 36**

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

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

**Correct Answer:** A

**Section:** (none)

## **Explanation**

### **QUESTION 37**

A company is experiencing very slow network speeds of 54Mbps. A technician has been hired to perform an assessment on the existing wireless network. The technician has recommended an 802.11n network infrastructure. Which of the following allows 802.11n to reach higher speeds?

- A. MU-MIMO
- B. LWAPP
- C. PoE
- D. MIMO

**Correct Answer:** D

**Section:** (none)

## **Explanation**

### **QUESTION 38**

It has been determined by network operations that there is a severe bottleneck on the company's mesh topology network. The field technician has chosen to use log management and found that one router is making routing decisions slower than others on the network. This is an example of which of the following?

- A. Network device power issues
- B. Network device CPU issues
- C. Storage area network issues
- D. Delayed responses from RADIUS

**Correct Answer:** B

**Section:** (none)

## **Explanation**

### **QUESTION 39**

After a company rolls out software updates, Ann, a lab researcher, is no longer able to use lab equipment connected to her PC. The technician contacts the vendor and determines there is an incompatibility with the latest IO drivers. Which of the following should the technician perform so that Ann can get back to work as quickly as possible?

- A. Reformat and install the compatible drivers.
- B. Reset Ann's equipment configuration from a backup.
- C. Downgrade the PC to a working patch level.



- D. Restore Ann's PC to the last known good configuration.
- E. Roll back the drivers to the previous version.

**Correct Answer:** E

**Section:** (none)

**Explanation**

#### **QUESTION 40**

A system administrator has been tasked to ensure that the software team is not affecting the production software when developing enhancements. The software that is being updated is on a very short SDLC and enhancements must be developed rapidly. These enhancements must be approved before being deployed. Which of the following will mitigate production outages before the enhancements are deployed?

- A. Implement an environment to test the enhancements.
- B. Implement ACLs that only allow management access to the enhancements.
- C. Deploy an IPS on the production network.
- D. Move the software team's workstations to the DMZ.

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 41**

An administrator reassigns a laptop to a different user in the company. Upon delivering the laptop to the new user, the administrator documents the new location, the user of the device and when the device was reassigned. Which of the following BEST describes these actions?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 42**

Company policies require that all network infrastructure devices send system level information to a centralized server. Which of the following should be

implemented to ensure the network administrator can review device error information from one central location?

- A. TACACS+ server
- B. Single sign-on
- C. SYSLOG server
- D. Wi-Fi analyzer

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 43**

A network technician has been tasked to configure a new network monitoring tool that will examine interface settings throughout various network devices. Which of the following would need to be configured on each network device to provide that information in a secure manner?

- A. S/MIME
- B. SYSLOG
- C. PGP
- D. SNMPv3
- E. RSH

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 44**

Which of the following would be the result of a user physically unplugging a VoIP phone and connecting it into another interface with switch port security enabled as the default setting?

- A. The VoIP phone would request a new phone number from the unified communications server.
- B. The VoIP phone would cause the switch interface, that the user plugged into, to shutdown.
- C. The VoIP phone would be able to receive incoming calls but will not be able to make outgoing calls.
- D. The VoIP phone would request a different configuration from the unified communications server.

**Correct Answer:** B

**Section:** (none)

## **Explanation**

### **QUESTION 45**

A company is deploying a new wireless network and requires 800Mbps network throughput. Which of the following is the MINIMUM configuration that would meet this need?

- A. 802.11ac with 2 spatial streams and an 80MHz bandwidth
- B. 802.11ac with 3 spatial streams and a 20MHz bandwidth
- C. 802.11ac with 3 spatial streams and a 40MHz bandwidth
- D. 802.11ac with 4 spatial streams and a 160MHz bandwidth

**Correct Answer:** A

**Section:** (none)

## **Explanation**

### **QUESTION 46**

A technician would like to track the improvement of the network infrastructure after upgrades. Which of the following should the technician implement to have an accurate comparison?

- A. Regression test
- B. Speed test
- C. Baseline
- D. Statement of work

**Correct Answer:** C

**Section:** (none)

## **Explanation**

### **QUESTION 47**

When two or more links need to pass traffic as if they were one physical link, which of the following would be used to satisfy the requirement?

- A. Port mirroring
- B. 802.1w
- C. LACP
- D. VTP

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 48**

A VLAN with a gateway offers no security without the addition of:

- A. An ACL.
- B. 802.1w.
- C. A RADIUS server.
- D. 802.1d.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**QUESTION 49**

Network segmentation provides which of the following benefits?



<http://www.gratisexam.com/>

- A. Security through isolation
- B. Link aggregation
- C. Packet flooding through all ports
- D. High availability through redundancy

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 50**

A network technician must create a wireless link between two buildings in an office park utilizing the 802.11ac standard. The antenna chosen must have a small physical footprint and minimal weight as it will be mounted on the outside of the building. Which of the following antenna types is BEST suited for this solution?



<http://www.gratisexam.com/>

- A. Yagi
- B. Omni-directional
- C. Parabolic
- D. Patch

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 51**

The administrator's network has OSPF for the internal routing protocol. One port going out to the Internet is congested. The data is going out to the Internet, but queues up before sending. Which of the following would resolve this issue?

Output:

Fast Ethernet 0 is up, line protocol is up

Int ip address is 10.20.130.5/25

MTU 1500 bytes, BW10000 kbit, DLY 100 usec

Reliability 255/255, Tx load 1/255, Rx load 1/255

Encapsulation ospf, loopback not set

Keep alive 10

Half duplex, 100Mb/s, 100 Base Tx/Fx

Received 1052993 broadcasts

0 input errors

983881 packets output, 768588 bytes

0 output errors, 0 collisions, 0 resets

- A. Set the loopback address
- B. Change the IP address
- C. Change the slash notation
- D. Change duplex to full

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 52**

An outside organization has completed a penetration test for a company. One of the items on the report is reflecting the ability to read SSL traffic from the web server. Which of the following is the MOST likely mitigation for this reported item?

- A. Ensure patches are deployed
- B. Install an IDS on the network
- C. Configure the firewall to block traffic on port 443
- D. Implement a VPN for employees

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 53**

A system administrator wants to update a web-based application to the latest version. Which of the following procedures should the system administrator perform

FIRST?

- A. Remove all user accounts on the server
- B. Isolate the server logically on the network
- C. Block all HTTP traffic to the server
- D. Install the software in a test environment

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 54**

Multiple students within a networking lab are required to simultaneously access a single switch remotely. The administrator checks and confirms that the switch can be accessed using the console, but currently only one student can log in at a time. Which of the following should be done to correct this issue?

- A. Increase installed memory and install a larger flash module.
- B. Increase the number of VLANs configured on the switch.
- C. Decrease the number of VLANs configured on the switch.
- D. Increase the number of virtual terminals available.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 55**

A technician needs to install software onto company laptops to protect local running services, from external threats. Which of the following should the technician install and configure on the laptops if the threat is network based?

- A. A cloud-based antivirus system with a heuristic and signature based engine
- B. A network based firewall which blocks all inbound communication
- C. A host-based firewall which allows all outbound communication
- D. A HIDS to inspect both inbound and outbound network communication

**Correct Answer:** C

**Section:** (none)

## **Explanation**

### **QUESTION 56**

Which of the following physical security controls prevents an attacker from gaining access to a network closet?

- A. CCTVs
- B. Proximity readers
- C. Motion sensors
- D. IP cameras

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### **QUESTION 57**

A network technician is performing a wireless survey in the office and discovers a device that was not installed by the networking team. This is an example of which of following threats?

- A. Bluesnarfing
- B. DDoS
- C. Brute force
- D. Rogue AP

**Correct Answer:** D

**Section:** (none)

**Explanation**

### **QUESTION 58**

A technician is setting up a computer lab. Computers on the same subnet need to communicate with each other using peer to peer communication. Which of the following would the technician MOST likely configure?

- A. Hardware firewall
- B. Proxy server
- C. Software firewall



D. GRE tunneling

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 59**

Which of the following concepts are MOST important for a company's long term health in the event of a disaster? (Select TWO).

- A. Redundancy
- B. Implementing acceptable use policy
- C. Offsite backups
- D. Uninterruptable power supplies
- E. Vulnerability scanning

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**QUESTION 60**

A technician needs to ensure that new systems are protected from electronic snooping of Radio Frequency emanations. Which of the following standards should be consulted?

- A. DWDM
- B. MIMO
- C. TEMPEST
- D. DOCSIS

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 61**

Which of the following types of network would be set up in an office so that customers could access the Internet but not be given access to internal resources such as printers and servers?

- A. Quarantine network
- B. Core network
- C. Guest network
- D. Wireless network

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 62**

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

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.ensurepass.com>

#### **QUESTION 63**

An attacker has connected to an unused VoIP phone port to gain unauthorized access to a network. This is an example of which of the following attacks?

- A. Smurf attack
- B. VLAN hopping
- C. Bluesnarfing
- D. Spear phishing

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 64**

A company has decided to update their usage policy to allow employees to surf the web unrestricted from their work computers. Which of the following actions should the IT security team implement to help protect the network from attack as a result of this new policy?

- A. Install host-based anti-malware software
- B. Implement MAC filtering on all wireless access points
- C. Add an implicit deny to the core router ACL
- D. Block port 80 outbound on the company firewall
- E. Require users to utilize two-factor authentication

**Correct Answer:** A

**Section:** (none)

**Explanation**

**QUESTION 65**

An organization notices a large amount of malware and virus incidents at one satellite office, but hardly any at another. All users at both sites are running the same company image and receive the same group policies. Which of the following has MOST likely been implemented at the site with the fewest security issues?

- A. Consent to monitoring
- B. Business continuity measures
- C. Vulnerability scanning
- D. End-user awareness training

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 66**

A wireless network technician for a local retail store is installing encrypted access points within the store for real-time inventory verification, as well as remote price checking capabilities, while employees are away from the registers. The store is in a fully occupied strip mall that has multiple neighbors allowing guest access to the wireless networks. There are a finite known number of approved handheld devices needing to access the store's wireless network. Which of the following is the BEST security method to implement on the access points?

- A. Port forwarding
- B. MAC filtering
- C. TLS/TTLS

D. IP ACL

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 67**

Ann, a network technician, was asked to remove a virus. Issues were found several levels deep within the directory structure. To ensure the virus has not infected the .mp4 files in the directory, she views one of the files and believes it contains illegal material. Which of the following forensics actions should Ann perform?

- A. Erase the files created by the virus
- B. Stop and escalate to the proper authorities
- C. Check the remaining directories for more .mp4 files
- D. Copy the information to a network drive to preserve the evidence

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 68**

Which of the following describes a smurf attack?

- A. Attack on a target using spoofed ICMP packets to flood it
- B. Intercepting traffic intended for a target and redirecting it to another
- C. Spoofed VLAN tags used to bypass authentication
- D. Forging tags to bypass QoS policies in order to steal bandwidth

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 69**

Which of the following technologies is designed to keep systems uptime running in the event of a disaster?



<http://www.gratisexam.com/>

- A. High availability
- B. Load balancing
- C. Quality of service
- D. Caching engines

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 70**

Packet analysis reveals multiple GET and POST requests from an internal host to a URL without any response from the server. Which of the following is the BEST explanation that describes this scenario?

- A. Compromised system
- B. Smurf attack
- C. SQL injection attack
- D. Man-in-the-middle

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 71**

A network technician was tasked to respond to a compromised workstation. The technician documented the scene, took the machine offline, and left the PC under a cubicle overnight. Which of the following steps of incident handling has been incorrectly performed?

- A. Document the scene
- B. Forensics report
- C. Evidence collection
- D. Chain of custody

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 72**

During a check of the security control measures of the company network assets, a network administrator is explaining the difference between the security controls at the company. Which of the following would be identified as physical security controls? (Select THREE).

- A. RSA
- B. Passwords
- C. Man traps
- D. Biometrics
- E. Cipher locks
- F. VLANs
- G. 3DES

**Correct Answer:** CDE

**Section:** (none)

**Explanation**

#### **QUESTION 73**

A technician is installing a surveillance system for a home network. The technician is unsure which ports need to be opened to allow remote access to the system. Which of the following should the technician perform?

- A. Disable the network based firewall
- B. Implicit deny all traffic on network
- C. Configure a VLAN on Layer 2 switch
- D. Add the system to the DMZ

**Correct Answer:** D

**Section:** (none)

## Explanation

### QUESTION 74

A firewall ACL is configured as follows:

- 10. Deny Any Trust to Any DMZ eq to TCP port 22
- 11. Allow 10.200.0.0/16 to Any DMZ eq to Any
- 12. Allow 10.0.0.0/8 to Any DMZ eq to TCP ports 80, 443
- 13. Deny Any Trust to Any DMZ eq to Any

A technician notices that users in the 10.200.0.0/16 network are unable to SSH into servers in the DMZ. The company wants 10.200.0.0/16 to be able to use any protocol, but restrict the rest of the 10.0.0.0/8 subnet to web browsing only. Reordering the ACL in which of the following manners would meet the company's objectives?

- A. 11, 10, 12, 13
- B. 12, 10, 11, 13
- C. 13, 10, 12, 11
- D. 13, 12, 11, 10

**Correct Answer:** A

**Section:** (none)

**Explanation**

### QUESTION 75

A malicious user floods a switch with frames hoping to redirect traffic to the user's server. Which of the following attacks is the user MOST likely using?

- A. DNS poisoning
- B. ARP poisoning
- C. Reflection
- D. SYN attack

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 76**

Which of the following is a security benefit gained from setting up a guest wireless network?

- A. Optimized device bandwidth
- B. Isolated corporate resources
- C. Smaller ACL changes
- D. Reduced password resets

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 77**

A company has seen an increase in ransomware across the enterprise. Which of the following should be implemented to reduce the occurrences?

- A. ARP inspection
- B. Intrusion detection system
- C. Web content filtering
- D. Port filtering

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 78**

Before logging into the company network, users are required to sign a document that is to be stored in their personnel file. This standards and policies document is usually called which of the following?

- A. SOP
- B. BEP
- C. AUP
- D. SLA

**Correct Answer:** C

**Section:** (none)



## **Explanation**

### **QUESTION 79**

A network technician has set up an FTP server for the company to distribute software updates for their products. Each vendor is provided with a unique username and password for security. Several vendors have discovered a virus in one of the security updates. The company tested all files before uploading them but retested the file and found the virus. Which of the following could the technician do for vendors to validate the proper security patch?

- A. Use TFTP for tested and secure downloads
- B. Require biometric authentication for patch updates
- C. Provide an MD5 hash for each file
- D. Implement a RADIUS authentication

**Correct Answer: C**

**Section: (none)**

## **Explanation**

### **QUESTION 80**

A technician wants to securely manage several remote network devices. Which of the following should be implemented to securely manage the devices?

- A. WPA2
- B. IPv6
- C. SNMPv3
- D. RIPv2

**Correct Answer: C**

**Section: (none)**

## **Explanation**

**Explanation/Reference:**

### **QUESTION 81**

A PC technician has installed a new network printer that was preconfigured with the correct static IP address, subnet mask, and default gateway. The printer was installed with a new cable and appears to have link activity, but the printer will not respond to any network communication attempts. Which of the following is MOST likely the cause of the problem?

- A. Damaged cable

- B. Duplex mismatch
- C. Incorrect VLAN assignment
- D. Speed mismatch

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 82**

A network technician has detected duplicate IP addresses on the network. After testing the behavior of rogue DHCP servers, the technician believes that the issue is related to an unauthorized home router. Which of the following should the technician do NEXT in the troubleshooting methodology?

- A. Document the findings and action taken.
- B. Establish a plan to locate the rogue DHCP server.
- C. Remove the rogue DHCP server from the network.
- D. Identify the root cause of the problem.

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 83**

Two weeks after installation, a network technician is now unable to log onto any of the newly installed company switches. The technician suspects that a malicious user may have changed the switches' settings before they were installed in secure areas. Which of the following is the MOST likely way in which the malicious user gained access to the switches?

- A. Via SSH using the RADIUS shared secret
- B. Via HTTP using the default username and password
- C. Via console using the administrator's password
- D. Via SNMP using the default RO community

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 84**

When a client calls and describes a problem with a computer not being able to reach the Internet, in which of the following places of the OSI model would a technician begin troubleshooting?

- A. Transport layer
- B. Physical layer
- C. Network layer
- D. Session layer

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 85**

A network technician has been assigned to install an additional router on a wireless network. The router has a different SSID and frequency. All users on the new access point and the main network can ping each other and utilize the network printer, but all users on the new router cannot get to the Internet. Which of the following is the MOST likely cause of this issue?

- A. The gateway is misconfigured on the new router.
- B. The subnet mask is incorrect on the new router.
- C. The gateway is misconfigured on the edge router.
- D. The SSID is incorrect on the new router.

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 86**

While troubleshooting a network outage, a technician finds a 100-meter fiber cable with a small service loop and suspects it might be the cause of the outage. Which of the following is MOST likely the issue?

- A. Maximum cable length exceeded
- B. Dirty connectors
- C. RF interference caused by impedance mismatch
- D. Bend radius exceeded

**Correct Answer:** D

**Section:** (none)

## **Explanation**

### **QUESTION 87**

A technician is troubleshooting a wired device on the network. The technician notices that the link light on the NIC does not illuminate. After testing the device on a different RJ-45 port, the device connects successfully. Which of the following is causing this issue?

- A. EMI
- B. RFI
- C. Cross-talk
- D. Bad wiring

**Correct Answer:** D

**Section:** (none)

## **Explanation**

### **QUESTION 88**

An organization requires a second technician to verify changes before applying them to network devices. When checking the configuration of a network device, a technician determines that a coworker has improperly configured the AS number on the device. This would result in which of the following?

- A. The OSPF not-so-stubby area is misconfigured
- B. Reduced wireless network coverage
- C. Spanning tree ports in flooding mode
- D. BGP routing issues

**Correct Answer:** D

**Section:** (none)

## **Explanation**

### **QUESTION 89**

When configuring a new server, a technician requests that an MX record be created in DNS for the new server, but the record was not entered properly. Which of the following was MOST likely installed that required an MX record to function properly?

- A. Load balancer
- B. FTP server
- C. Firewall DMZ
- D. Mail server

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 90**

A company has had several virus infections over the past few months. The infections were caused by vulnerabilities in the application versions that are being used. Which of the following should an administrator implement to prevent future outbreaks?



<http://www.gratisexam.com/>

- A. Host-based intrusion detection systems
- B. Acceptable use policies
- C. Incident response team
- D. Patch management

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 91**

A user calls the help desk and states that he was working on a spreadsheet and was unable to print it. However, his colleagues are able to print their documents to the same shared printer. Which of the following should be the FIRST question the helpdesk asks?

- A. Does the printer have toner?
- B. Are there any errors on the printer display?
- C. Is the user able to access any network resources?
- D. Is the printer powered up?

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.ensurepass.com>

#### **QUESTION 92**

A network technician is using a network monitoring system and notices that every device on a particular segment has lost connectivity. Which of the following should the network technician do NEXT?

- A. Establish a theory of probable cause.
- B. Document actions and findings.
- C. Determine next steps to solve the problem.
- D. Determine if anything has changed.

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 93**

A technician just completed a new external website and setup access rules in the firewall. After some testing, only users outside the internal network can reach the site. The website responds to a ping from the internal network and resolves the proper public address. Which of the following could the technician do to fix this issue while causing internal users to route to the website using an internal address?

- A. Configure NAT on the firewall
- B. Implement a split horizon DNS
- C. Place the server in the DMZ
- D. Adjust the proper internal ACL

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 94**

A network administrator recently installed a web proxy server at a customer's site. The following week, a system administrator replaced the DNS server overnight. The next day, customers began having issues accessing public websites. Which of the following will resolve the issue?

- A. Update the DNS server with the proxy server information.
- B. Implement a split horizon DNS server.
- C. Reboot the web proxy and then reboot the DNS server.
- D. Put the proxy server on the other side of the demarc.

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 95**

While troubleshooting a connectivity issue, a network technician determines the IP address of a number of workstations is 169.254.0.0/16 and the workstations cannot access the Internet. Which of the following should the technician check to resolve the problem?

- A. Default gateway address
- B. Misconfigured DNS
- C. DHCP server
- D. NIC failure

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 96**

A technician recently ran a 20-meter section of CAT6 to relocate a control station to a more central area on the production floor. Since the relocation, the helpdesk has received complaints about intermittent operation. During the troubleshooting process, the technician noticed that collisions are only observed on the switch port during production. Given this information, which of the following is the cause of the problem?

- A. Distance limitation
- B. Electromagnetic interference
- C. Cross talk
- D. Speed and duplex mismatch

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 97**

A technician has finished configuring AAA on a new network device. However, the technician is unable to log into the device with LDAP credentials but is able to do so with a local user account. Which of the following is the MOST likely reason for the problem?

- A. Username is misspelled in the device configuration file
- B. IDS is blocking RADIUS
- C. Shared secret key is mismatched
- D. Group policy has not propagated to the device

**Correct Answer: C**

**Section: (none)**

**Explanation**

**QUESTION 98**

A technician is tasked with connecting a router to a DWDM. The technician connects the router to the multiplexer and confirms that there is a good signal level. However, the interface on the router will not come up. Which of the following is the MOST likely cause?

- A. The wrong wavelength was demuxed from the multiplexer.
- B. The SFP in the multiplexer is malfunctioning.
- C. There is a dirty connector on the fiber optic cable.
- D. The fiber optic cable is bent in the management tray.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**QUESTION 99**

A network technician is performing a tracer command to troubleshoot a website-related issue. The following output is received for each hop in the tracer:

- 1 \* \* \* Request timed out.
- 2 \* \* \* Request timed out.
- 3 \* \* \* Request timed out.

The technician would like to see the results of the tracer command. Which of the following will allow the technician to perform tracer on external sites but not allow



outsiders to discover information from inside the network?

- A. Enable split horizon to allow internal tracer commands to pass through the firewall
- B. Enable IGMP messages out and block IGMP messages into the network
- C. Configure the firewall to allow echo reply in and echo request out of the network
- D. Install a backdoor to access the router to allow tracer messages to pass through

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 100**

Which of the following describes an area containing a rack that is used to connect customer equipment to a service provider?

- A. 110 block
- B. MDF



<http://www.gratisexam.com/>

- C. DSU
- D. CSU

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## Exam B

### QUESTION 1

A network technician must utilize multimode fiber to uplink a new networking device. Which of the following Ethernet standards could the technician utilize? (Select TWO).

- A. 1000Base-LR
- B. 1000Base-SR
- C. 1000Base-T
- D. 10GBase-LR
- E. 10GBase-SR
- F. 10GBase-T

**Correct Answer:** BE

**Section:** (none)

**Explanation**

### QUESTION 2

A network administrator is using a packet analyzer to determine an issue on the local LAN. Two separate computers are showing an error message on the screen and are unable to communicate with other computers in the same lab. The network administrator looks at the following output:

SRC MAC SRC IP DST MAC DST IP

00:1D:1F:AB:10:7D 192.168.1.10:2000 15:BE:9F:AB:10:1D 192.168.1.14:1200

05:DD:1F:AB:10:27 192.168.1.10:1000 22:C7:2F:AB:10:A2 192.168.1.15:1300

Given that all the computers in the lab are directly connected to the same switch, and are not using any virtualization technology, at which of the following layers of the OSI model is the problem occurring?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

### QUESTION 3

Which of the following requires the network administrator to schedule a maintenance window?

- A. When a company-wide email notification must be sent.
- B. A minor release upgrade of a production router.
- C. When the network administrator's laptop must be rebooted.
- D. A major release upgrade of a core switch in a test lab.

**Correct Answer:** B

**Section:** (none)

**Explanation**

### QUESTION 4

Which of the following is true about the main difference between a web session that uses port 80 and one that uses port 443?



<http://www.gratisexam.com/>

- A. Port 80 web sessions often use application-level encryption, while port 443 sessions often use transport-level encryption.
- B. Port 80 web session cannot use encryption, while port 443 sessions are encrypted using web certificates.
- C. Port 80 web sessions can use web application proxies, while port 443 sessions cannot traverse web application proxies.
- D. Port 80 web sessions are prone to man-in-the-middle attacks, while port 443 sessions are immune from man-in-the-middle attacks.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 5

The management team wants to set up a wireless network in their office but all of their phones operate at the 2.4 GHz frequency. They need a wireless network that would be able to operate at a higher frequency than their phones. Which of following standards should be used?

- A. 802.11a
- B. 802.11b
- C. 802.11g
- D. 802.1x

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 6**

Which of the following will negotiate standoff timers to allow multiple devices to communicate on congested network segments?

- A. CSMA/CD
- B. OSPF
- C. DOCSIS
- D. BGP

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 7**

A service provider is unable to maintain connectivity to several remote sites at predetermined speeds. The service provider could be in violation of the:

- A. MLA.
- B. SLA.
- C. SOW.
- D. MOU.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 8**

A network administrator has created a virtual machine in the cloud. The technician would like to connect to the server remotely using RDP. Which of the following default ports needs to be opened?

- A. 445
- B. 3389
- C. 5004
- D. 5060

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 9**

Which of the following is an example of an IPv4 address?

- A. 192:168:1:55
- B. 192.168.1.254
- C. 00:AB:FA:B1:07:34
- D. ::1

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 10**

Which of the following does a network technician need to implement if a change is unsuccessful within the approved maintenance window?

- A. Configuration procedures
- B. Stakeholder notification
- C. Impact analysis
- D. Rollback procedure

**Correct Answer:** D

**Section:** (none)

## **Explanation**

### **QUESTION 11**

Which of the following is the main difference between TCP and UDP?

- A. TCP data flows in two directions, while UDP data flows from server to client.
- B. The TCP header implements flags, while the UDP header does not.
- C. The TCP header implements checksum, while the UDP header does not.
- D. TCP connections can be secured by stateful firewalls, while UDP connections cannot.

**Correct Answer:** B

**Section:** (none)

## **Explanation**

### **QUESTION 12**

Which of the following PDUs is used by a connectionless protocol?

- A. Frames
- B. Segments
- C. Streams
- D. Datagram

**Correct Answer:** D

**Section:** (none)

## **Explanation**

### **QUESTION 13**

When troubleshooting a network problem, browsing through the log of a switch, it is discovered that multiple frames contain errors. In which of the following layers does the problem reside? (Select TWO).

- A. Layer 2
- B. Layer 3
- C. Layer 5
- D. Transport layer
- E. Data link

F. Physical layer

**Correct Answer:** AE

**Section:** (none)

**Explanation**

#### **QUESTION 14**

A network technician is attempting to locate a switch connected to the fourth floor west side of the building. Which of the following will allow quick identification of the switch, when looking at a logical diagram?

- A. Building layout
- B. Patch panel labeling
- C. Packet sniffing
- D. Naming conventions

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 15**

In an engineering office, all plotters are configured via static IP. Which of the following best practices will alleviate many issues if equipment moves are required? (Select TWO).

- A. Rack monitoring
- B. Device placement
- C. Wall plate labeling
- D. Room numbering
- E. Patch panel labeling

**Correct Answer:** CE

**Section:** (none)

**Explanation**

#### **QUESTION 16**

Which of the following devices implements CSMA/CA virtually through the RTS/CTS protocols?



<http://www.gratisexam.com/>

- A. Firewall
- B. Router
- C. 802.11 AP
- D. Switch

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 17**

A user with a 802.11n WLAN card is connected to a SOHO network and is only able to connect at 11 Mbps with full signal strength. Which of the following standards is implemented on the network?

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 18**

A network technician is attempting to connect a new host to existing manufacturing equipment on an Ethernet network. The technician is having issues trying to establish communication between the old equipment and the new host. The technician checks the cabling for breaks and finds that the CAT3 cable in use is in perfect condition. Which of the following should the technician check to ensure the new host will connect?



- A. Confirm the new host is using 10GBaseSR due to the manufacturing environment
- B. Confirm the new host is compatible with 10BaseT Ethernet
- C. Confirm the existing 10Base2 equipment is using the proper frame type
- D. Confirm that CSMA/CD is disabled on the Ethernet network

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 19**

A customer has engaged a company to improve the availability of all of the customer's services and applications, enabling the customer to minimize downtime to a few hours per quarter. Which of the following will document the scope of the activities the company will provide to the customer, including the intended outcomes?

- A. MLA
- B. MOU
- C. SOW
- D. SLA

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 20**

A network technician has just installed a TFTP server on the administrative segment of the network to store router and switch configurations. After a transfer attempt to the server is made, the process errors out. Which of the following is a cause of the error?

- A. Only FTP can be used to copy configurations from switches
- B. Anonymous users were not used to log into the TFTP server
- C. An incorrect password was used and the account is now locked
- D. Port 69 is blocked on a router between the network segments

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 21**

An organization is moving to a new datacenter. During the move, several technicians raise concerns about a system that could potentially remove oxygen from the server room and result in suffocation. Which of the following systems are they MOST likely discussing?

- A. Fire suppression
- B. Mantraps at the entry
- C. HVAC
- D. UPS and battery backups

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 22**

A technician, Joe, needs to troubleshoot a recently installed NIC. He decides to ping the local loopback address. Which of the following is a valid IPv4 loopback address?

- A. 10.0.0.1
- B. 127.0.0.1
- C. 172.16.1.1
- D. 192.168.1.1

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 23**

A host has been assigned the address 169.254.0.1. This is an example of which of the following address types?

- A. APIPA
- B. MAC
- C. Static
- D. Public

**Correct Answer:** A

**Section:** (none)

**Explanation**

**QUESTION 24**

An F-connector is used on which of the following types of cabling?

- A. CAT3
- B. Single mode fiber
- C. CAT5
- D. RG6

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 25**

After repairing a computer infected with malware, a technician determines that the web browser fails to go to the proper address for some sites. Which of the following should be checked?

- A. Server host file
- B. Subnet mask
- C. Local hosts file
- D. Duplex settings

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 26**

A company wants to make sure that users are required to authenticate prior to being allowed on the network. Which of the following is the BEST way to accomplish this?

- A. 802.1x
- B. 802.1p
- C. Single sign-on

D. Kerberos

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 27**

A technician, Joe, has been tasked with assigning two IP addresses to WAN interfaces on connected routers. In order to conserve address space, which of the following subnet masks should Joe use for this subnet?

- A. /24
- B. /32
- C. /28
- D. /29
- E. /30

**Correct Answer:** E

**Section:** (none)

**Explanation**

#### **QUESTION 28**

Joe, a network technician, is setting up a DHCP server on a LAN segment. Which of the following options should Joe configure in the DHCP scope, in order to allow hosts on that LAN segment using dynamic IP addresses, to be able to access the Internet and internal company servers? (Select THREE).

- A. Default gateway
- B. Subnet mask
- C. Reservations
- D. TFTP server
- E. Lease expiration time of 1 day
- F. DNS servers
- G. Bootp

**Correct Answer:** ABF

**Section:** (none)

**Explanation**

**QUESTION 29**

An administrator only has telnet access to a remote workstation. Which of the following utilities will identify if the workstation uses DHCP?

- A. tracert
- B. ping
- C. dig
- D. ipconfig
- E. netstat

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 30**

Which of the following protocols uses label-switching routers and label-edge routers to forward traffic?

- A. BGP
- B. OSPF
- C. IS-IS
- D. MPLS

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 31**

A network technician has received a help desk ticket indicating that after the new wireless access point was installed, all of the media department's devices are experiencing sporadic wireless connectivity. All other departments are connecting just fine and the settings on the new access point were copied from the baseline. Which of the following is a reason why the media department is not connecting?

- A. Wrong SSID
- B. Rogue access point
- C. Placement
- D. Channel mismatch

**Correct Answer:** C

**Section:** (none)

**Explanation**

### **QUESTION 32**

A user connects to a wireless network at the office and is able to access unfamiliar SMB shares and printers. Which of the following has happened to the user?

- A. The user is connected using the wrong channel.
- B. The user is connected to the wrong SSID.
- C. The user is experiencing an EMI issue.
- D. The user is connected to the wrong RADIUS server.

**Correct Answer:** B

**Section:** (none)

**Explanation**

### **QUESTION 33**

Which of the following network devices use ACLs to prevent unauthorized access into company systems?

- A. IDS
- B. Firewall
- C. Content filter
- D. Load balancer

**Correct Answer:** B

**Section:** (none)

**Explanation**

### **QUESTION 34**

Ann, a user, is experiencing an issue with her wireless device. While in the conference area, the wireless signal is steady and strong. However, at her desk the signal is consistently dropping, yet the device indicates a strong signal. Which of the following is the MOST likely cause of the issue?

- A. Signal-to-noise ratio
- B. AP configuration
- C. Incorrect SSID

D. Bounce

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.ensurepass.com>

### QUESTION 35

A network engineer is troubleshooting an issue with a computer that is unable to connect to the Internet. The network engineer analyzes the following output from a command line utility:

Network Destination Netmask Gateway Interface

192.168.1.0 255.255.255.0 192.168.1.254 eth0

192.168.1.10 255.255.255.255 192.168.1.10 eth0

127.0.0.1 255.0.0.0 On-Link lo

127.0.0.2 255.0.0.0 On-Link lo

255.255.255.255 255.255.255.255 102.168.1.10 eth0

Which of the following is the reason for the computer issue, given the above output?

- A. Wrong default gateway netmask
- B. Incorrect default gateway address
- C. Default gateway on the wrong interface
- D. Missing default gateway

**Correct Answer:** D

**Section:** (none)

**Explanation**

### QUESTION 36

A network engineer is dispatched to an employee office to troubleshoot an issue with the employee's laptop. The employee is unable to connect to local and remote resources. The network engineer flips the laptop's wireless switch on to resolve the issue. At which of the following layers of the OSI model was the issue resolved?

- A. Layer 1
- B. Layer 2
- C. Layer 3
- D. Layer 4
- E. Layer 7

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 37**

A network technician has received comments from several users that cannot reach a particular website. Which of the following commands would provide the BEST information about the path taken across the network to this website?

- A. ping
- B. netstat
- C. telnet
- D. tracer

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 38**

A network technician has detected a personal computer that has been physically connected to the corporate network. Which of the following commands would the network technician use to locate this unauthorized computer and determine the interface it is connected to?

- A. nbtstat -a
- B. show mac address-table
- C. show interface status
- D. show ip access-list
- E. nslookup hostname

**Correct Answer:** B

**Section:** (none)

**Explanation**



**Explanation/Reference:**

**QUESTION 39**

A network technician is troubleshooting a problem at a remote site. It has been determined that the connection from router A to router B is down. The technician at the remote site re-terminates the CAT5 cable that connects the two routers as a straight through cable. The cable is then tested and is plugged into the correct interface. Which of the following would be the result of this action?

- A. The normal amount of errors and the connection problem has been resolved.
- B. The interface status will indicate that the port is administratively down.
- C. The traffic will flow, but with excessive errors.
- D. The interface status will show line protocol down.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 40**

After connecting a workstation directly to a small business firewall, a network administrator is trying to manage it via HTTPS without losing its stored configuration. The only two pieces of information that the network administrator knows about the firewall are the management interface MAC address, which is 01:4a:d1:fa:b1:0e, and the administrator's password. Which of the following will allow the administrator to log onto the firewall via HTTPS if the management's IP address is unknown and the administrator's workstation IP address is 192.168.0.10/23?

- A. Use the reset button on the back of the firewall to restore it to its factory default, and then log onto
- B. Run the following command on the administrator's workstation: `arp -s 192.168.1.200 01:4a:d1:fa:b1:0e`
- C. Use an SNMP tool to query the firewall properties and determine the correct management IP address
- D. Use a crossover cable to connect to the console port and reconfigure the firewall management IP to 192.168.0.1

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 41**

Which of the following connection types is used to terminate DS3 connections in a telecommunications facility?

- A. 66 block
- B. BNC
- C. F-connector
- D. RJ-11

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 42**

A desktop computer is connected to the network and receives an APIPA address but is unable to reach the VLAN gateway of 10.10.100.254. Other PCs in the VLAN subnet are able to reach the Internet. Which of the following is MOST likely the source of the problem?

- A. 802.1q is not configured on the switch port
- B. APIPA has been misconfigured on the VLAN
- C. Bad SFP in the PC's 10/100 NIC
- D. OS updates have not been installed

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 43**

A technician is setting up a new network and wants to create redundant paths through the network. Which of the following should be implemented to prevent performance degradation?

- A. Port mirroring
- B. Spanning tree
- C. ARP inspection
- D. VLAN

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 44**

A network technician is utilizing a network protocol analyzer to troubleshoot issues that a user has been experiencing when uploading work to the internal FTP server. Which of the following default port numbers should the technician set the analyzer to highlight when creating a report? (Select TWO).

- A. 20
- B. 21
- C. 22
- D. 23
- E. 67
- F. 68
- G. 69

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**QUESTION 45**

A network engineer needs to set up a topology that will not fail if there is an outage on a single piece of the topology. However, the computers need to wait to talk on the network to avoid congestions. Which of the following topologies would the engineer implement?



<http://www.gratisexam.com/>

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

**Correct Answer:** C

**Section:** (none)

### **Explanation**

### **Explanation/Reference:**

#### **QUESTION 46**

A technician needs to secure web traffic for a new e-commerce website. Which of the following will secure traffic between a web browser and a website?

- A. SSL
- B. DNSSEC
- C. WPA2
- D. MTU

**Correct Answer:** A

**Section:** (none)

### **Explanation**

#### **QUESTION 47**

A network technician is assisting the company with developing a new business continuity plan. Which of the following would be an appropriate suggestion to add to the plan?

- A. Build redundant links between core devices
- B. Physically secure all network equipment
- C. Maintain up-to-date configuration backups
- D. Perform reoccurring vulnerability scans

**Correct Answer:** A

**Section:** (none)

### **Explanation**

#### **QUESTION 48**

A company has changed ISPs for their office and ordered a new 250 Mbps symmetrical Internet connection. As a result, they have been given a new IP range. The ISP has assigned the company 10.10.150.16 /28. The company gateway router has the following interface configuration facing the ISP:

Interface A:

IP address: 10.10.150.16

Subnet mask: 255.255.255.240

Default gateway: 10.10.150.32

Speed: 1000 Mbps

Duplex: Auto

State: No Shutdown

None of the workstations at the company are able to access the Internet. Which of the following are the reasons? (Select TWO).

- A. There is a duplex mismatch between the router and ISP.
- B. The router interface is turned off.
- C. The interface is set to the incorrect speed.
- D. The router is configured with the incorrect subnet mask.
- E. The router interface is configured with the incorrect IP address.
- F. The default gateway is configured incorrectly.

**Correct Answer:** EF

**Section:** (none)

**Explanation**

#### **QUESTION 49**

The ability to make access decisions based on an examination of Windows registry settings, antivirus software, and AD membership status is an example of which of the following NAC features?

- A. Quarantine network
- B. Persistent agents
- C. Posture assessment
- D. Non-persistent agents

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 50**

A technician is troubleshooting a client's connection to a wireless network. The client is asked to run a "getinfo" command to list information about the existing condition.

```
myClient$ wificard --getinfo
```

```
agrCtlRSSI: -72
```

```
agrExtRSSI: 0
```

```
state: running
```

```
op mode: station
```

```
lastTxRate: 178
```

```
MaxRate: 300
```

```
802.11 auth: open
```

```
link auth: wpa2-psk
```

```
BSSID: 0F:33:AE:F1:02:0A
```

```
SSID: CafeWireless
```

```
Channel: 149,1
```

Given this output, which of the following has the technician learned about the wireless network? (Select TWO).

- A. The WAP is using RC4 encryption
- B. The WAP is using 802.11a
- C. The WAP is using AES encryption
- D. The WAP is using the 2.4GHz channel
- E. The WAP is using the 5GHz channel
- F. The WAP is using 802.11g

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**QUESTION 51**

A technician has prolonged contact with a thermal compound. Which of the following resources should be consulted?

- A. HCL
- B. MSDS
- C. SLA
- D. HVAC

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 52**

Joe, a network technician, is implementing a wireless network and needs to support legacy devices. He has selected to use WPA mixed mode. WPA mixed mode is normally implemented with which of the following encryption factors? (Select TWO).

- A. SSH
- B. 3DES
- C. AES
- D. SSL
- E. TLS
- F. TKIP

**Correct Answer:** CF

**Section:** (none)

**Explanation**

**QUESTION 53**

An advertised route learned from one protocol over a different protocol is called:

- A. Co-location
- B. Reallocation
- C. Redundancy
- D. Redistribution

**Correct Answer:** D

**Section: (none)**

**Explanation**

**QUESTION 54**

Which of the following attacks is spread by attaching themselves to files?

- A. Worms
- B. Botnet
- C. DDoS
- D. FTP bounce

**Correct Answer: A**

**Section: (none)**

**Explanation**

**QUESTION 55**

A network administrator is configuring PXE boot to reimage a computer lab. Which of the following must be configured on the existing DHCP server to specify the IP address of the imaging server from which the clients must boot?

- A. Scope
- B. Reservation
- C. Option
- D. Lease

**Correct Answer: C**

**Section: (none)**

**Explanation**

**QUESTION 56**

A technician testing an Ethernet card uses a cable wired with pins 1,2 to pins 3,6 on the same RJ-45 plug. Which of the following describes what the technician is using?

- A. RS-232
- B. Rollover cable
- C. Loopback



D. Point to point cable

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 57**

The protocol SNMP uses which of the following ports by default?

A. 53

B. 61

C. 67

D. 161

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 58**

A company has a remote access VPN and wants to ensure that if a username and password are compromised, the corporate network will remain secure. Which of the following will allow the company to achieve its security goal?

A. Posture assessment

B. Kerberos

C. TACACS+

D. Two-factor authentication

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 59**

In order for switching loops to be automatically disabled, which of the following needs to be implemented?

A. Routing tables

B. Collision domains

- C. Port mirroring
- D. Spanning-tree protocol

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 60**

Which of the following is considered a routing metric?

- A. Hop count
- B. QoS
- C. Subnet size
- D. IP address

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 61**

192.168.0.7/8 notation denotes which of the following IPv4 subnet masks?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 62**

Which of the following devices allows for multiple web servers to host the same web page and for traffic to be distributed between them according to some metric?

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

#### **QUESTION 63**

A technician is troubleshooting a printing issue where some users in an office are unable to print. Which of the following should be the FIRST step in troubleshooting this issue?

- A. Reboot each of the workstations
- B. Ask users if anything changed in their environment recently
- C. Advise users to move to a different office
- D. Power cycle the printer

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.ensurepass.com>

#### **QUESTION 64**

A forward lookup zone converts which of the following?

- A. IP addresses to hostnames
- B. Hostnames to IP addresses
- C. MAC addresses to IP addresses
- D. IP Addresses to MAC addresses

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 65**

In a newly installed LAN, the network administrator receives many calls about intermittent or slow connectivity to the authentication server. Which of the following could cause this problem? (Select TWO).

- A. VLAN configuration error
- B. Cables too short
- C. Cable crosstalk
- D. Incorrect channel
- E. EMI
- F. Wrong subnet mask

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**QUESTION 66**

A technician grabs a network cable and connects two switches together. However, the ports fail to come up as indicated by the link lights. Which of the following is MOST likely the issue?

- A. Wrong subnet mask on the interfaces
- B. Mismatched MTU size
- C. Straight through instead of cross over cable
- D. SSID mismatch between the switches

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 67**

A technician needs to verify the time of a power outage. Which of the following may be used to determine this information?

- A. Network baseline
- B. Tracert
- C. System logs
- D. Protocol analyzer

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 68**

Which of the following network topologies is MOST commonly used by online file sharing websites?

- A. Point to multipoint
- B. Peer-to-peer
- C. Ring
- D. Hybrid

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 69**

A user reports that one of their critical programs no longer functions after a recent router upgrade in the office. A network technician is called in to troubleshoot the issue and documentation shows that the software needs full open connections over ports 558, 981, and 382 in order to function. Which of the following tools could the technician BEST use to troubleshoot this issue?

- A. NET USE
- B. IPCONFIG
- C. TRACEROUTE
- D. TELNET

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 70**

A technician is assigned the task of connecting two buildings 125 meters apart (410 ft.). Which of the following cable types should the technician consider?

- A. CAT5e Cable
- B. CAT5 Cable

- C. Plenum
- D. Single mode fiber

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### QUESTION 71

Which of the following configuration management documents is used to describe how a computer performs after initial installation onto a network?



<http://www.gratisexam.com/>

- A. Baseline
- B. Network map
- C. Asset management
- D. Installation guide

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 72

Which of the following types of technologies should be used to provide a MAXIMUM 10 GB speed to a multi-mode fiber network?

- A. 10GBaseER
- B. 10GBaseSR
- C. 10GBaseTX
- D. 10GBaseT

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 73**

A user wants to send information and ensure that it was not modified during transmission. Which of the following should be implemented?

- A. MAC filtering
- B. Digital signatures
- C. MS-CHAP
- D. CHAP

**Correct Answer:** B

**Section:** (none)

**Explanation**

**QUESTION 74**

A SOHO client has tasked Joe, a technician, with setting up a basic SOHO network to support four laptops and one desktop PC. The client would also like to have a basic wireless network to use for internal devices only that is secure. Given the list of requirements, which of the following devices would Joe need to purchase for his client? (Select TWO).

- A. IDS
- B. Repeater
- C. Switch
- D. WAP
- E. UTM device

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**QUESTION 75**

A user reports that they are unable to access a new server but are able to access all other network resources. Based on the following firewall rules and network information, which of the following ACL entries is the cause?

User's IP: 192.168.5.14

Server IP: 192.168.5.17

Firewall rules:

Permit 192.168.5.16/28 192.168.5.0/28

Permit 192.168.5.0/24 192.168.4.0/24

Permit 192.168.4.0/24 192.168.5.0/24

Deny 192.168.5.0/28 192.168.5.16/28

Deny 192.168.14.0/24 192.168.5.16/28

Deny 192.168.0.0/24 192.168.5.0/24

- A. Deny 192.168.0.0/24 192.168.5.0/24
- B. Deny 192.168.5.0/28 192.168.5.16/28
- C. Deny 192.168.14.0/24 192.168.5.16/28
- D. Implicit Deny rule

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### QUESTION 76

Dynamic DNS provides which of the following services?

- A. Automatic registration of host records
- B. Translates public host names to private host names
- C. Provides round robin load balancing for web servers
- D. Provides aliases for additional search suffixes

**Correct Answer:** A

**Section:** (none)

**Explanation**



**QUESTION 77**

Which of the following network performance optimization methods allows for frequently accessed sites to be housed locally, thereby reducing bandwidth requirements?

- A. Load balancing
- B. Traffic policing
- C. Caching engines
- D. Traffic shaping

**Correct Answer:** C

**Section:** (none)

**Explanation**

**QUESTION 78**

Which of the following cables would BEST be used to extend a network through an 80 feet (262 meters) machine shop that has many high voltage machines and generators running?

- A. CAT5
- B. CAT6
- C. Coaxial
- D. Fiber

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 79**

Which of the following types of cables would be used to connect a hub to a patch panel?

- A. Straight-through cable
- B. Crossover cable
- C. T1 Crossover cable
- D. Rollover cable

**Correct Answer:** A

**Section:** (none)

## **Explanation**

### **QUESTION 80**

Which of the following requires congestion to occur before enabling traffic prioritization?

- A. Quality of Service
- B. IGMP snooping
- C. Flow control
- D. WAN optimization

**Correct Answer: A**

**Section: (none)**

## **Explanation**

### **QUESTION 81**

A technician sets up a network with multiple WAN connections, backup power sources, multiple firewalls, and a mesh configuration for network switching. All of the software and hardware has fault detection designed to provide a system with minimal down time. Which of the following is the BEST example of this optimization method?

- A. Load balancing
- B. High availability
- C. Caching engines
- D. Quality of Service

**Correct Answer: B**

**Section: (none)**

## **Explanation**

**Explanation/Reference:**

<http://www.ensurepass.com>

### **QUESTION 82**

A technician is terminating a new run of network cables to a 110 block. Which of the following tools would the technician use?

- A. Loopback plug
- B. Crimper tool
- C. Punch down tool

D. Cable tester

**Correct Answer:** C

**Section:** (none)

**Explanation**

### **QUESTION 83**

Which of the following network topologies is MOST likely used in remote access VPN?

- A. Point to Point
- B. Bus
- C. Ring
- D. Mesh

**Correct Answer:** A

**Section:** (none)

**Explanation**

### **QUESTION 84**

Which of the following operate at the Data Link layer of the OSI model? (Select TWO).

- A. MAC address
- B. Router
- C. Hub
- D. Switch
- E. IP address

**Correct Answer:** AD

**Section:** (none)

**Explanation**

### **QUESTION 85**

An administrator has added QoS settings to the LAN switches prioritizing RTP. Which of the following systems is the Administrator MOST concerned with in this scenario?

- A. Phone communications

- B. Web site downloads
- C. Streaming video clients
- D. Client bittorrent abilities

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 86**

A home user wishes to secure the wireless network using strong encryption, so they decide to use AES. Which of the following would be used as the encryption method?

- A. WEP
- B. CCMP
- C. TKIP
- D. CHAP

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 87**

Which of the following tools will scan a network for hosts and provide information on the installed operating system?

- A. DOCSIS
- B. NMAP
- C. IMAP
- D. BERT

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 88**

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

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 89**

A SOHO company just installed new 802.11a wireless APs. All company laptops have gigabit LAN ports along with wireless-g cards. Which of the following is the issue with this setup?

- A. The laptops will have a max wireless speed of 300Mbps
- B. The wired network is likely not backwards compatible with the gigabit LAN ports on the laptops
- C. The wireless system will only function at a slow 11Mbps
- D. The laptops are only capable of functioning on 2.4GHz spectrum

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 90**

An administrator can use packet tags to configure which of the following?



<http://www.gratisexam.com/>

- A. VLAN
- B. NAT
- C. PoE

D. QoS

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 91**

An administrator needs to open ports in the firewall for both DNS and eDNS. Which of the following default ports would need to be opened on the firewall? (Select TWO).

- A. TCP 23
- B. TCP 53
- C. TCP 123
- D. UDP 23
- E. UDP 53
- F. UDP 123

**Correct Answer:** BE

**Section:** (none)

**Explanation**

#### **QUESTION 92**

Which of the following OSI model layers is used to frame packets that are sent over a medium?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

#### **QUESTION 93**

At which layer of the TCP/IP model would cabling exist?

- A. Network Interface
- B. Internet
- C. Application
- D. Transport

**Correct Answer:** A

**Section:** (none)

**Explanation**

#### **QUESTION 94**

Which of the following should the last line of an ACL normally contain?

- A. Explicit allow
- B. Statically routed
- C. Random access
- D. Implicit deny

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 95**

An IT manager is looking for a solution that can easily trace back suspicious Internet browsing to particular users at a company. Which of the following can BEST provide this functionality?

- A. Layer 3 managed switch
- B. VPN concentrator
- C. Load balancer
- D. Content filter

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 96**

Which of the following 802.11 standards can operate at both 2.4Ghz and 5.0Ghz?

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**QUESTION 97**

Which of the following is used to allow multiple sources on a single optical cable?



<http://www.gratisexam.com/>

- A. HSPA+
- B. MIMO
- C. DWDM
- D. SONET

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 98**

A company has been just opened a new site in another country. Both sites share information across the WAN continuously throughout the business day. Which of



the following should be implemented to ensure both sites are accessible?

- A. Traffic shaping
- B. QoS
- C. Caching engines
- D. High availability

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 99**

A technician is attempting to set up a new laptop for a user. The user's old laptop connects to the corporate wireless network "CompanyWiFi" automatically. However, when the technician looks for the "CompanyWiFi" network on the new laptop, he does not find it in the list of available networks. Both laptops have 802.11g wireless network adapters and are sitting next to each other on the user's desk. Which of the following would MOST likely be the reason that the new laptop cannot see the "CompanyWiFi" network?

- A. Loss of signal strength
- B. Incorrect WEP key was input
- C. RFID interference from other electronic devices
- D. SSID broadcasting is disabled on the WAP

**Correct Answer:** D

**Section:** (none)

**Explanation**

#### **QUESTION 100**

A VoIP system running over a wireless network link is continually being reported as choppy. Which of the following is the cause of this issue?

- A. Frequency
- B. Latency
- C. Interference
- D. Encryption type

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

## HotSpot

### QUESTION 1

Corporate headquarters provided your office a portion of their class B subnet to use at a new office location. Allocate the minimum number of addresses (using CIDR notation) needed to accommodate each department.



<http://www.gratisexam.com/>

Range Given: 172.30.232.0/24

- Sales 57 devices
- HR 23 devices
- IT 12 devices
- Finance 32 devices
- Marketing 9 devices

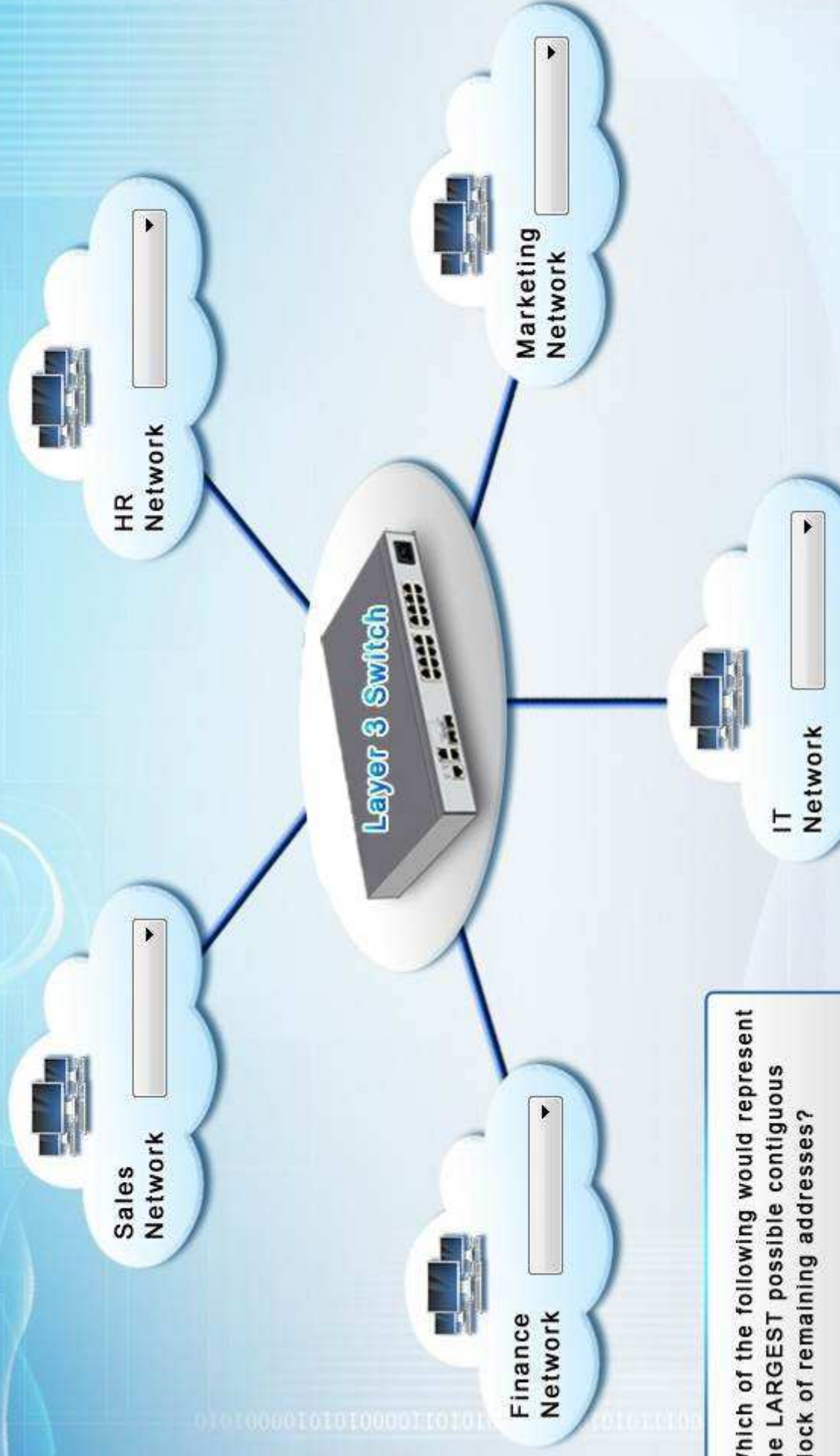
After accommodating each department, identify the unused portion of the subnet by responding to the question on the graphic. All drop downs must be filled.

Instructions:

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

## CIDR Notation

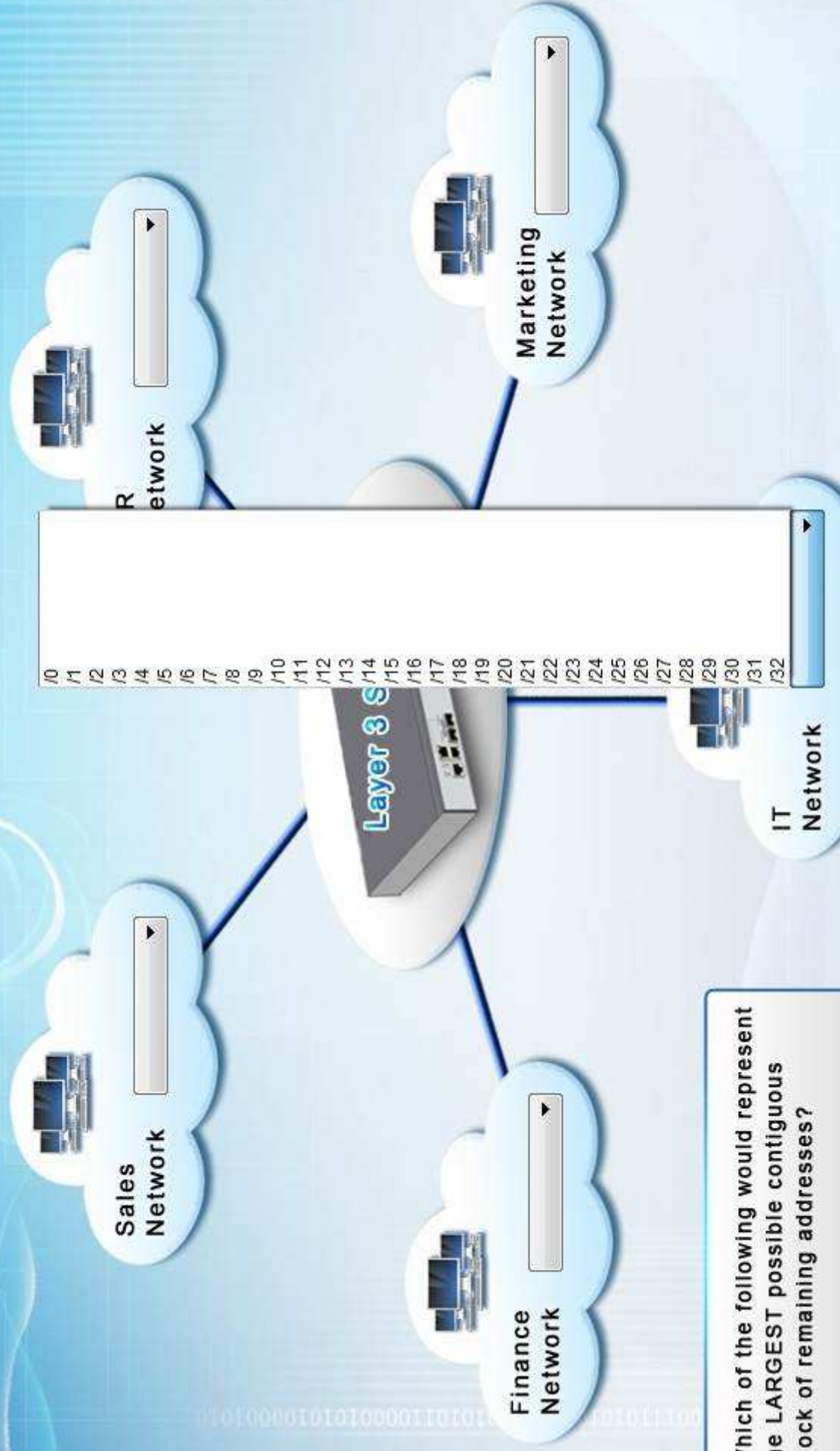
Instructions: When the simulation is complete, please select the Done button to submit.



Which of the following would represent the **LARGEST** possible contiguous block of remaining addresses?

## CIDR Notation

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



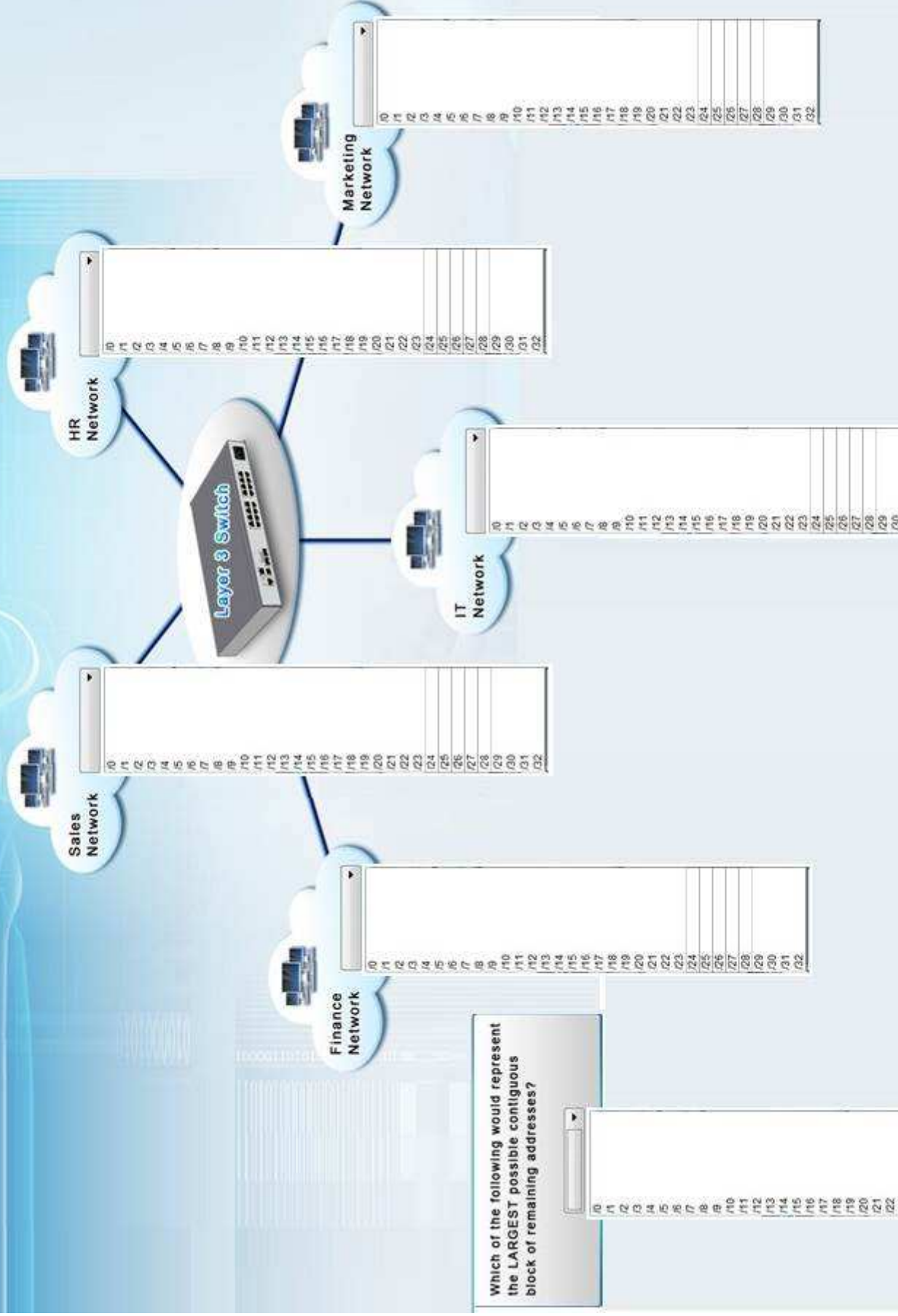
All Networks have the range form /0 to/32

**Hot Area:**



## CIDR Notation

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

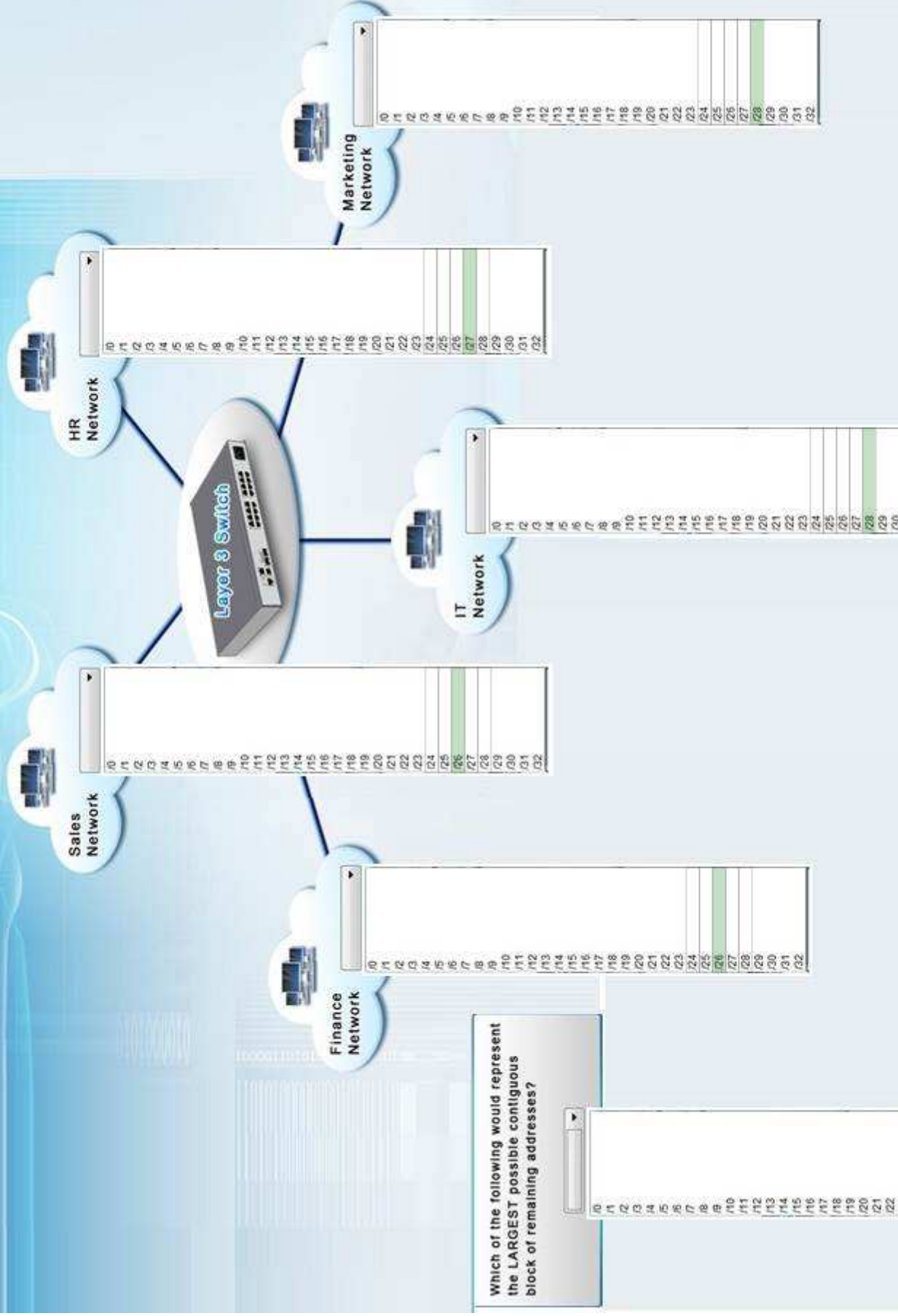


**Correct Answer:**



## CIDR Notation

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



**Section: (none)**

**Explanation**

**Explanation/Reference:**

Explanation:

Sales network - /26 - This will provide up to 62 usable IP addresses (64-2 for subnet and broadcast IP)

HR network - /27 - This will provide for up to 30 usable IP's (32-2)

IT - /28 - This will provide for up to 14 usable IP's (16-2)

Finance - /26 - Note that a /27 is 32 IP addresses but 2 of those are reserved for the network and broadcast IP's and can't be used for hosts.

Marketing - /28

If we add up how many IP blocks are used that is  $64+32+16+64+16=192$ .

A /24 contains 256 IP addresses, so  $256-192=64$ .

So the last unused box should be a /26, which equates to 64 addresses

## Fill in the Blank

### QUESTION 1

Wireless network users recently began experiencing speed and performance issues after access point 2 (AP2) was replaced due to faulty hardware. The original network was installed according to a consultant's specifications and has always worked without a problem.

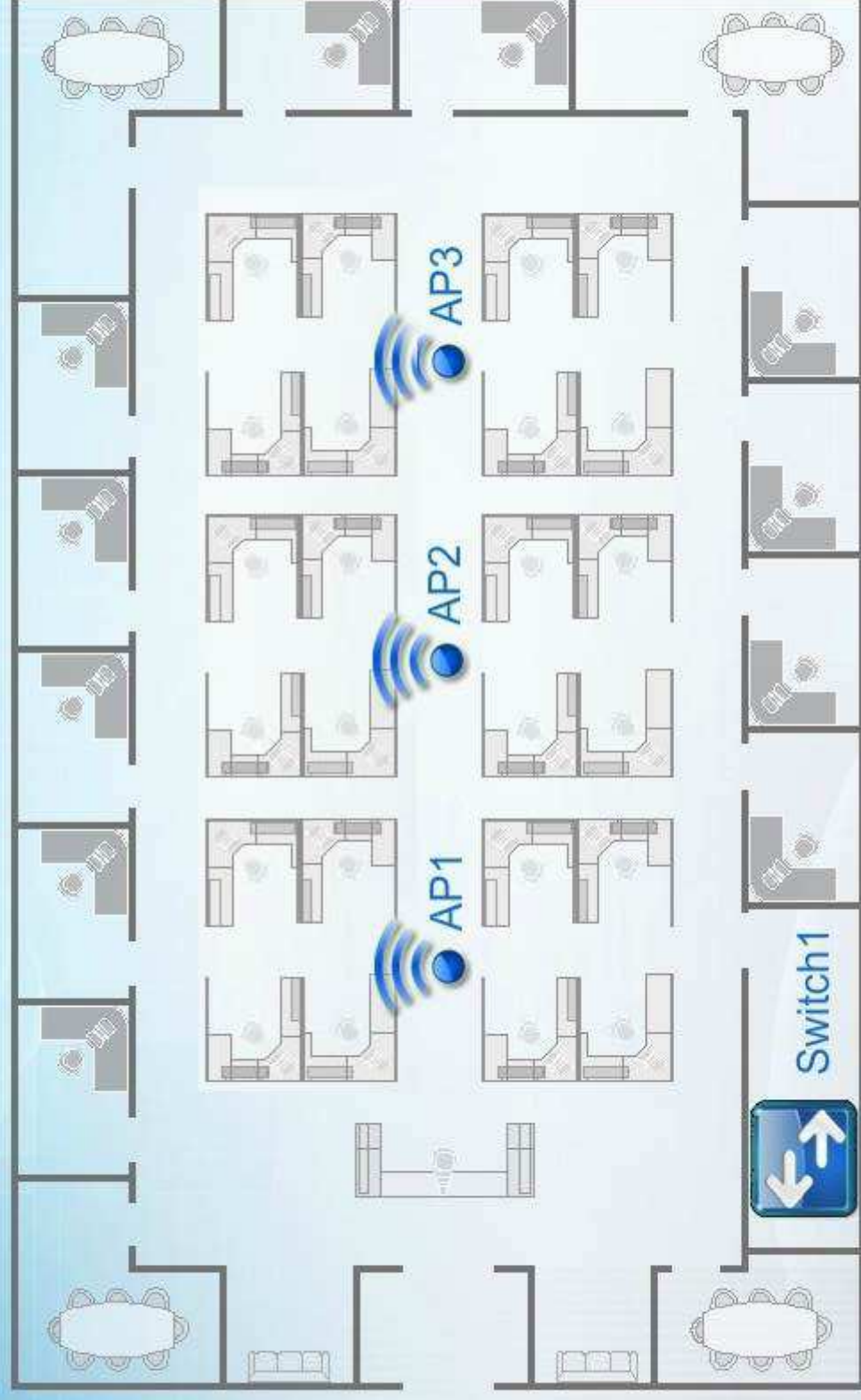
You, a network technician, have been tasked with evaluating the situation and resolving the issues to improve both performance and connectivity. Refer to the following diagram and perform any NECESSARY changes to the wireless and wired infrastructure by adjusting devices.

Note: Adjust the LEAST number of devices needed to fix the issue, all blue icons in the image are clickable. When you feel the simulation is complete please select the Done button.

## Network Diagram

Instructions: Perform changes to the wireless and wired infrastructure by adjusting the devices.

### AP Physical Locations



Wireless AP1 Settings

http://ap1.setup.do

Wireless AP Configuration Settings

Basic Configuration

Access Point Name:  
AP1

IP Address:  
192.168.100.151 / 24

Gateway:  
192.168.100.1

SSID:  
CorpNET

SSID Broadcast:  
☒ Yes ☐ No

Wireless

Mode:  
G

Channel:  
1

Wired

Speed:  
☐ 10 ☒ 100 ☐ 1000

Duplex:  
☐ Auto ☐ Half ☒ Full

Security

Security Settings:  
☐ None ☐ WEP ☒ WPA

Key or Passphrase:  
123456789b

Reset

Submit



Wireless AP2 Settings

http://ap2.setup.do

Wireless AP Configuration Settings

Basic Configuration

Access Point Name:  
AP2

IP Address:  
192.168.100.152 / 24

Gateway:  
192.168.100.1

SSID:  
CorpNET

SSID Broadcast:  
☒ Yes ☐ No

Wireless

Mode:  
B

Channel:  
1

Wired

Speed:  
☒ Aut ☐ 10 ☐ 100 ☐ n

Duplex:  
☒ Aut ☐ Half ☐ Full ☐ n

Security

Security Settings:  
☐ None ☐ WEP ☒ WPA

Key or Passphrase:  
123456789b

Reset

Submit



Wireless AP3 Settings

http://ap3.setup.do



# Wireless AP Configuration Settings

Basic Configuration

Access Point Name:

AP3

IP Address:

192.168.100.153

 / 

24

Gateway:

192.168.100.1

SSID:

CorpNET

SSID Broadcast:

☒ Yes ☐ No

Wireless

Mode:

G

Channel:

11

Wired

Speed:

☐ 10 ☒ 100 ☐ 1000

Duplex:

☐ Auto ☐ Half ☒ Full

Security

Security Settings:

☐ None ☐ WEP ☒ WPA

Key or Passphrase:

123456789b

Reset

Submit

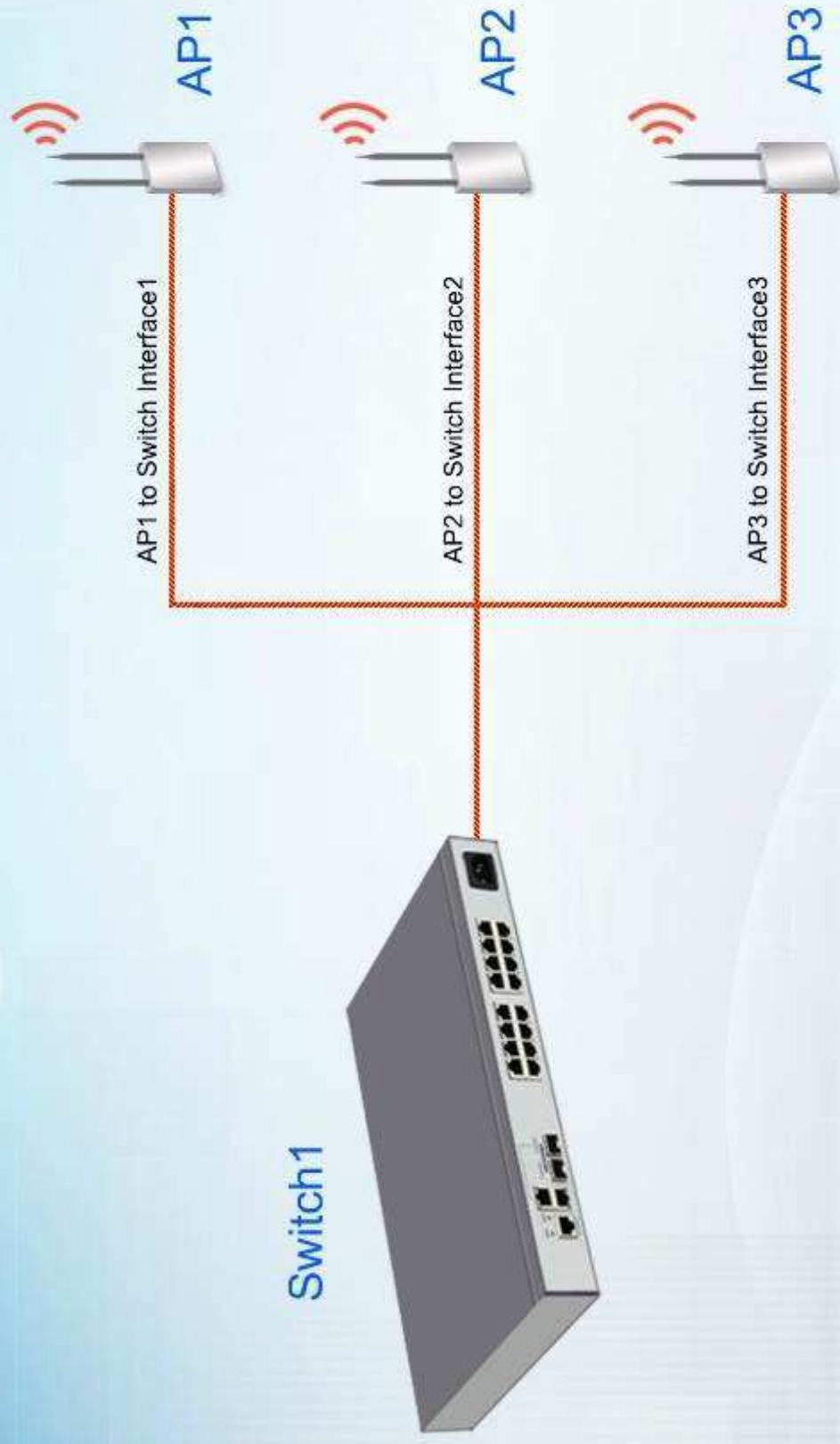




## Network Diagram

Instructions: Perform changes to the wireless and wired infrastructure by adjusting the devices.

## Logical Network Diagram



**Correct Answer:** -Change the speed and duplex settings on AP2 only to 100 and full. -Change the mode to G on AP2 -Change the channel to 6 on AP2

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Explanation:

Since we know that the network was running perfectly before replacing AP2 we should start by looking at this new device that was used to replace the old one. Here we see that the other AP's have hard coded the speed and duplex settings to 100/full, while AP2 is set to auto/auto.

Also, the other AP's have been configured to use 802.11G, while AP2 is using 802.11B.

Finally the channel that AP2 is using overlaps with AP1 which can cause problems. Channels 1, 6, and 11 are spaced far enough apart that they don't overlap. On a non-MIMO setup (i.e. 802.11 a, b, or g) you should always try to use channel 1, 6, or 11. Since AP1 is using 1, and AP3 is using 11, AP2 should be using 6.

## **QUESTION 2**

You have been tasked with testing a CAT5e cable. A summary of the test results can be found on the screen.

Step 1: Select the tool that was used to create the cable test results.

Step 2: Interpret the test results and select the option that explains the results. After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

## Cable Test

Step 1: Select the tool that was used to create the cable test results.

Cable Test Result			
1, 2	Open	7ft	
3, 6	Short	7ft	
4, 5	Open	7ft	
7, 8	Open	7ft	



Tool Choices	
<input type="checkbox"/>	Crimper
<input type="checkbox"/>	Cable Certifier
<input type="checkbox"/>	Multimeter
<input type="checkbox"/>	Punch Down Tool
<input type="checkbox"/>	Protocol Analyzer
<input type="checkbox"/>	OTDR
<input type="checkbox"/>	Toner Probe

## Cable Test

Step 1: Select the tool that was used to create the cable test results.

**Cable Test Result**

1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft



**Tool Choices**

☒ Crimper  
☐ Cable Certifier  
☐ Multimeter  
☐ Punch Down Tool  
☐ Protocol Analyzer  
☐ OTDR  
☐ Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

- ☐ Correctly crimped cable  
☐ Incorrectly crimped cable

Submit Cable Test Analysis



## Cable Test

Step 1: Select the tool that was used to create the cable test results.

 Cable Test Result

1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

 Tool Choices

☐ Crimper

☒ Cable Certifier

☐ Multimeter

☐ Punch Down Tool

☐ Protocol Analyzer

☐ OTDR

☐ Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

- ☐ Correctly crimped cable
- ☐ Incorrectly crimped cable

Submit Cable Test Analysis

## Cable Test

Step 1: Select the tool that was used to create the cable test results.

 Cable Test Result

1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

 Tool Choices

☐ Crimper

☐ Cable Certifier

☒ Multimeter

☐ Punch Down Tool

☐ Protocol Analyzer

☐ OTDR

☐ Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

- ☐ Correct voltage on the cable
- ☐ Incorrect voltage on the cable

Submit Cable Test Analysis

## Cable Test

Step 1: Select the tool that was used to create the cable test results.

 Cable Test Result

1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

 Tool Choices

☐ Crimper

☐ Cable Certifier

☐ Multimeter

☒ Punch Down Tool

☐ Protocol Analyzer

☐ OTDR

☐ Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

- ☐ Correctly punched cable
- ☐ Incorrectly punched cable

Submit Cable Test Analysis



## Cable Test

Step 1: Select the tool that was used to create the cable test results.

 Cable Test Result

1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

 Tool Choices

☐ Crimper

☐ Cable Certifier

☐ Multimeter

☐ Punch Down Tool

☒ Protocol Analyzer

☐ OTDR

☐ Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

- ☐ Correct captured packets
- ☐ Incorrect captured packets

Submit Cable Test Analysis



## Cable Test

Step 1: Select the tool that was used to create the cable test results.

 Cable Test Result

1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

 Tool Choices

☐ Crimper

☐ Cable Certifier

☐ Multimeter

☐ Punch Down Tool

☐ Protocol Analyzer

☒ OTDR

☐ Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

- ☐ Correct length cable
- ☐ Incorrect length cable

Submit Cable Test Analysis

## Cable Test

Step 1: Select the tool that was used to create the cable test results.

Cable Test Result		
1, 2	Open	7ft
3, 6	Short	7ft
4, 5	Open	7ft
7, 8	Open	7ft

↑

Tool Choices	
<input type="checkbox"/>	Crimper
<input type="checkbox"/>	Cable Certifier
<input type="checkbox"/>	Multimeter
<input type="checkbox"/>	Punch Down Tool
<input type="checkbox"/>	Protocol Analyzer
<input type="checkbox"/>	OTDR
<input checked="" type="checkbox"/>	Toner Probe

Step 2: Interpret the test results and select the option that explains the results.

After you are done with your analysis, click the 'Submit Cable Test Analysis' button.

- ☐ Correctly toned cable
- ☐ Incorrectly toned cable

Submit Cable Test Analysis

**Correct Answer:** Solution is pending. Please suggest your solution for this simulation question to us.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

### **QUESTION 3**

Alter recent changes to the pictured network, several users are unable to access the servers. Only PC1, PC2, PC3, and PC4 are clickable and will give you access to the command prompt and the adapter configuration tabs.

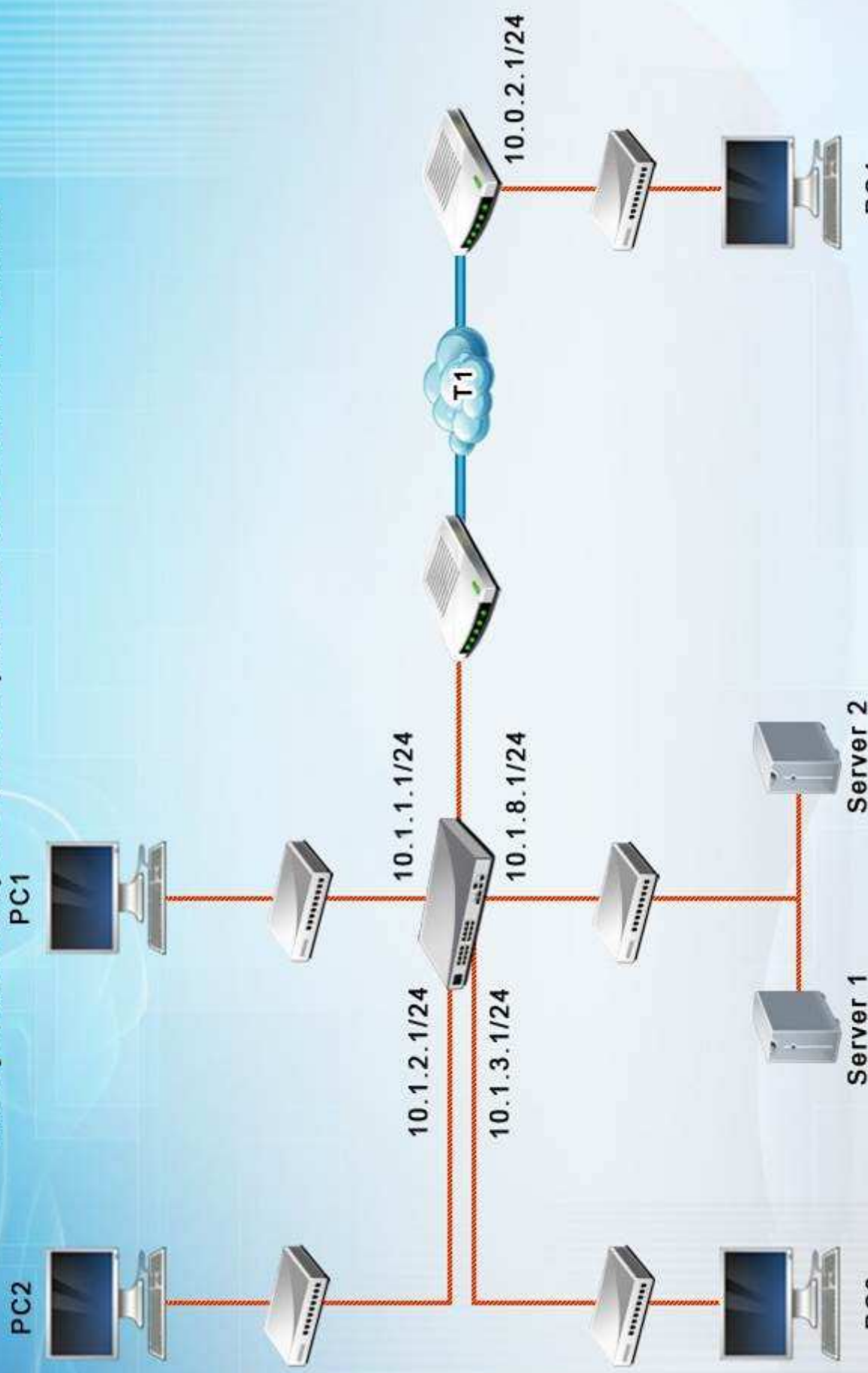
Instructions:

Verify the settings by using the command prompt, after making any system changes. Next, restore connectivity by making the appropriate changes to the infrastructure. When you have completed these steps, select the Done button to submit.



## Network Diagram

**Instructions:** Verify the settings by using the command prompt, after making any system changes.  
Next, restore connectivity by making the appropriate changes to the infrastructure.  
When you have completed these steps, select the Done button to submit.



You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address

IP address:

10 . 1 . 1 . 129

Subnet mask:

255 . 255 . 255 . 0

Default gateway:

10 . 1 . 1 . 1

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses

Preferred DNS server:

10 . 1 . 8 . 13

Alternate DNS server:

.

☐ Validate settings upon exit

Advanced...

Apply

Cancel

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address

IP address:

10 . 1 . 2 . 129

Subnet mask:

255 . 255 . 255 . 0

Default gateway:

10 . 1 . 2 . 1

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses

Preferred DNS server:

10 . 1 . 8 . 13

Alternate DNS server:

. . . .

☐ Validate settings upon exit

Advanced...

Apply

Cancel

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address

IP address:

10 . 1 . 3 . 129

Subnet mask:

255 . 255 . 255 . 128

Default gateway:

10 . 1 . 3 . 1

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses

Preferred DNS server:

10 . 1 . 8 . 13

Alternate DNS server:

.

☐ Validate settings upon exit

Advanced...

Apply

Cancel

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address

IP address:

10 . 0 . 2 . 129

Subnet mask:

255 . 255 . 255 . 0

Default gateway:

10 . 1 . 2 . 1

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses

Preferred DNS server:

10 . 1 . 8 . 13

Alternate DNS server:

.

☐ Validate settings upon exit

Advanced...

Apply

Cancel



**Correct Answer:** On PC3, change the subnet mask to 255.255.255.0. When it is set to 255.255.255.128, then the PC with a .129 address will not be on the same subnet as the default gateway which is .1 On PC4, change the default gateway to 10.0.2.1. It has been incorrectly set as 10.1.2.1.

**Section: (none)**

**Explanation**

**Explanation/Reference:**



<http://www.gratisexam.com/>