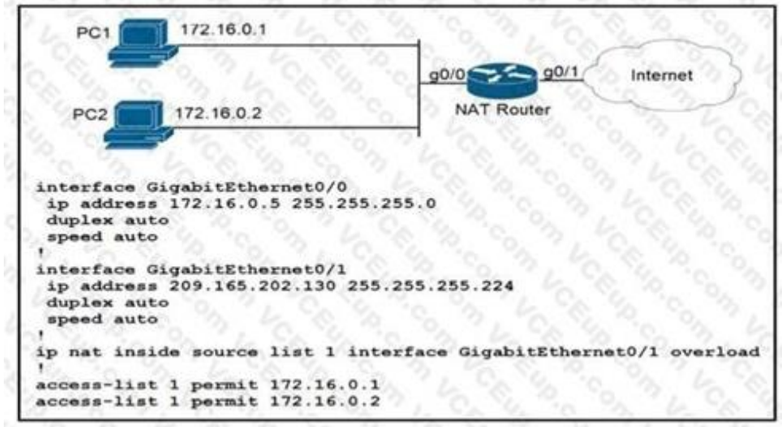
Number: 200-301
Passing Score: 800.0
Time Limit: 120.0
File Version: 16.0

Exam Code: 200-301
Exam Name: Cisco Certified Network Associate (CCNA)

Exam A

QUESTION 1
Refer to the exhibit.

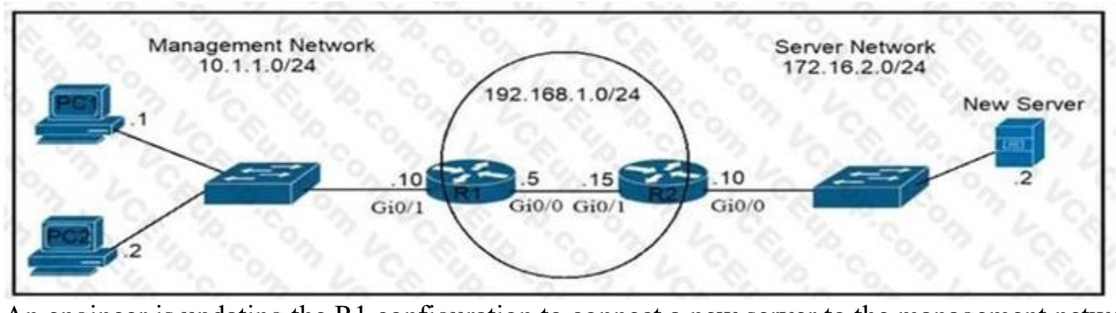


How should the configuration be updated to allow PC1 and PC2 access to the Internet?

A. Modify the configured number of the second access list.
B. Add either the ip nat {inside|outside} command under both interfaces.
C. Remove the overload keyword from the ip nat inside source command.
D. Change the ip nat inside source command to use interface GigabitEthernet0/0.

Correct Answer: B
Section:

QUESTION 2
Refer to the exhibit.



An engineer is updating the R1 configuration to connect a new server to the management network.
The PCs on the management network must be blocked from pinging the default gateway of the new server. Which command must be configured on R1 to complete the task?

A. R1(config)#lp route 172.16.2.2 255.255.255.248 gi0/1
B. R1(config)#jp route 172.16.2.2 255.255.255.255 gi0/0
C. R1(config>#ip route 172.16.2.0 255.255.255.0 192.168.1.15

D. R1(conflg)#ip route 172.16.2.0 255.255.255.0 192.168.1.5

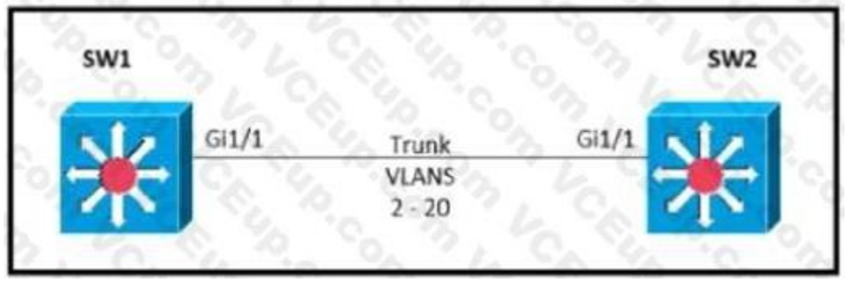
Correct Answer: B
Section:

QUESTION 3
An engineer observes high usage on the 2.4GHz channels and lower usage on the 5GHz channels. What must be configured to allow clients to preferentially use 5GH2 access points?

A. Re- Anchor Roamed Clients
B. 11ac MU-MIMO
C. OEAP Split Tunnel
D. Client Band Select

Correct Answer: D
Section:

QUESTION 4
Refer to the exhibit.



Which command must be executed for Gi1.1 on SW1 to become a trunk port if Gi1/1 on SW2 is configured in desirable or trunk mode?

A. switchport mode trunk
B. switchport mode dot1-tunnel
C. switchport mode dynamic auto
D. switchport mode dynamic desirable

Correct Answer: C
Section:

QUESTION 5
Which IPv6 address type provides communication between subnets and is unable to route on the Internet?

A. global unicast
B. unique local
C. link-local
D. multicast

Correct Answer: B
Section:

QUESTION 6
What are two descriptions of three-tier network topologies? (Choose two)

A. The core and distribution layers perform the same functions
B. The access layer manages routing between devices in different domains
C. The network core is designed to maintain continuous connectivity when devices fail.
D. The core layer maintains wired connections for each host
E. The distribution layer runs Layer 2 and Layer 3 technologies

Correct Answer: C, E
Section:

QUESTION 7
Refer to the exhibit.

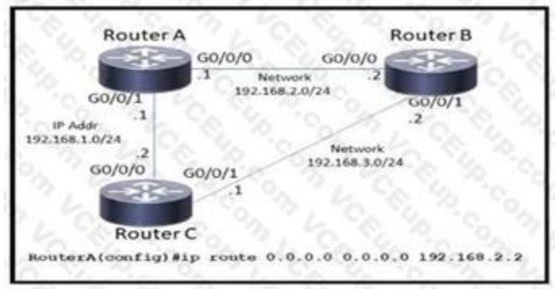
```
SW1(config-line)#line vty 0 15
SW1(config-line)#no login local
SW1(config-line)#password cisco

SW2(config)#username admin1 password abcd1234
SW2(config)#username admin2 password abcd1234
SW2(config-line)#line vty 0 15
SW2(config-line)#login local

SW3(config)#username admin1 secret abcd1234
SW3(config)#username admin2 secret abcd1234
SW3(config-line)#line vty 0 15
SW3(config-line)#login local

SW4(config)#username admin1 secret abcd1234
SW4(config)#username admin2 secret abcd1234
SW4(config-line)#line console 0
SW4(config-line)#login local
```

An administrator configures four switches for local authentication using passwords that are stored in a cryptographic hash. The four switches must also support SSH access for administrators to manage the network infrastructure. Which switch is configured correctly to meet these requirements?

A. SW1
B. SW2
C. SW3
D. SW4

Correct Answer: C
Section:

QUESTION 8
Refer to the exhibit.



Which command must be issued lo enable a floating static default route on router A?

A. lp route 0.0.0.0 0.0.0.0 192.168.1.2
B. ip default-gateway 192.168.2.1
C. ip route 0.0.0.0 0.0.0.0 192.168.2.1 10
D. ip route 0.0.0.0 0.0.0.0 192.168.1.2 10

Correct Answer: D
Section:

QUESTION 9
Where does a switch maintain DHCP snooping information?

A. in the MAC address table
B. in the CAM table
C. in the binding database
D. in the frame forwarding database

Correct Answer: C
Section:

QUESTION 10
Refer to the exhibit.

```
SW1#show run int gig 0/1
interface GigabitEthernet0/1
 switchport access vlan 11
 switchport trunk allowed vlan 1-10
 switchport trunk encapsulation dot1q
 switchport trunk native vlan 5
 switchport mode trunk
 speed 1000
 duplex full
```

Which action is expected from SW1 when the untagged frame is received on the GigabitEthernet0/1 interface?

A. The frame is processed in VLAN 5.
B. The frame is processed in VLAN 11
C. The frame is processed in VLAN 1
D. The frame is dropped

Correct Answer: A
Section:

QUESTION 11
Refer to the exhibit.

```
SW1#sh lacp neighbor
Flags:  S - Device is requesting Slow LACPDUs
        F - Device is requesting Fast LACPDUs
        A - Device is in Active mode       P - Device is in Passive mode

Channel group 35 neighbors

Partner's information:

                  LACP port                     Admin  Oper   Port    Port
Port      Flags   Priority  Dev ID          Age    key    Key    Number  State
Et1/0     SP      32768     aabb.cc80.7000  8s     0x0    0x23   0x101   0x3C
Et1/1     SP      32768     aabb.cc80.7000  8s     0x0    0x23   0x102   0x3C
```

Based on the LACP neighbor status, in which mode is the SW1 port channel configured?

A. passive
B. mode on
C. auto
D. active

Correct Answer: D
Section:
Explanation:
From the neighbor status, we notice the "Flags" are SP. "P" here means the neighbor is in Passive mode.
In order to create an Etherchannel interface, the (local) SW1 ports should be in Active mode.
Moreover, the "Port State" in the exhibit is "0x3c" (which equals to "00111100 in binary format).
Bit 3 is "1" which means the ports are synchronizing -> the ports are working so the local ports should be in Active mode.

QUESTION 12
Which result occurs when PortFast is enabled on an interface that is connected to another switch?

A. Spanning tree may fail to detect a switching loop in the network that causes broadcast storms
B. VTP is allowed to propagate VLAN configuration information from switch to switch automatically.
C. Root port choice and spanning tree recalculation are accelerated when a switch link goes down
D. After spanning tree converges PortFast shuts down any port that receives BPDUs.

Correct Answer: A
Section:
Explanation:
Enabling the PortFast feature causes a switch or a trunk port to enter the STP forwarding-state immediately or upon a linkup event, thus bypassing the listening and learning states.

Note: To enable portfast on a trunk port you need the trunk keyword "spanning-tree portfast trunk

QUESTION 13
What is the primary different between AAA authentication and authorization?

A. Authentication verifies a username and password, and authorization handles the communication between the authentication agent and the user database.
B. Authentication identifies a user who is attempting to access a system, and authorization validates the users password
C. Authentication identifies and verifies a user who is attempting to access a system, and authorization controls the tasks the user can perform.
D. Authentication controls the system processes a user can access and authorization logs the activities the user initiates

Correct Answer: C
Section:
Explanation:
AAA stands for Authentication, Authorization and Accounting.
+ Authentication: Specify who you are (usually via login username & password) + Authorization: Specify what actions you can do, what resource you can access + Accounting: Monitor what you do, how long you do it (can be used for billing and auditing) An example of AAA is shown below:
+ Authentication: "I am a normal user. My username/password is user_tom/learnforever" + Authorization: "user_tom can access LearnCCNA server via HTTP and FTP" + Accounting: "user_tom accessed LearnCCNA server for 2 hours".
This user only uses "show" commands.

QUESTION 14
A network administrator must to configure SSH for remote access to router R1 The requirement is to use a public and private key pair to encrypt management traffic to and from the connecting client.
Which configuration, when applied, meets the requirements?

```
R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate ec keysize 2048

R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate rsa modulus 1024

R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key generate ec keysize 1024

R1#enable
R1#configure terminal
R1(config)#ip domain-name cisco.com
R1(config)#crypto key encrypt rsa name myKey
```

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: B
Section:

QUESTION 15
A network engineer must configure the router R1 GigabitEthernet1/1 interface to connect to the router R2 GigabitEthernet1/1 interface. For the configuration to be applied the engineer must compress the address 2001:0db8:0000:0000:0500:000a:400F:583B. Which command must be issued on the interface?

A. ipv6 address 2001:0db8::5: a: 4F 583B
B. ipv6 address 2001:db8::500:a:400F:583B
C. ipv6 address 2001 db8:0::500:a:4F:583B
D. ipv6 address 2001::db8:0000::500:a:400F:583B

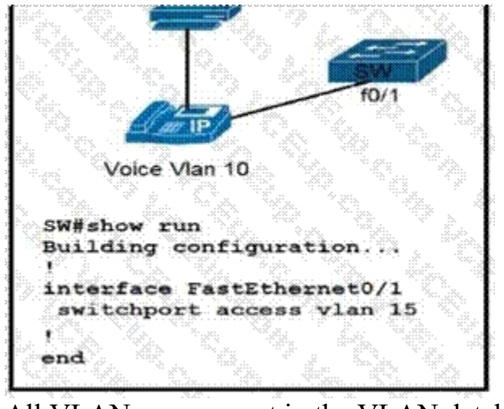
Correct Answer: B
Section:

QUESTION 16
Which protocol is used for secure remote CLI access?

A. HTTPS
B. HTTP
C. Telnet
D. SSH

Correct Answer: D
Section:

QUESTION 17
Refer to the exhibit.



All VLANs are present in the VLAN database. Which command sequence must be applied to complete the configuration?

A. Interface FastEthernet0/1 switchport trunk native vlan 10 switchport trunk allowed vlan 10,15
B. Interface FastEthernet0/1 switchport mode trunk switchport trunk allowed vlan 10,15
C. interface FastEthernet0/1 switchport mode access switchport voice vlan 10
D. Interface FastEthernet0/1 switchport trunk allowed vlan add 10 vlan 10 private-vlan isolated

Correct Answer: C
Section:

QUESTION 18

Refer to the exhibit.

```
Router#show run
Building configuration...

Current configuration : 1530 bytes
!
! Last configuration change at 11:32:53 UTC Sat Oct 10 2020
upgrade fpd auto
version 15.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Router
!
boot-start-marker
boot-end-marker
!
!
!
no aaa new-model
no ip icmp rate-limit unreachable
!
!
!
!
--More--
```

Which minimum configuration items are needed to enable Secure Shell version 2 access to R15?

A.

```
Router(config)#hostname R15
R15(config)#crypto key generate rsa general-keys modulus 1024
R15(config-line)#line vty 0 15
R15(config-line)# transport input ssh
R15(config)#ip ssh source-interface Fa0/0
R15(config)#ip ssh stricthostkeycheck
```

B.

```
Router(config)#crypto key generate rsa general-keys modulus 1024
Router(config)#ip ssh version 2
Router(config-line)#line vty 0 15
Router(config-line)# transport input ssh
Router(config)#ip ssh logging events
R15(config)#ip ssh stricthostkeycheck
```

C.

```
Router(config)#ip domain-name cisco.com
Router(config)#crypto key generate rsa general-keys modulus 1024
Router(config)#ip ssh version 2
Router(config-line)#line vty 0 15
Router(config-line)# transport input all
Router(config)#ip ssh logging events
```

D.

```
Router(config)#hostname R15
R15(config)#ip domain-name cisco.com
R15(config)#crypto key generate rsa general-keys modulus 1024
R15(config)#ip ssh version 2
R15(config-line)#line vty 0 15
R15(config-line)# transport input ssh
```

Correct Answer: D
Section:

QUESTION 19
Which attribute does a router use to select the best path when two or more different routes to the same destination exist from two different routing protocols.

A. dual algorithm
B. metric
C. administrative distance
D. hop count

Correct Answer: C
Section:
Explanation:
Administrative distance is the feature used by routers to select the best path when there are two or more different routes to the same destination from different routing protocols. Administrative distance defines the reliability of a routing protocol.

QUESTION 20
Which command prevents passwords from being stored in the configuration as plain text on a router or switch?

A. enable secret
B. service password-encryption
C. username Cisco password encrypt
D. enable password

Correct Answer: B
Section:

QUESTION 21
A frame that enters a switch fails the Frame Check Sequence. Which two interface counters are incremented? (Choose two)

A. runts
B. giants
C. frame
D. CRC

E. input errors

Correct Answer: D, E
Section:
Explanation:
Whenever the physical transmission has problems, the receiving device might receive a frame whose bits have changed values. These frames do not pass the error detection logic as implemented in the FCS field in the Ethernet trailer. The receiving device discards the frame and counts it as some kind of input error.
Cisco switches list this error as a CRC error. Cyclic redundancy check (CRC) is a term related to how the FCS math detects an error.
The "input errors" includes runts, giants, no buffer, CRC, frame, overrun, and ignored counts.
The output below show the interface counters with the "show interface s0/0/0" command:

```
Router#show interface s0/0/0
Serial0/0/0 is up, line protocol is up
  Hardware is M4T
  Description: Link to R2
  Internet address is 10.1.1.1/30
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  --output omitted--
  5 minute output rate 0 bits/sec, 0 packets/sec
     268 packets input, 24889 bytes, 0 no buffer
     Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
     251 packets output, 23498 bytes, 0 underruns
     0 output errors, 0 collisions, 0 interface resets
     0 output buffer failures, 0 output buffers swapped out
     0 carrier transitions     DCD=up  DSR=up  DTR=up  RTS=up  CTS=up
```

QUESTION 22
Which command enables a router to become a DHCP client?

A. ip address dhcp
B. ip helper-address
C. ip dhcp pool
D. ip dhcp client

Correct Answer: A
Section:
Explanation:
Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_dhcp/configuration/12-4/dhcp-12-4-book/config-dhcp-client.htmlIf we want to get an IP address from the DHCP server on a Cisco device, we can use the command "ipaddress dhcp".
Note: The command "ip helper-address" enables a router to become a DHCP Relay Agent.

QUESTION 23
Which two encoding methods are supported by REST APIs? (Choose two)

A. YAML
B. JSON
C. EBCDIC

D. SGML
E. XML

Correct Answer: B, E
Section:
Explanation:
https://www.cisco.com/c/en/us/td/docs/switches/datacenter/aci/apic/sw/2-x/rest_cfg/2_1_x/b_Cisco_APIC_REST_API_Configuration_Guide/b_Cisco_APIC_REST_API_Configuration_Guide_chapter_01.html
Reference:
https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus1000/sw/5_x/rest_api_config/b_Cisco_N1KV_VMware_REST_API_Config_5x/b_Cisco_N1KV_VMware_REST_API_Config_5x_chapter_010.pdfThe Application Policy
Infrastructure Controller (APIC) REST API is a programmatic interface that usesREST architecture. The API accepts and returns HTTP (not enabled by default) or HTTPS messagesthat contain JavaScript Object Notation (JSON) or Extensible Markup Language (XML) documents.

QUESTION 24
Two switches are connected and using Cisco Dynamic Trunking Protocol SW1 is set to Dynamic Desirable What is the result of this configuration?

A. The link is in a down state.
B. The link is in an error disables state
C. The link is becomes an access port.
D. The link becomes a trunk port.

Correct Answer: D
Section:

QUESTION 25
When configuring IPv6 on an interface, which two IPv6 multicast groups are joined? (Choose two)

A. 2000::/3
B. 2002::5
C. FC00::/7
D. FF02::1
E. FF02::2

Correct Answer: D, E
Section:
Explanation:
Reference:
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipv6/configuration/xe-3s/ipv6-xe-36sbook/ip6-multicast.htmlWhen an interface is configured with IPv6 address, it automatically joins the all nodes (FF02::1) andsolicited-node (FF02::1:FFxx:xxxx) multicast groups. The all-node group is used to communicate withall interfaces on the local link, and the solicited-nodes multicast group is required for link-layeraddress resolution. Routers also join a third multicast group, the all-routers group (FF02::2).

QUESTION 26
Which MAC address is recognized as a VRRP virtual address?

A. 0000.5E00.010a
B. 0005.3711.0975
C. 0000.0C07.AC99

D. 0007.C070/AB01

Correct Answer: A
Section:
Explanation:
With VRRP, the virtual router's MAC address is 0000.5E00.01xx , in which xx is the VRRP group.

QUESTION 27
in Which way does a spine and-leaf architecture allow for scalability in a network when additional access ports are required?

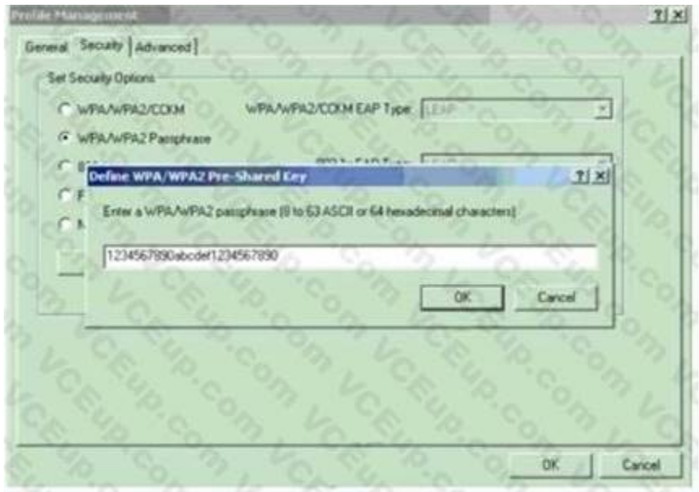
A. A spine switch and a leaf switch can be added with redundant connections between them
B. A spine switch can be added with at least 40 GB uplinks
C. A leaf switch can be added with a single connection to a core spine switch.
D. A leaf switch can be added with connections to every spine switch

Correct Answer: D
Section:
Explanation:
Spine-leaf architecture is typically deployed as two layers: spines (such as an aggregation layer), and leaves (such as an access layer). Spine-leaf topologies provide high-bandwidth, low-latency, nonblocking server-to-server connectivity.
Leaf (aggregation) switches are what provide devices access to the fabric (the network of spine and leaf switches) and are typically deployed at the top of the rack. Generally, devices connect to the leaf switches.
Devices can include servers, Layer 4-7 services (firewalls and load balancers), and WAN or Internet routers. Leaf switches do not connect to other leaf switches. In spine-and-leaf architecture, every leaf should connect to every spine in a full mesh.
Spine (aggregation) switches are used to connect to all leaf switches and are typically deployed at the end or middle of the row. Spine switches do not connect to other spine switches.

QUESTION 28
Which type of wireless encryption is used for WPA2 in preshared key mode?

A. TKIP with RC4
B. RC4
C. AES-128
D. AES-256

Correct Answer: D
Section:
Explanation:
We can see in this picture we have to type 64 hexadecimal characters (256 bit) for the WPA2 passphrase so we can deduce the encryption is AES-256, not AES-128.



https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/67134-wpa2-config.html

QUESTION 29
Which two actions are performed by the Weighted Random Early Detection mechanism? (Choose two)

A. It drops lower-priority packets before it drops higher-priority packets
B. It can identify different flows with a high level of granularity
C. It guarantees the delivery of high-priority packets
D. It can mitigate congestion by preventing the queue from filling up
E. it supports protocol discovery

Correct Answer: A, D
Section:
Explanation:
Weighted Random Early Detection (WRED) is just a congestion avoidance mechanism. WRED drops packets selectively based on IP precedence. Edge routers assign IP precedences to packets as they enter the network. When a packet arrives, the following events occur:
1. The average queue size is calculated.
2. If the average is less than the minimum queue threshold, the arriving packet is queued.
3. If the average is between the minimum queue threshold for that type of traffic and the maximum threshold for the interface, the packet is either dropped or queued, depending on the packet drop probability for that type of traffic.
4. If the average queue size is greater than the maximum threshold, the packet is dropped. WRED reduces the chances of tail drop (when the queue is full, the packet is dropped) by selectively dropping packets when the output interface begins to show signs of congestion (thus it can mitigate congestion by preventing the queue from filling up). By dropping some packets early rather than waiting until the queue is full, WRED avoids dropping large numbers of packets at once and minimizes the chances of global synchronization. Thus, WRED allows the transmission line to be used fully at all times.
WRED generally drops packets selectively based on IP precedence. Packets with a higher IP precedence are less likely to be dropped than packets with a lower precedence. Thus, the higher the priority of a packet, the higher the probability that the packet will be delivered

QUESTION 30
When a floating static route is configured, which action ensures that the backup route is used when the primary route fails?

A. The floating static route must have a higher administrative distance than the primary route so it is used as a backup
B. The administrative distance must be higher on the primary route so that the backup route becomes secondary.
C. The floating static route must have a lower administrative distance than the primary route so it is used as a backup
D. The default-information originate command must be configured for the route to be installed into the routing table

Correct Answer: A
Section:

QUESTION 31
Refer to the exhibit.

```
Atlanta#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Atlanta(config)#aaa new-model
Atlanta(config)#aaa authentication login default local
Atlanta(config)#line vty 0 4
Atlanta(config-line)#login authentication default
Atlanta(config-line)#exit
Atlanta(config)#username ciscoadmin password adminadmin123
Atlanta(config)#username ciscoadmin privilege 15
Atlanta(config)#enable password cisco123
Atlanta(config)#enable secret testing1234
Atlanta(config)#end
```

Which password must an engineer use to enter the enable mode?

A. adminadmin123
B. default
C. testing 1234
D. cisco123

Correct Answer: C
Section:
Explanation:
If neither the enable password command nor the enable secret command is configured, and if there is a line password configured for the console, the console line password serves as the enable password for all VTY sessions -> The "enable secret" will be used first if available, then "enable password" and line password.

QUESTION 32
How do TCP and UDP differ in the way that they establish a connection between two endpoints?

A. TCP uses synchronization packets, and UDP uses acknowledgment packets.
B. UDP uses SYN, SYN ACK and FIN bits in the frame header while TCP uses SYN, SYN ACK and ACK bits
C. UDP provides reliable message transfer and TCP is a connectionless protocol
D. TCP uses the three-way handshake and UDP does not guarantee message delivery

Correct Answer: D
Section:

QUESTION 33
Which mode allows access points to be managed by Cisco Wireless LAN Controllers?

A. autonomous
B. lightweight
C. bridge

D. mobility express

Correct Answer: B
Section:
Explanation:
https://www.cisco.com/c/en/us/support/docs/wireless/aironet-1200-series/70278-lap-faq.htmlA Lightweight Access Point (LAP) is an AP that is designed to be connected to a wireless LAN (WLAN)controller (WLC). APs are "lightweight," which means that they cannot act independently of awireless LAN controller (WLC). The WLC manages the AP configurations and firmware. The APs are"zero touch" deployed, and individual configuration of APs is not necessary.

QUESTION 34
Which QoS Profile is selected in the GUI when configuring a voice over WLAN deployment?

A. Bronze
B. Platinum
C. Silver
D. Gold

Correct Answer: B
Section:
Explanation:
Reference: https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lanwlan/81831-qos-wlc-lap.htmlCisco Unified Wireless Network solution WLANs support four levels of QoS: Platinum/Voice,Gold/Video, Silver/Best Effort (default), and Bronze/Background.

QUESTION 35
If a notice-level messaging is sent to a syslog server, which event has occurred?

A. A network device has restarted
B. An ARP inspection has failed
C. A routing instance has flapped
D. A debug operation is running

Correct Answer: C
Section:
Explanation:
Usually no action is required when a route flaps so it generates the notification syslog level message (level 5).

QUESTION 36
What are two southbound APIs? (Choose two)

A. OpenFlow
B. NETCONF
C. Thrift
D. CORBA
E. DSC

Correct Answer: A, B
Section:
Explanation:

OpenFlow is a well-known southbound API. OpenFlow defines the way the SDN Controller should interact with the forwarding plane to make adjustments to the network, so it can better adapt to changing business requirements.
The Network Configuration Protocol (NetConf) uses Extensible Markup Language (XML) to install, manipulate and delete configuration to network devices.

QUESTION 37
An email user has been lured into clicking a link in an email sent by their company's security organization. The webpage that opens reports that it was safe but the link could have contained malicious code. Which type of security program is in place?

A. Physical access control
B. Social engineering attack
C. brute force attack
D. user awareness

Correct Answer: D
Section:
Explanation:
This is a training program which simulates an attack, not a real attack (as it says "The webpage that opens reports that it was safe") so we believed it should be called a "user awareness" program.
Therefore the best answer here should be "user awareness". This is the definition of "User awareness" from CCNA 200- 301 Offical Cert Guide Book:
"User awareness: All users should be made aware of the need for data confidentiality to protect corporate information, as well as their own credentials and personal information. They should also be made aware of potential threats, schemes to mislead, and proper procedures to report security incidents. " Note: Physical access control means infrastructure locations, such as network closets and data centers, should remain securely locked.

QUESTION 38
An engineer must configure a/30 subnet between two routers. Which usable IP address and subnet mask combination meets this criteria?

```
interface e0/0
description to HQ-A371:19452
ip address 209.165.201.2 255.255.255.252

interface e0/0
description to HQ-A371:19452
ip address 10.2.1.3 255.255.255.252

interface e0/0
description to HQ-A371:19452
ip address 172.16.1.4 255.255.255.248

interface e0/0
description to HQ-A371:19452
ip address 192.168.1.1 255.255.255.248
```

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: A
Section:

QUESTION 39
What is the default behavior of a Layer 2 switch when a frame with an unknown destination MAC address is received?

A. The Layer 2 switch drops the received frame

B. The Layer 2 switch floods packets to all ports except the receiving port in the given VLAN.
C. The Layer 2 switch sends a copy of a packet to CPU for destination MAC address learning.
D. The Layer 2 switch forwards the packet and adds the destination MAC address to its MAC address table

Correct Answer: B
Section:
Explanation:
If the destination MAC address is not in the CAM table (unknown destination MAC address), the switch sends the frame out all other ports that are in the same VLAN as the received frame. This is called flooding. It does not flood the frame out the same port on which the frame was received.

QUESTION 40
Refer to the exhibit.

```
R2#show ip nat translations
Pro Inside global      Inside local   Outside local    Outside global
tcp 172.23.104.3:43268 10.4.4.4:43268 172.23.103.10:23 172.23.103.10:23
tcp 172.23.104.4:45507 10.4.4.5:45507 172.23.103.10:80 172.23.103.10:80
```

An engineer configured NAT translations and has verified that the configuration is correct.
Which IP address is the source IP?

A. 10.4.4.4
B. 10.4.4.5
C. 172.23.103.10
D. 172.23.104.4

Correct Answer: D
Section:
Explanation:
NAT is used to send a packet to the outside network, using a public IP address to make it routable.
The NAT logic is "inside-to-outside" FIRST and "outside-to-inside" THEN. This way, configuring NAT means "choosing a public IP address" for any outbound packet" IN THE FIRST PLACE, where "public IP address" translates to "inside global address". Among the given answers, the only inside global address is 172.123.104.4.

QUESTION 41
Which feature on the Cisco Wireless LAN Controller when enabled restricts management access from specific networks?

A. CPU ACL
B. TACACS
C. Flex ACL
D. RADIUS

Correct Answer: A
Section:
Explanation:
Reference: https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wlan-security/71978-acl-wlc.html

QUESTION 42
Which command automatically generates an IPv6 address from a specified IPv6 prefix and MAC address of an interface?

A. ipv6 address dhcp

B. ipv6 address 2001:DB8:5:112::/64 eui-64
C. ipv6 address autoconfig
D. ipv6 address 2001:DB8:5:112::2/64 link-local

Correct Answer: C
Section:
Explanation:
The "ipv6 address autoconfig" command causes the device to perform IPv6 stateless address autoconfiguration to discover prefixes on the link and then to add the EUI-64 based addresses to the interface.
Addresses are configured depending on the prefixes received in Router Advertisement (RA) messages.
The device will listen for RA messages which are transmitted periodically from the router (DHCP Server).
This RA message allows a host to create a global IPv6 address from:
+ Its interface identifier (EUI-64 address)
+ Link Prefix (obtained via RA)
Note: Global address is the combination of Link Prefix and EUI-64 address

QUESTION 43
An engineer is asked to protect unused ports that are configured in the default VLAN on a switch.
Which two steps will fulfill the request? (Choose two)

A. Configure the ports in an EtherChannel.
B. Administratively shut down the ports
C. Configure the port type as access and place in VLAN 99
D. Configure the ports as trunk ports
E. Enable the Cisco Discovery Protocol

Correct Answer: B, C
Section:

QUESTION 44
Which output displays a JSON data representation?

A
```
{
  "response": {
  "taskId": {},
  "url": "string"
  },
  "version": "string"
}
```

B
```
{
  "response"- {
  "taskId"- {},
  "url"- "string"
  },
  "version"- "string"
}
```

C
```
{
  "response": {
  "taskId": {},
  "url": "string"
  },
  "version": "string"
}
```

D
```
{
  "response": {
  "taskId": {},
  "url": "string"
  },
  "version": "string"
}
```

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: C
Section:
Explanation:
JSON data is written as name/value pairs.
A name/value pair consists of a field name (in double quotes), followed by a colon, followed by a value:
"name":"Mark"
JSON can use arrays. Array values must be of type string, number, object, array, boolean or null.
For example:
{
"name":"John",
"age":30,
"cars":["Ford", "BMW", "Fiat"]

}
JSON can have empty object like "taskId":{}

QUESTION 45
Which command is used to specify the delay time in seconds for LLDP to initialize on any interface?

A. lldp timer
B. lldp holdtimt
C. lldp reinit
D. lldp tlv-select

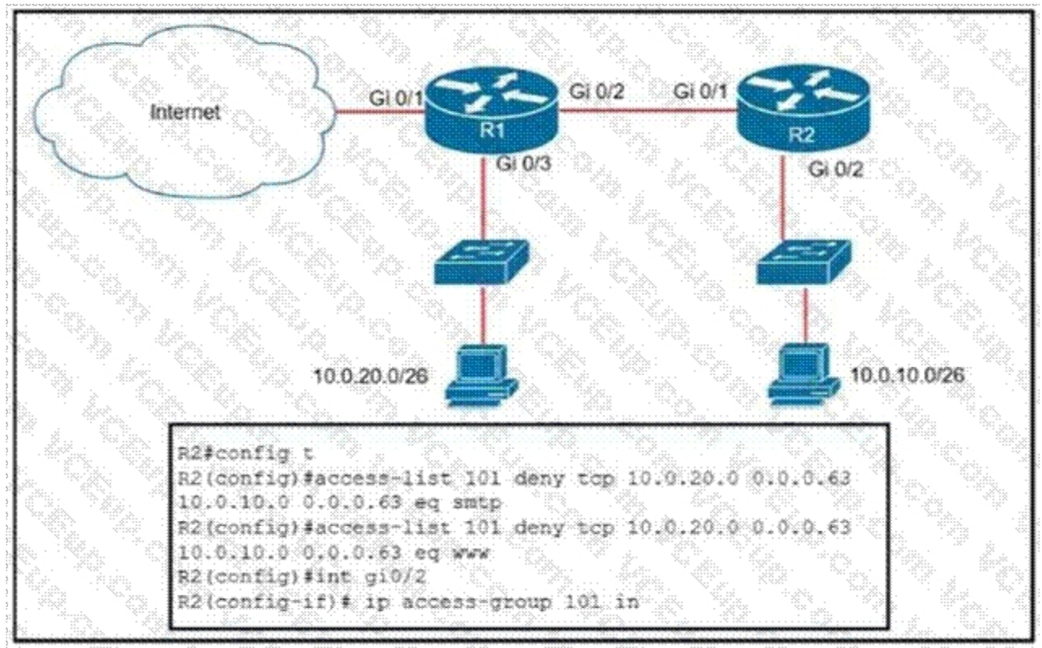
Correct Answer: C
Section:
Explanation:
Reference: https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960/software/release/12-2_37_ey/configuration/guide/scg/swlldp.pdf+ lldp holdtime seconds: Specify the amount of time a receiving device should hold the informationfrom your device before discarding it+ lldp reinit delay: Specify the delay time in seconds for LLDP to initialize on an interface+ lldp timer rate: Set the sending frequency of LLDP updates in seconds

QUESTION 46
A network engineer must back up 20 network router configurations globally within a customer environment. Which protocol allows the engineer to perform this function using the Cisco IOS MIB?

A. CDP
B. SNMP
C. SMTP
D. ARP

Correct Answer: B
Section:
Explanation:
SNMP is an application-layer protocol that provides a message format for communication between SNMP managers and agents. SNMP provides a standardized framework and a common language used for the monitoring and management of devices in a network.
The SNMP framework has three parts:
+ An SNMP manager
+ An SNMP agent
+ A Management Information Base (MIB)
The Management Information Base (MIB) is a virtual information storage area for network management information, which consists of collections of managed objects.
With SNMP, the network administrator can send commands to multiple routers to do the backup

QUESTION 47
Refer to the exhibit.



An extended ACL has been configured and applied to router R2 The configuration failed to work as intended Which two changes stop outbound traffic on TCP ports 25 and 80 to 10.0.20 0 26 from the 10.0.10 0/26 subnet while still allowing all other traffic? (Choose two)

A. Add a "permit ip any any" statement to the begining of ACL 101 for allowed traffic.
B. Add a "permit ip any any" statement at the end of ACL 101 for allowed traffic
C. The source and destination IPs must be swapped in ACL 101
D. The ACL must be configured the Gi0/2 interface inbound on R1
E. The ACL must be moved to the Gi0/1 interface outbound on R2

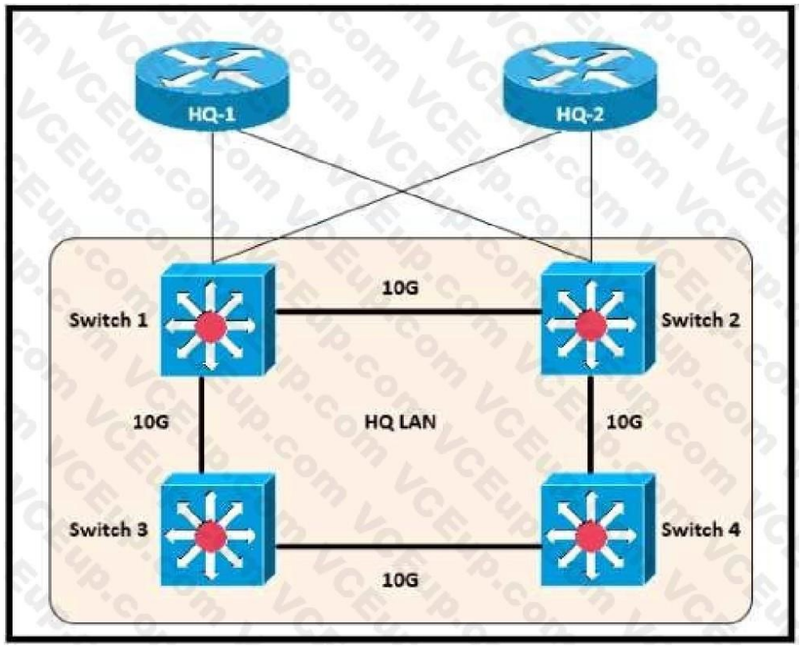
Correct Answer: B, C
Section:

QUESTION 48
How do servers connect to the network in a virtual environment?

A. wireless to an access point that is physically connected to the network
B. a cable connected to a physical switch on the network
C. a virtual switch that links to an access point that is physically connected to the network
D. a software switch on a hypervisor that is physically connected to the network

Correct Answer: D
Section:

QUESTION 49
Refer to the exhibit.



Which switch becomes the root of the spanning tree for VLAN 110?

Switch 1
VLAN 110 - 32778 0018.184e.3c00
Switch 2
VLAN 110 - 24586 001a.e3ff.a680
Switch 3
VLAN 110 - 28682 0022.55cf.cc00
Switch 4
VLAN 110 - 64000 0e38.7363.657f

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

Correct Answer: B
Section:

QUESTION 50
Which device tracks the state of active connections in order to make a decision to forward a packet through?

A. wireless access point
B. firewall
C. wireless LAN controller
D. router

Correct Answer: B
Section:

QUESTION 51
How does a switch process a frame received on Fa0/1 with the destination MAC address of 0e38.7363.657b when the table is missing the address?

A. It drops the frame immediately.
B. It forwards the frame back out of interface Fa0/1.
C. It floods the frame to all interfaces except Fa0/1.
D. It holds the frame until the MAC address timer expires and then drops the frame.

Correct Answer: C
Section:

QUESTION 52
A network administrator must enable DHCP services between two sites. What must be configured for the router to pass DHCPDISCOVER messages on to the server?

A. a DHCP Relay Agent
B. DHCP Binding
C. a DHCP Pool
D. DHCP Snooping

Correct Answer: A
Section:

QUESTION 53
What is recommended for the wireless infrastructure design of an organization?

A. group access points together to increase throughput on a given channel
B. configure the first three access points are configured to use Channels 1, 6, and 11
C. include a least two access points on nonoverlapping channels to support load balancing
D. assign physically adjacent access points to the same Wi-Fi channel

Correct Answer: B
Section:

QUESTION 54
Refer to the exhibit.

```
switch(config)#interface gigabitEthernet 1/11
switch(config-if)#switchport mode access
switch(config-if)#spanning-tree portfast
switch(config-if)#spanning-tree bpduguard enable
```

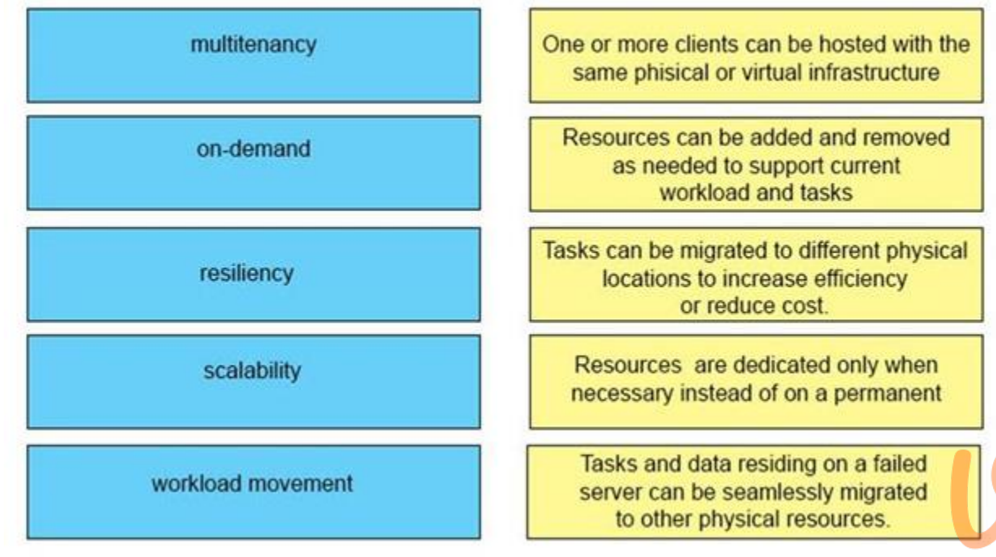
What is the result if Gig1/11 receives an STP BPDU?

A. The port transitions to STP blocking
B. The port transitions to the root port
C. The port immediately transitions to STP forwarding.
D. The port goes into error-disable state

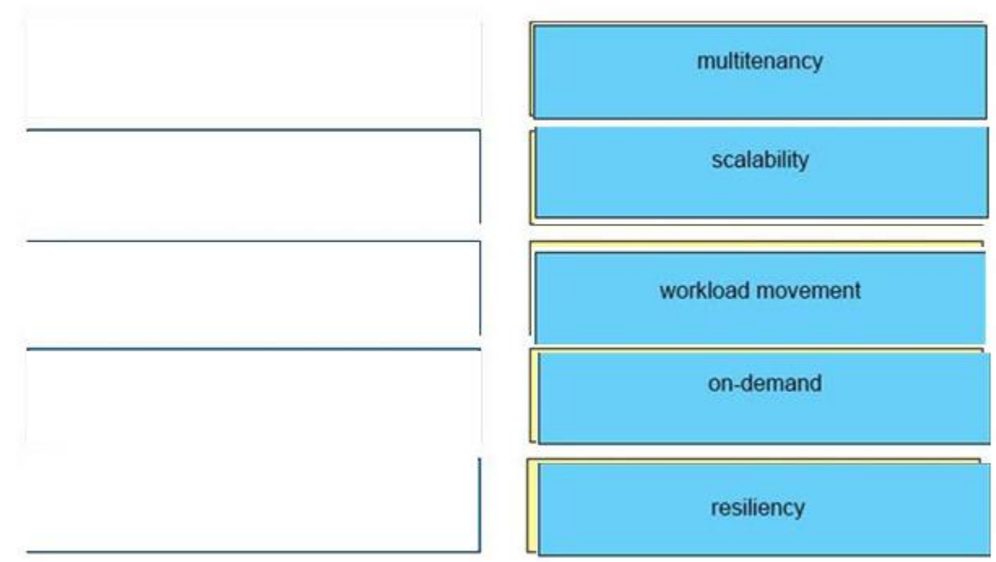
Correct Answer: D
Section:

QUESTION 55
DRAG DROP
Drag and drop the characteristics of a cloud environment from the left onto the correct examples on the right.

Select and Place:



Correct Answer:

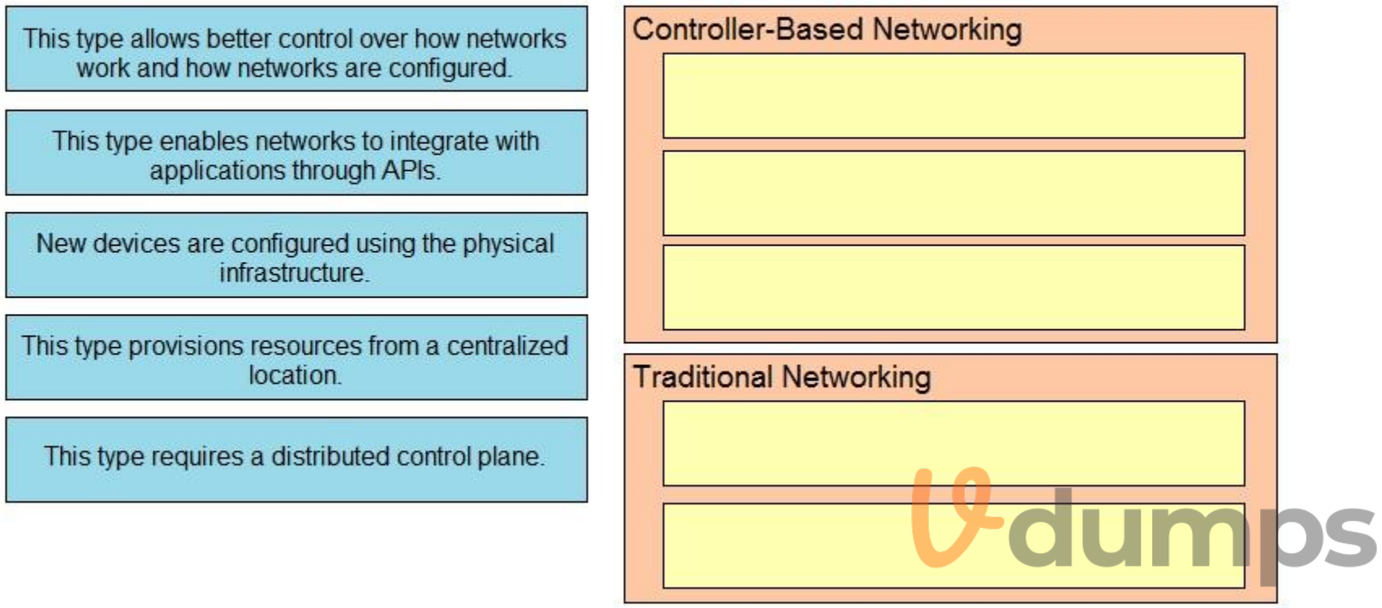


Section:
Explanation:

QUESTION 56
DRAG DROP
Drag and drop the statements about networking from the left onto the corresponding networking types on the right.

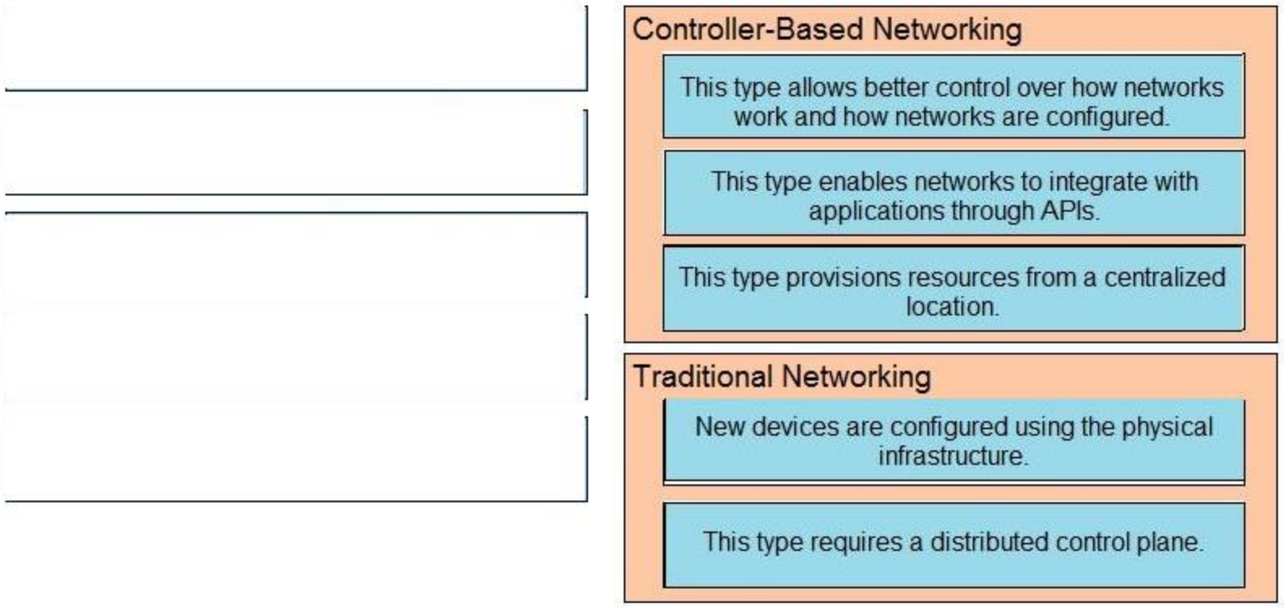
Select and Place:

Answer Area



Correct Answer:

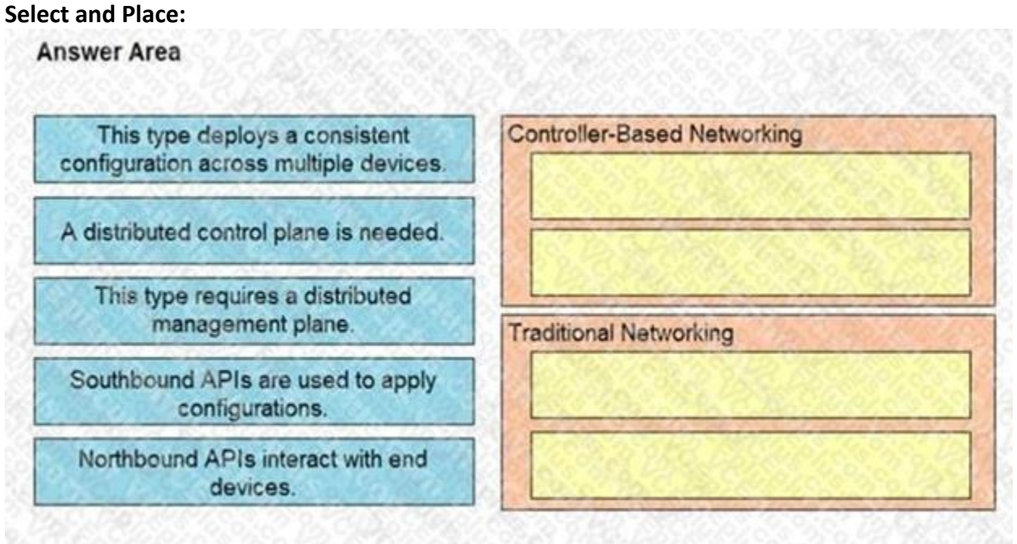
Answer Area



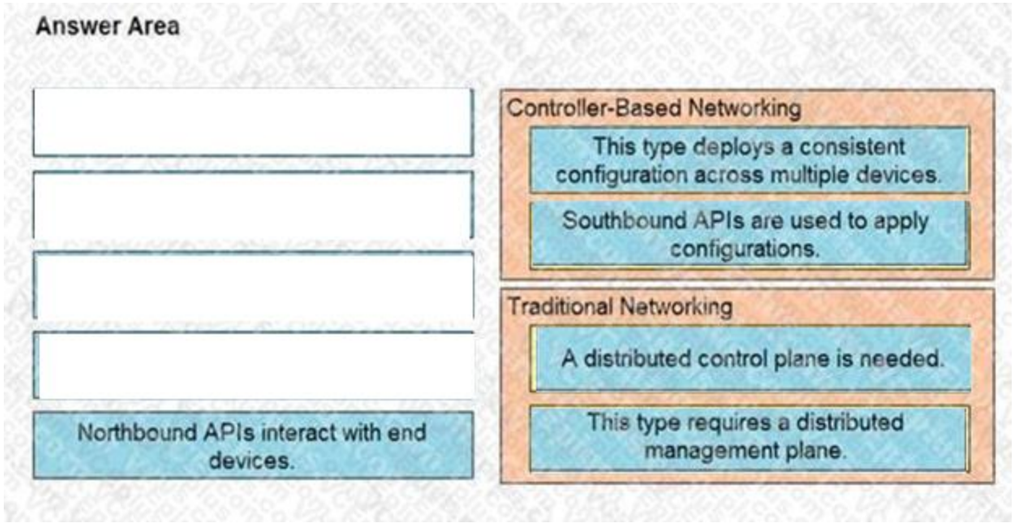
Section:
Explanation:

QUESTION 57
DRAG DROP
Drag and drop the statements about networking from the left onto the corresponding networking types on the right.

Select and Place:



Correct Answer:



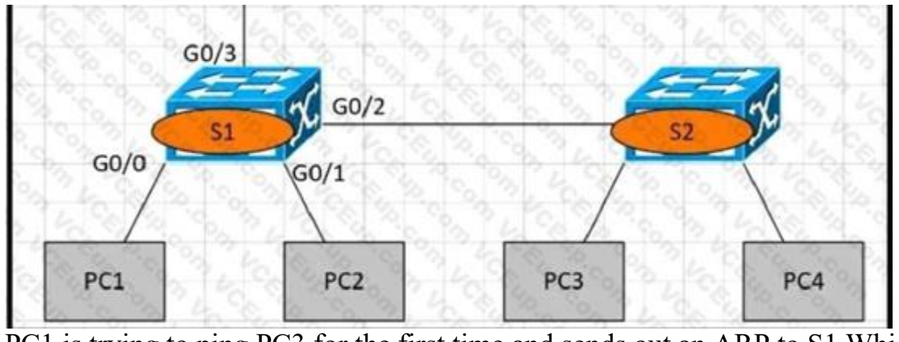
Section:
Explanation:

QUESTION 58
What does a switch use to build its MAC address table?

A. VTP
B. DTP
C. egress traffic
D. ingress traffic

Correct Answer: D
Section:

QUESTION 59
Refer to the exhibit.



PC1 is trying to ping PC3 for the first time and sends out an ARP to S1 Which action is taken by S1?

A. It forwards it out G0/3 only
B. It is flooded out every port except G0/0.
C. It drops the frame.
D. It forwards it out interface G0/2 only.

Correct Answer: B
Section:

QUESTION 60
What does a router do when configured with the default DNS lookup settings, and a URL is entered on the CLI?

A. initiates a ping request to the URL
B. prompts the user to specify the desired IP address
C. continuously attempts to resolve the URL until the command is cancelled
D. sends a broadcast message in an attempt to resolve the URL

Correct Answer: D
Section:

QUESTION 61
Which two WAN architecture options help a business improve scalability and reliability for the network? (Choose two.)

A. asynchronous routing
B. single-homed branches
C. dual-homed branches
D. static routing
E. dynamic routing

Correct Answer: A, C
Section:

QUESTION 62
Which type of security program is violated when a group of employees enters a building using the ID badge of only one person?

A. intrusion detection
B. user awareness
C. physical access control
D. network authorization

Correct Answer: C
Section:

QUESTION 63
Which device controls the forwarding of authentication requests for users when connecting to the network using a lightweight access point?

A. TACACS server
B. wireless access point
C. RADIUS server
D. wireless LAN controller

Correct Answer: D
Section:

QUESTION 64
What is a benefit of VRRP?

A. It provides traffic load balancing to destinations that are more than two hops from the source.
B. It provides the default gateway redundancy on a LAN using two or more routers.
C. It allows neighbors to share routing table information between each other.
D. It prevents loops in a Layer 2 LAN by forwarding all traffic to a root bridge, which then makes the final forwarding decision.

Correct Answer: B
Section:

QUESTION 65
Aside from discarding, which two states does the switch port transition through while using RSTP (802.1w)? (Choose two)

A. listening
B. blocking
C. forwarding
D. learning
E. speaking

Correct Answer: C, D
Section:

QUESTION 66
Which protocol does an IPv4 host use to obtain a dynamically assigned IP address?

A. ARP
B. DHCP
C. CDP
D. DNS

Correct Answer: B
Section:
Explanation:
https://www.geeksforgeeks.org/how-dhcp-server-dynamically-assigns-ip-address-to-ahost/#:~:text=DHCP%20is%20an%20abbreviation%20for,subnet%20mask%20and%20gateway%20address.

QUESTION 67
Which CRUD operation corresponds to the HTTP GET method?

A. read
B. update
C. create
D. delete

Correct Answer: A
Section:
Explanation:

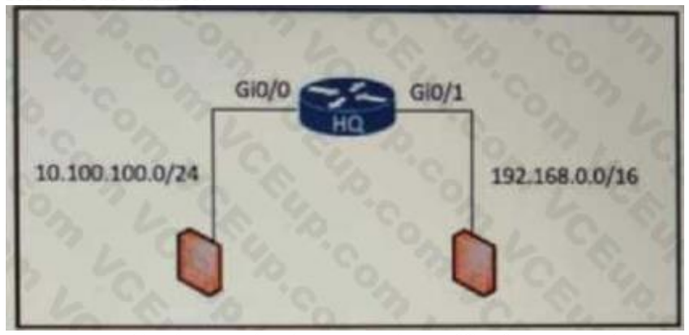
GET: This method retrieves the information identified by the request URI. In the context of the RESTful web services, this method is used to retrieve resources. This is the method used for read operations (the R in CRUD).
https://hub.packtpub.com/crud-operations-rest/

QUESTION 68
In which situation is private IPv4 addressing appropriate for a new subnet on the network of an organization?

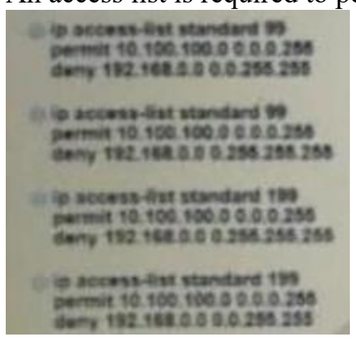
A. There is limited unique address space, and traffic on the new subnet will stay local within the organization.
B. The network has multiple endpoint listeners, and it is desired to limit the number of broadcasts.
C. Traffic on the subnet must traverse a site-to-site VPN to an outside organization.
D. The ISP requires the new subnet to be advertised to the internet for web services.

Correct Answer: A
Section:

QUESTION 69
Refer to the exhibit.



An access list is required to permit traffic from any host on interface G0/0 and deny traffic from interface G/0/1. Which access list must be applied?



A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: A
Section:

QUESTION 70
What is the maximum bandwidth of a T1 point-to-point connection?

A. 1.544 Mbps
B. 2.048 Mbps
C. 34.368 Mbps
D. 43.7 Mbps

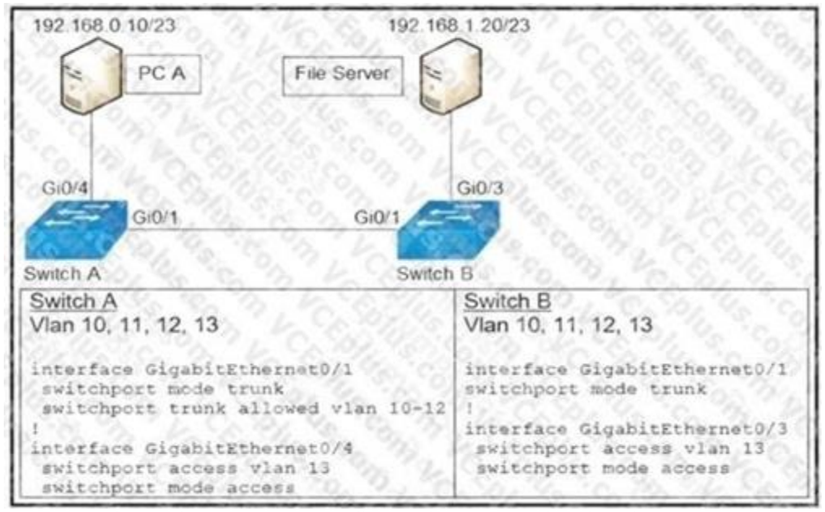
Correct Answer: A
Section:
Explanation:
https://www.bsimplify.com/what-is-point-to-pointt1/#:~:text=A%20Point%20to%20Point%20T1,data%20speeds%20(1.54Mbps).
Point to Point T1
A Point to Point T1 service is a private data connection securely connecting two or more locations with T1 data speeds (1.54Mbps).

QUESTION 71
What is a DNS lookup operation?

A. DNS server pings the destination to verify that it is available
B. serves requests over destination port 53
C. DNS server forwards the client to an alternate IP address when the primary IP is down
D. responds to a request for IP address to domain name resolution to the DNS server

Correct Answer: D
Section:

QUESTION 72
Refer to the exhibit.



A network engineer must configured communication between PC A and the File Server. To prevent interruption for any other communications, which command must be configured?

A. Switch trunk allowed vlan 12
B. Switchport trunk allowed vlan none
C. Switchport trunk allowed vlan add 13
D. Switchport trunk allowed vlan remove 10-11

Correct Answer: C
Section:

QUESTION 73
Which implementation provides the strongest encryption combination for the wireless environment?

A. WPA2 + AES
B. WPA + AES
C. WEP
D. WPA + TKIP

Correct Answer: A
Section:

QUESTION 74
What is a characteristic of a SOHO network?

A. connects each switch to every other switch in the network
B. enables multiple users to share a single broadband connection
C. provides high throughput access for 1000 or more users
D. includes at least three tiers of devices to provide load balancing and redundancy

Correct Answer: B
Section:

QUESTION 75
Refer to the exhibit.

```
import ncclient

with ncclient.manager.connect(host='192.168.1.1', port=830, username='root',
                              password='teset123!', allow_agent=False) as m:
    print(m.get_config('running').data_xml)
```

After running the code in the exhibit, which step reduces the amount of data that the NETCONF server returns to the NETCONF client, to only the interface's configuration?

A. Use the Ixml library to parse the data returned by the NETCONF server for the interface's configuration.
B. Create an XML filter as a string and pass it to get_config() method as an argument.
C. Create a JSON filter as a string and pass it to the get_config() method as an argument.
D. Use the JSON library to parse the data returned by the NETCONF server for the interface's configuration.

Correct Answer: D
Section:

QUESTION 76
Which resource is able to be shared among virtual machines deployed on the same physical server?

A. disk
B. applications

C. VM configuration file
D. operating system

Correct Answer: C
Section:

QUESTION 77
Which WAN topology provides a combination of simplicity quality, and availability?

A. partial mesh
B. full mesh
C. point-to-point
D. hub-and-spoke

Correct Answer: C
Section:

QUESTION 78
Which command on a port enters the forwarding state immediately when a PC is connected to it?

A. switch(config)#spanning-tree portfast default
B. switch(config)#spanning-tree portfast bpduguard default
C. switch(config-if)#spanning-tree portfast trunk
D. switch(config-if)#no spanning-tree portfast

Correct Answer: C
Section:

QUESTION 79
What are two functions of an SDN controller? (Choose two)

A. Layer 2 forwarding
B. coordinating VTNs
C. tracking hosts
D. managing the topology
E. protecting against DDoS attacks

Correct Answer: B, D
Section:

QUESTION 80
What is a network appliance that checks the state of a packet to determine whether the packet is legitimate?

A. Layer 2 switch
B. load balancer
C. firewall
D. LAN controller

Correct Answer: C
Section:

QUESTION 81
When DHCP is configured on a router, which command must be entered so the default gateway is automatically distributed?

A. default-router
B. default-gateway
C. ip helper-address
D. dns-server

Correct Answer: A
Section:

QUESTION 82
What is an appropriate use for private IPv4 addressing?

A. on the public-facing interface of a firewall
B. to allow hosts inside to communicate in both directions with hosts outside the organization
C. on internal hosts that stream data solely to external resources
D. on hosts that communicates only with other internal hosts

Correct Answer: D
Section:

QUESTION 83
How is the native VLAN secured in a network?

A. separate from other VLANs within the administrative domain
B. give it a value in the private VLAN range
C. assign it as VLAN 1
D. configure it as a different VLAN ID on each end of the link

Correct Answer: A
Section:

QUESTION 84
What is the purpose of a southbound API in a control based networking architecture?

A. Facilities communication between the controller and the applications
B. Facilities communication between the controller and the networking hardware
C. allows application developers to interact with the network
D. integrates a controller with other automation and orchestration tools.

Correct Answer: B
Section:
Explanation:

https://www.ciscopress.com/articles/article.asp?p=2995354&seqNum=2#:~:text=The%20Southbound%20Interface,communicate%20to%20the%20networking%20devices.&text=The%20overall%20goal%20is%20network,from%20being%20only%20a%20protocol.

The Southbound Interface

In a controller-based network architecture, the controller needs to communicate to the networking devices.

QUESTION 85

What causes a port to be placed in the err-disabled state?

A. latency
B. port security violation
C. shutdown command issued on the port
D. nothing plugged into the port

Correct Answer: B
Section:
Explanation:

This mode is the default violation mode; when in this mode, the switch will automatically force the switchport into an error disabled (err-disable) state when a violation occurs. While in this state, the switchport forwards no traffic. The switchport can be brought out of this error disabled state by issuing the errdisable recovery cause CLI command or by disabling and reenabling the switchport.

QUESTION 86

Which switch technology establishes a network connection immediately when it is plugged in?

A. PortFast
B. BPDU guard
C. UplinkFast
D. BackboneFast

Correct Answer: A
Section:
Explanation:

PortFast is useful to connect hosts and switches to a switch. Access layer switches are more frequently “plugged in” and “plugged out” than distribution or core layer switches. Also, this feature’s target is just to minimize STP convergence time.

QUESTION 87

Which technology is appropriate for communication between an SDN controller and applications running over the network?

A. OpenFlow
B. REST API
C. NETCONF
D. Southbound API

Correct Answer: B
Section:

QUESTION 88

Which security program element involves installing badge readers on data-center doors to allow workers to enter and exit based on their job roles?

A. role-based access control

B. biometrics
C. multifactor authentication
D. physical access control

Correct Answer: D
Section:

QUESTION 89
Which network action occurs within the data plane?

A. compare the destination IP address to the IP routing table.
B. run routing protocols (OSPF, EIGRP, RIP, BGP)
C. make a configuration change from an incoming NETCONF RPC
D. reply to an incoming ICMP echo request

Correct Answer: A
Section:

QUESTION 90
What is a DHCP client?

A. a host that is configured to request an IP address automatically
B. a server that dynamically assigns IP addresses to hosts
C. a workstation that requests a domain name associated with its IP address
D. a rooter that statically assigns IP addresses to hosts

Correct Answer: A
Section:

QUESTION 91
An engineer needs to add an old switch back into a network. To prevent the switch from corrupting the VLAN database which action must be taken?

A. Add the switch in the VTP domain with a lower revision number
B. Add the switch with DTP set to dynamic desirable
C. Add the switch in the VTP domain with a higher revision number
D. Add the switch with DTP set to desirable

Correct Answer: A
Section:

QUESTION 92
What is a similarity between OM3 and OM4 fiber optic cable?

A. Both have a 50 micron core diameter
B. Both have a 9 micron core diameter
C. Both have a 62.5 micron core diameter
D. Both have a 100 micron core diameter

Correct Answer: A
Section:

QUESTION 93
What is the benefit of using FHRP?

A. reduced management overhead on network routers
B. balancing traffic across multiple gateways in proportion to their loads
C. higher degree of availability
D. reduced ARP traffic on the network

Correct Answer: C
Section:

QUESTION 94
Which technology allows for multiple operating systems to be run on a single host computer?

A. virtual routing and forwarding
B. network port ID visualization
C. virtual device contexts
D. server visualization

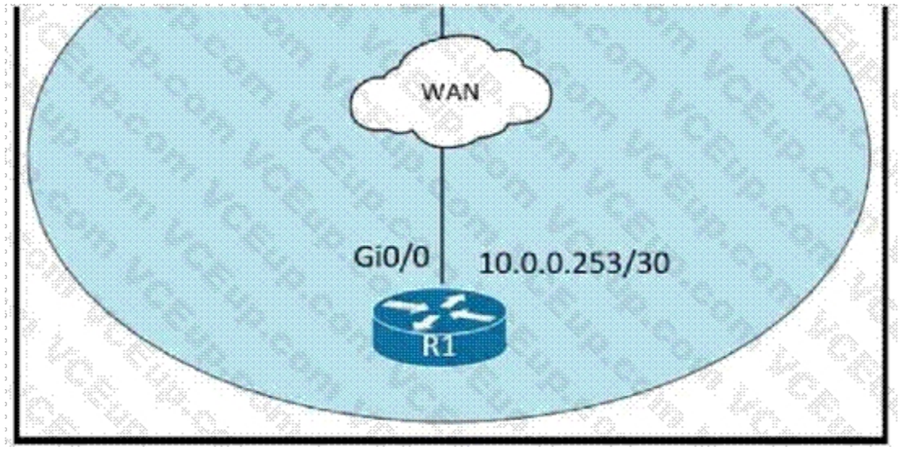
Correct Answer: D
Section:

QUESTION 95
What occurs when overlapping Wi-Fi channels are implemented?

A. The wireless network becomes vulnerable to unauthorized access.
B. Wireless devices are unable to distinguish between different SSIDs
C. Users experience poor wireless network performance.
D. Network communications are open to eavesdropping.

Correct Answer: C
Section:

QUESTION 96
Refer to the exhibit.



An administrator must turn off the Cisco Discovery Protocol on the port configured with address last usable address in the 10.0.0.0/30 subnet. Which command set meets the requirement?

A. interface gi0/1 no cdp enable
B. interface gi0/1 clear cdp table
C. interface gi0/0 no cdp advertise-v2
D. interface gi0/0 no cdp run

Correct Answer: D
Section:

QUESTION 97
Which 802.11 management frame type is sent when a client roams between access points on the same SSID?

A. Reassociation Request
B. Probe Request
C. Authentication Request
D. Association Request

Correct Answer: A
Section:

QUESTION 98
What are two improvements provided by automation for network management in an SDN environment? (Choose two)

A. Data collection and analysis tools establish a baseline for the network
B. Artificial intelligence identifies and prevents potential design failures.
C. Machine learning minimizes the overall error rate when automating troubleshooting processes
D. New devices are onboarded with minimal effort
E. Proprietary Cisco APIs leverage multiple network management tools.

Correct Answer: B, E
Section:

QUESTION 99

An engineer must configure the IPv6 address 2001:0db8:0000:0000:0700:0003:400F:572B on the serial0/0 interface of the HQ router and wants to compress it for easier configuration. Which command must be issued on the router interface?

A. ipv6 address 2001:db8::700:3:400F:572B
B. ipv6 address 2001:db8:0::700:3:4F:572B
C. ipv6 address 2001:Odb8::7:3:4F:572B
D. ipv6 address 2001::db8:0000::700:3:400F:572B

Correct Answer: A
Section:

QUESTION 100
What describes the operation of virtual machines?

A. Virtual machines are responsible for managing and allocating host hardware resources
B. In a virtual machine environment, physical servers must run one operating system at a time.
C. Virtual machines are the physical hardware that support a virtual environment.
D. Virtual machines are operating system instances that are decoupled from server hardware

Correct Answer: B
Section:

QUESTION 101
Which WLC port connects to a switch to pass normal access-point traffic?

A. redundancy
B. console
C. distribution system
D. service

Correct Answer: C
Section:

QUESTION 102
An engineering team asks an implementer to configure syslog for warning conditions and error conditions. Which command does the implementer configure to achieve the desired result?

A. logging trap 5
B. logging trap 2
C. logging trap 4
D. logging trap 3

Correct Answer: C
Section:

QUESTION 103
Which two protocols are supported on service-port interfaces? (Choose two.)

A. RADIUS
B. TACACS+
C. SCP
D. Telnet
E. SSH

Correct Answer: D, E
Section:
Explanation:
https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-5/configurationguide/b_cg75/b_cg75_chapter_011110.html

QUESTION 104
If a switch port receives a new frame while it is actively transmitting a previous frame, how does it process the frames?

A. The new frame is delivered first, the previous frame is dropped, and a retransmission request is sent.
B. The previous frame is delivered, the new frame is dropped, and a retransmission request is sent.
C. The new frame is placed in a queue for transmission after the previous frame.
D. The two frames are processed and delivered at the same time.

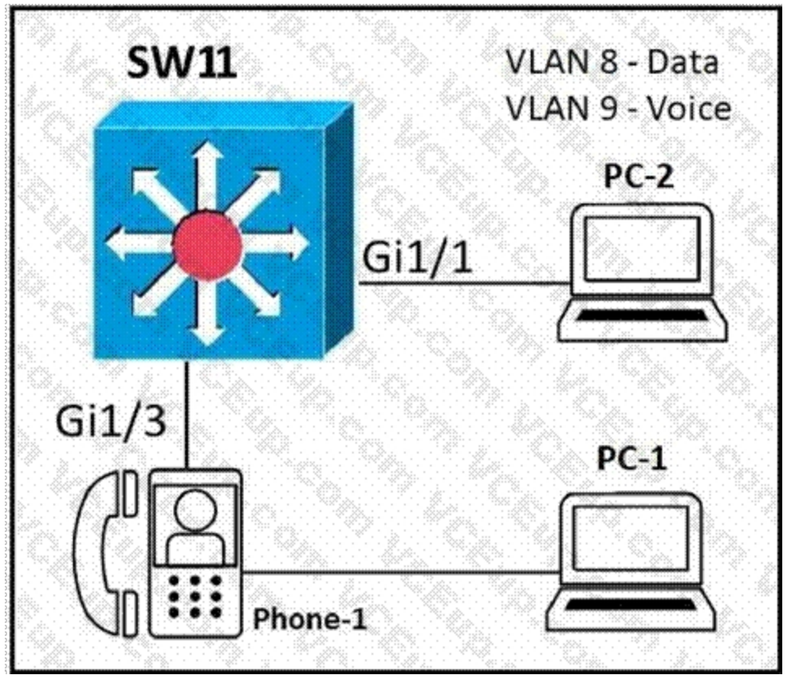
Correct Answer: B
Section:

QUESTION 105
A wireless administrator has configured a WLAN; however, the clients need access to a less congested 5-GHz network for their voice quality. What action must be taken to meet the requirement?

A. enable AAA override
B. enable RX-SOP
C. enable DTIM
D. enable Band Select

Correct Answer: D
Section:

QUESTION 106
Refer to the exhibit.



An administrator must configure interfaces Gi1/1 and Gi1/3 on switch SW11 PC-1 and PC-2 must be placed in the Data VLAN and Phone-1 must be placed in the Voice VLAN Which configuration meets these requirements?

```
interface gigabitethernet1/1
switchport mode access
switchport access vlan 8
!
interface gigabitethernet1/3
switchport mode access
switchport voice vlan 8
switchport access vlan 9
```

```
interface gigabitethernet1/1
switchport mode access
switchport access vlan 9
!
interface gigabitethernet1/3
switchport mode trunk
switchport trunk vlan 8
switchport trunk vlan 9
```

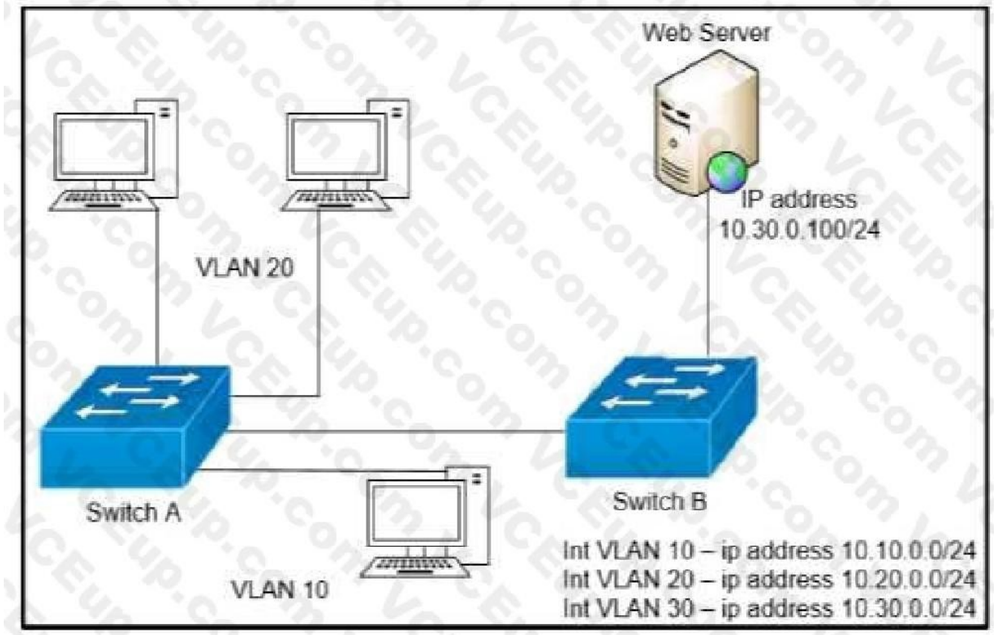
```
interface gigabitethernet1/1
switchport mode access
switchport access vlan 8
!
interface gigabitethernet1/3
switchport mode access
switchport access vlan 8
switchport voice vlan 9
```

```
interface gigabitethernet1/1
switchport mode access
switchport access vlan 8
!
interface gigabitethernet1/3
switchport mode trunk
switchport trunk vlan 8
switchport voice vlan 9
```

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: C
Section:

QUESTION 107
Refer to the exhibit.



A network engineer must block access for all computers on VLAN 20 to the web server via HTTP Allother computers must be able to access the web server Which configuration when applied to switchA accomplishes this task?

```
config t
ip access-list extended wwwblock
deny tcp any host 10.30.0.100 eq 80
int vlan 10
ip access-group wwwblock in
```

```
config t
ip access-list extended wwwblock
deny tcp any host 10.30.0.100 eq 80
permit ip any any
int vlan 20
ip access-group wwwblock in
```

```
config t
ip access-list extended wwwblock
permit ip any any
deny tcp any host 10.30.0.100 eq 80
int vlan 30
ip access-group wwwblock in
```

```
config t
ip access-list extended wwwblock
permit ip any any
deny tcp any host 10.30.0.100 eq 80
int vlan 20
ip access-group wwwblock in
```

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: B
Section:

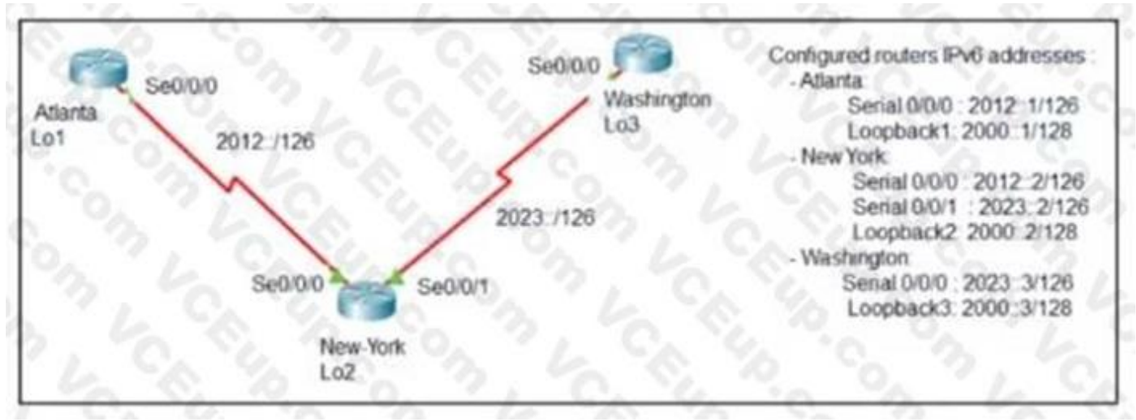
QUESTION 108
An engineer must configure a WLAN using the strongest encryption type for WPA2- PSK. Which cipher fulfills the configuration requirement?

A. WEP
B. RC4
C. AES
D. TKIP

Correct Answer: C
Section:
Explanation:

Many routers provide WPA2-PSK (TKIP), WPA2-PSK (AES), and WPA2-PSK (TKIP/AES) as options. TKIP is actually an older encryption protocol introduced with WPA to replace the very-insecure WEP encryption at the time. TKIP is actually quite similar to WEP encryption. TKIP is no longer considered secure, and is now deprecated. In other words, you shouldn't be using it.
AES is a more secure encryption protocol introduced with WPA2 and it is currently the strongest encryption type for WPA2-PSK.

QUESTION 109
Refer to the exhibit.



An engineer configured the New York router with state routes that point to the Atlanta and Washington sites. When command must be configured on the Atlanta and Washington routers so that both sites are able to reach the loopback2 interface on the New York router?

A. ipv6 route ::/0 Serial 0/0/1
B. ipv6 route 0/0 Serial 0/0/0
C. ipv6 route ::/0 Serial 0/0/0
D. ip route 0.0.0.0.0.0.0.0 Serial 0/0/0
E. ipv6 route ::/0 2000::2

Correct Answer: C
Section:

QUESTION 110
Which unified access point mode continues to serve wireless clients after losing connectivity to the Cisco Wireless LAN Controller?

A. sniffer
B. mesh
C. flexconnect
D. local

Correct Answer: C
Section:
Explanation:
Reference: https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/configguide/b_cg85/flexconnect.html

QUESTION 111
What is a difference between RADIUS and TACACS+?

A. RADIUS is most appropriate for dial authentication, but TACACS+ can be used for multiple types of authentication

B. TACACS+ encrypts only password information and RADIUS encrypts the entire payload
C. TACACS+ separates authentication and authorization, and RADIUS merges them
D. RADIUS logs all commands that are entered by the administrator, but TACACS+ logs only start, stop, and interim commands

Correct Answer: C
Section:

QUESTION 112
What Is a syslog facility?

A. Host that is configured for the system to send log messages
B. password that authenticates a Network Management System to receive log messages
C. group of log messages associated with the configured severity level
D. set of values that represent the processes that can generate a log message

Correct Answer: C
Section:
Explanation:
Cisco Community – Difference between logging level and logging facility Post by ahmednaas "The logging facility command basically tells the syslog server where to put the log message. You configure the syslog server with something like:
local7.debug /var/adm/local7.log Now, when you use the "logging facility local7" on your device, all messages with severity "debug" or greater should be saved in /var/adm/local7.log." Example: on a switch, any process (CDP, SNMP, etc.) can generate a log message. On a syslog server, the logging facility is the place where all received messages with the same priority level are stored.

QUESTION 113
What are two characteristics of a public cloud Implementation? (Choose two.)

A. It is owned and maintained by one party, but it is shared among multiple organizations.
B. It enables an organization to fully customize how It deploys network resources.
C. It provides services that are accessed over the Internet.
D. It Is a data center on the public Internet that maintains cloud services for only one company.
E. It supports network resources from a centralized third-party provider and privately-owned virtual resources

Correct Answer: C, E
Section:
Explanation:
Private cloud is cloud infrastructure operated solely for a single organization, whether managed internally or by a third party, and hosted either internally or externally.
Most public-cloud providers offer direct-connection services that allow customers to securely link their legacy data centers to their cloud-resident applications.

QUESTION 114
Refer to the exhibit.

```
R1# show ip route
D       192.168.10.0/24   [90/2679326]   via 192.168.1.1
R       192.168.10.0/27   [120/3]    via 192.168.1.2
O       192.168.10.0/23   [110/2]    via 192.168.1.3
i  L1   192.168.10.0/13   [115/30]   via 192.168.1.4
```

How does router R1 handle traffic to 192.168.10.16?

A. It selects the IS-IS route because it has the shortest prefix inclusive of the destination address.
B. It selects the EIGRP route because it has the lowest administrative distance.
C. It selects the OSPF route because it has the lowest cost.
D. It selects the RIP route because it has the longest prefix inclusive of the destination address.

Correct Answer: D
Section:

QUESTION 115
What role does a hypervisor provide for each virtual machine in server virtualization?

A. infrastructure-as-a-service.
B. Software-as-a-service
C. control and distribution of physical resources
D. services as a hardware controller.

Correct Answer: C
Section:
Explanation:
The hypervisor creates and manages virtual machines on a host computer and allocates physical system resources to them.

QUESTION 116
What is the function of a server?

A. It transmits packets between hosts in the same broadcast domain.
B. It provides shared applications to end users.
C. It routes traffic between Layer 3 devices.
D. It Creates security zones between trusted and untrusted networks

Correct Answer: B
Section:

QUESTION 117
Refer to the exhibit.

```
ip arp inspection vlan 5-10
interface fastethernet 0/1
   switchport mode access
   switchport access vlan 5
```

What is the effect of this configuration?

A. All ARP packets are dropped by the switch
B. Egress traffic is passed only if the destination is a DHCP server.
C. All ingress and egress traffic is dropped because the interface is untrusted
D. The switch discard all ingress ARP traffic with invalid MAC-to-IP address bindings.

Correct Answer: D
Section:

QUESTION 118
What is a characteristic of private IPv4 addressing?

A. traverse the Internet when an outbound ACL is applied
B. issued by IANA in conjunction with an autonomous system number
C. composed of up to 65.536 available addresses
D. used without tracking or registration

Correct Answer: D
Section:

QUESTION 119
Refer to the exhibit.

Which configuration issue is preventing the OSPF neighbor relationship from being established between the two routers?

A. R2 is using the passive-interface default command
B. R1 has an incorrect network command for interface Gi1/0
C. R2 should have its network command in area 1
D. R1 interface Gil/0 has a larger MTU size

Correct Answer: D
Section:

QUESTION 120
Refer to the exhibit.

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.246 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.246, Serial0/1/0
      is directly connected, Serial0/1/0
      172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
S     172.16.3.0/24 [1/0] via 207.165.200.250, Serial0/0/0
O     172.16.3.0/28 [110/84437] via 207.165.200.254, 00:00:28, Serial0/0/1
      207.165.200.0/24 is variably subnetted, 6 subnets, 2 masks
C     207.165.200.244/30 is directly connected, Serial0/1/0
L     207.165.200.245/32 is directly connected, Serial0/1/0
C     207.165.200.248/30 is directly connected, Serial0/0/0
L     207.165.200.249/32 is directly connected, Serial0/0/0
C     207.165.200.252/30 is directly connected, Serial0/0/1
L     207.165.200.253/32 is directly connected, Serial0/0/1
```

A packet is being sent across router R1 to host 172.163.3.14. To which destination does the router send the packet?

A. 207.165.200.246 via Serial0/1/0
B. 207.165.200.254 via Serial0/0/1
C. 207.165.200.254 via Serial0/0/0
D. 207.165.200.250 via Serial/0/0/0

Correct Answer: B
Section:

QUESTION 121
A network administrator needs to aggregate 4 ports into a single logical link which must negotiate layer 2 connectivity to ports on another switch What must be configured when using active mode on both sides of the connection?

A. 802.1q trunks
B. Cisco vPC
C. LLDP
D. LACP

Correct Answer: D
Section:

QUESTION 122
When a WPA2-PSK WLAN is configured in the wireless LAN Controller, what is the minimum number of characters that in ASCll format?

A. 6
B. 8
C. 12
D. 18

Correct Answer: B
Section:

QUESTION 123

What are two differences between optical-fiber cabling and copper cabling? (Choose two)

A. Light is transmitted through the core of the fiber
B. A BNC connector is used for fiber connections
C. The glass core component is encased in a cladding
D. Fiber connects to physical interfaces using Rj-45 connections
E. The data can pass through the cladding

Correct Answer: A, C
Section:

QUESTION 124
Refer to the exhibit.

```
R1# sh ip ospf int gig0/0
Gig0/0 is up, line protocol is up
  Internet Address 10.201.24.8/28, Area 1, Attached via Network Statement
  Process ID 100, Router ID 192.168.1.1, Network Type BROADCAST, Cost: 1
  Topology-MTID    Cost    Disabled    Shutdown      Topology Name
        0          1          no          no            Base
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 192.168.1.1, Interface address 10.201.24.8
  No backup designated router on this network
  Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
    oob-resync timeout 40
    Hello due in 00:00:07

R2#sh ip ospf int gig0/0
gig0/0 is up, line protocol is up
  Internet Address 10.201.24.1/28, Area 1
  Process ID 100, Router ID 172.16.1.1, Network Type BROADCAST, Cost: 1
  Transmit Delay is 1 sec, State DR, Priority 1
  Designated Router (ID) 172.16.1.1, Interface address 10.201.24.1
  No backup designated router on this network
  Timer intervals configured, Hello 20, Dead 80, Wait 80, Retransmit 5
```

What action establishes the OSPF neighbor relationship without forming an adjacency?

A. modify hello interval
B. modify process ID
C. modify priority
D. modify network type

Correct Answer: A
Section:

QUESTION 125

How does WPA3 improve security?

A. It uses SAE for authentication.
B. It uses a 4-way handshake for authentication.
C. It uses RC4 for encryption.
D. It uses TKIP for encryption.

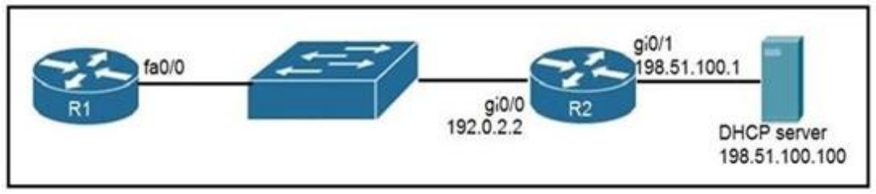
Correct Answer: A
Section:

QUESTION 126
A device detects two stations transmitting frames at the same time. This condition occurs after the first 64 bytes of the frame is received interface counter increments?

A. collision
B. CRC
C. runt
D. late collision

Correct Answer: D
Section:

QUESTION 127
Refer to the exhibit.



An engineer deploys a topology in which R1 obtains its IP configuration from DHCP. If the switch and DHCP server configurations are complete and correct. Which two sets of commands must be configured on R1 and R2 to complete the task? (Choose two)

A. R1(config)# interface fa0/0
R1(config-if)# ip helper-address 198.51.100.100
B. R2(config)# interface gi0/0
R2(config-if)# ip helper-address 198.51.100.100
C. R1(config)# interface fa0/0
R1(config-if)# ip address dhcp
R1(config-if)# no shutdown
D. R2(config)# interface gi0/0
R2(config-if)# ip address dhcp
E. R1(config)# interface fa0/0
R1(config-if)# ip helper-address 192.0.2.2

Correct Answer: B, C
Section:

QUESTION 128

When OSPF learns multiple paths to a network, how does it select a route?

A. It multiple the active K value by 256 to calculate the route with the lowest metric.
B. For each existing interface, it adds the metric from the source router to the destination to calculate the route with the lowest bandwidth.
C. It divides a reference bandwidth of 100 Mbps by the actual bandwidth of the existing interface to calculate the router with the lowest cost.
D. It count the number of hops between the source router and the destination to determine the router with the lowest metric

Correct Answer: C
Section:

QUESTION 129
A user configured OSPF in a single area between two routers A serial interface connecting R1 and R2 is running encapsulation PPP By default which OSPF network type is seen on this interface when the user types show ip ospf interface on R1 or R2?

A. port-to-multipoint
B. broadcast
C. point-to-point
D. nonbroadcast

Correct Answer: C
Section:
Explanation:
The default OSPF network type for HDLC and PPP on Serial link is point-to-point (while the default OSPF network type for Ethernet link is Broadcast).

QUESTION 130
How do AAA operations compare regarding user identification, user services and access control?

A. Authorization provides access control and authentication tracks user services
B. Authentication identifies users and accounting tracks user services
C. Accounting tracks user services, and authentication provides access control
D. Authorization identifies users and authentication provides access control

Correct Answer: B
Section:

QUESTION 131
An engineer requires a scratch interface to actively attempt to establish a trunk link with a neighbor switch. What command must be configured?

A. switchport mode trunk
B. switchport mode dynamic desirable
C. switchport mode dynamic auto
D. switchport nonegotiate

Correct Answer: C
Section:

QUESTION 132
Refer to the exhibit.

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.246 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.246, Serial0/1/0
      is directly connected, Serial0/1/0
      172.16.0.0/16 is variably subnetted, 2 subnets, 2 masks
S     172.16.3.0/24 [1/0] via 209.165.200.250, Serial0/0/0
O     172.16.3.0/28 [110/1] via 209.165.200.254, 00:00:28, Serial0/0/1
      209.165.200.0/24 is variably subnetted, 6 subnets, 2 masks
C     209.165.200.244/30 is directly connected, Serial0/1/0
L     209.165.200.245/32 is directly connected, Serial0/1/0
C     209.165.200.248/30 is directly connected, Serial0/0/0
L     209.165.200.249/32 is directly connected, Serial0/0/0
C     209.165.200.252/30 is directly connected, Serial0/0/1
L     209.165.200.253/32 is directly connected, Serial0/0/1
```

A packet is being sent across router R1 to host 172.16.0.14. What is the destination route for the packet?

A. 209.165.200.254 via Serial0/0/1
B. 209.165.200.254 via Serial0/0/0
C. 209.165.200.246 via Serial0/1/0
D. 209.165.200.250 via Serial0/0/0

Correct Answer: A
Section:

QUESTION 133
With REST API, which standard HTTP header tells a server which media type is expected by theclient?

A. Accept-Encoding: gzip. deflate
B. Accept-Patch: text/example; charset=utf-8
C. Content-Type: application/json; charset=utf-8
D. Accept: application/json

Correct Answer: D
Section:
Explanation:
Accept header is a way for a client to specify the media type of the response content it is expecting and Content-type is a way to specify the media type of request being sent from the client to the server. http://www.java-allandsundry.com/2012/08/accept-header-vs-content-typeheader. html#:~:text=Accept%20and%20Content%2Dtype%20are,the%20client%20to%20the%20serv er

QUESTION 134

Which JSON data type is an unordered set of attribute- value pairs?

A. array
B. string
C. object
D. Boolean

Correct Answer: C
Section:

QUESTION 135
What is the expected outcome when an EUI-64 address is generated?

A. The seventh bit of the original MAC address of the interface is inverted
B. The interface ID is configured as a random 64-bit value
C. The characters FE80 are inserted at the beginning of the MAC address of the interface
D. The MAC address of the interface is used as the interface ID without modification

Correct Answer: A
Section:

QUESTION 136
Which protocol prompts the Wireless LAN Controller to generate its own local web administration SSL certificate for GUI access?

A. HTTPS
B. RADIUS
C. TACACS+
D. HTTP

Correct Answer: A
Section:
Explanation:
You can protect communication with the GUI by enabling HTTPS. HTTPS protects HTTP browser sessions by using the Secure Sockets Layer (SSL) protocol. When you enable HTTPS, the controller generates its own local web administration SSL certificate and automatically applies it to the GUI.
You also have the option of downloading an externally generated certificate.
Reference: https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-0/configurationguide/b_cg80/b_cg80_chapter_011.html

QUESTION 137
The SW1 interface g0/1 is in the down/down state. Which two configurations are valid reasons for the interface conditions?(choose two)

A. There is a duplex mismatch
B. There is a speed mismatch
C. There is a protocol mismatch
D. The interface is shut down
E. The interface is error-disabled

Correct Answer: B, E

Section:

QUESTION 138
Which network plane is centralized and manages routing decisions?

A. policy plane
B. management plane
C. control plane
D. data plane

Correct Answer: C
Section:

QUESTION 139
Which action must be taken to assign a global unicast IPv6 address on an interface that is derived from the MAC address of that interface?

A. configure a stateful DHCPv6 server on the network
B. enable SLAAC on an interface
C. disable the EUI-64 bit process
D. explicitly assign a link-local address

Correct Answer: A
Section:

QUESTION 140
Refer to the exhibit.

```
Router#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route

Gateway of last resort is 209.165.202.131 to network 0.0.0.0

S*    0.0.0.0/0 [1/0] via 209.165.202.131
      209.165.200.0/27 is subnetted, 1 subnets
S        209.165.200.224 [254/0] via 209.165.202.129
      209.165.201.0/27 is subnetted, 1 subnets
S        209.165.201.0 [1/0] via 209.165.202.130
```

Which command configures a floating static route to provide a backup to the primary link?

A. ip route 0.0.0.0 0.0.0.0 209.165.202.131
B. ip route 209.165.201.0 255.255.255.224 209.165.202.130
C. ip route 0.0.0.0 0.0.0.0 209.165.200.224
D. ip route 209.165.200.224 255.255.255.224 209.165.202.129 254

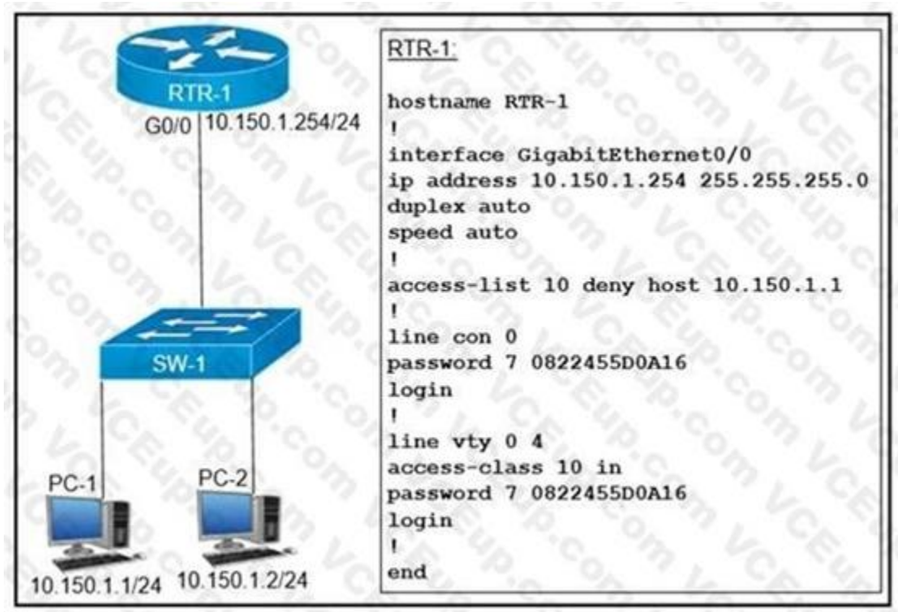
Correct Answer: D
Section:

QUESTION 141
Which two QoS tools provides congestion management? (Choose two)

A. CAR
B. CBWFQ
C. PQ
D. PBR
E. FRTS

Correct Answer: B, C
Section:
Explanation:
Type of queuing methods are available:
• First-In-First-Out (FIFO)
• Priority Queuing (PQ)
• Custom Queuing (CQ)
• Weighted Fair Queuing (WFQ)
• Class-Based Weighted Fair Queuing (CBWFQ)
• Low-Latency Queuing (LLQ)
https://www.orbit-computer-solutions.com/qos-congestion-management-tools/

QUESTION 142
Refer to the exhibit.



An access list is created to deny Telnet access from host PC-1 to RTR-1 and allow access from all other hosts A Telnet attempt from PC-2 gives this message:"% Connection refused by remote host" Without allowing Telnet access from
PC-1, which action must be taken to permit the traffic?

A. Add the access-list 10 permit any command to the configuration
B. Remove the access-class 10 in command from line vty 0.4.
C. Add the ip access-group 10 out command to interface g0/0.
D. Remove the password command from line vty 0 4.

Correct Answer: A
Section:

QUESTION 143
An engineer must configure an OSPF neighbor relationship between router R1 and R3 The authentication configuration has been configured and the connecting interfaces are in the same 192.168 1.0/30 sublet. What are the next two steps to complete the configuration? (Choose two.)

A. configure the hello and dead timers to match on both sides
B. configure the same process ID for the router OSPF process
C. configure the same router ID on both routing processes
D. Configure the interfaces as OSPF active on both sides.
E. configure both interfaces with the same area ID

Correct Answer: A, E
Section:

QUESTION 144
Which type of traffic Is sent with pure iPsec?

A. broadcast packets from a switch that is attempting to locate a MAC address at one of several remote sites
B. multicast traffic from a server at one site to hosts at another location
C. spanning-tree updates between switches that are at two different sites
D. unicast messages from a host at a remote site lo a server at headquarters

Correct Answer: D
Section:
Explanation:
"The original poster makes a correct observation that EIGRP does not work in a pure IPSEC environment. IPSEC was designed to process unicast traffic.

QUESTION 145
R1 has learned route 10.10.10.0/24 via numerous routing protocols. Which route is installed?

A. route with the lowest cost
B. route with the next hop that has the highest IP
C. route with the shortest prefix length
D. route with the lowest administrative distance

Correct Answer: D
Section:

QUESTION 146
Which configuration management mechanism uses TCP port 22 by default when communicating with managed nodes?

A. Ansible
B. Python
C. Puppet
D. Chef

Correct Answer: A
Section:

QUESTION 147
Which 802.11 frame type is indicated by a probe response after a client sends a probe request?

A. action
B. management
C. control
D. data

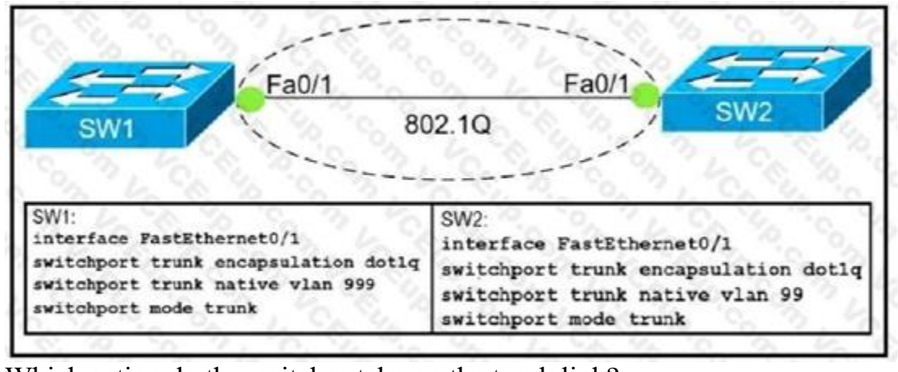
Correct Answer: B
Section:

QUESTION 148
Which two must be met before SSH can operate normally on a Cisco IOS switch? (Choose two)

A. The switch must be running a k9 (crypto) IOS image
B. The Ip domain-name command must be configured on the switch
C. IP routing must be enabled on the switch
D. A console password must be configured on the switch
E. Telnet must be disabled on the switch

Correct Answer: A, B
Section:
Explanation:
Reference: https://www.cisco.com/c/en/us/support/docs/security-vpn/secure-shell-ssh/4145-ssh.html

QUESTION 149
Refer to Exhibit.

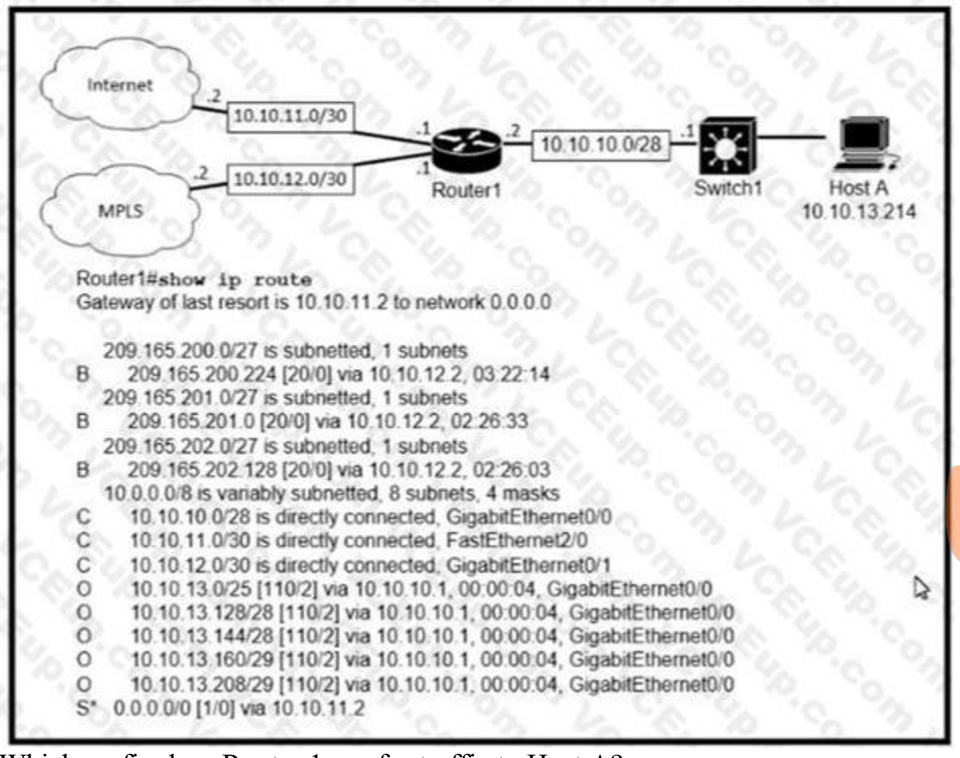


Which action do the switches take on the trunk link?

A. The trunk does not form and the ports go into an err-disabled status.
B. The trunk forms but the mismatched native VLANs are merged into a single broadcast domain.
C. The trunk does not form, but VLAN 99 and VLAN 999 are allowed to traverse the link.
D. The trunk forms but VLAN 99 and VLAN 999 are in a shutdown state.

Correct Answer: B
Section:
Explanation:
The trunk still forms with mismatched native VLANs and the traffic can actually flow between mismatched switches. But it is absolutely necessary that the native VLANs on both ends of a trunk link match; otherwise a native VLAN mismatch occurs, causing the two VLANs to effectively merge.
For example with the above configuration, SW1 would send untagged frames for VLAN 999. SW2 receives them but would think they are for VLAN 99 so we can say these two VLANs are merged.

QUESTION 150
Refer to the exhibit.



Which prefix does Router 1 use for traffic to Host A?

A. 10.10.10.0/28
B. 10.10.13.0/25
C. 10.10.13.144/28
D. 10.10.13.208/29

Correct Answer: D
Section:
Explanation:
Host A address fall within the address range. However, if more than one route to the same subnet exist (router will use the longest stick match, which match more specific route to the subnet). If there are route 10.10.13.192/26 and 10.10.13.208/29, the router will forward the packet to /29 rather than /28.

QUESTION 151
Refer to the exhibit.

```
R1#config t
R1(config)# interface gi1/1
R1(config-if)# ip address 192.168.0.1 255.255.255.0

R1(config)# router bgp 65000
R1(config-router)# neighbor 192.168.0.2 remote-as 65001
R1(config-router)# network 10.1.1.0 mask 255.255.255.0

R1(config)# router ospf 1
R1(config)# router-id 1.1.1.1
R1(config)# network 192.168.0.1 0.0.0.0 area 0
R1(config)# network 10.1.1.0 0.0.0.255 area 0

R1(config)# router eigrp 1
R1(config)# eigrp router-id 1.1.1.1
R1(config)# network 10.1.1.0 0.0.0.255
R1(config)# network 192.168.0.1 0.0.0.0

R2#config t
R2(config)# interface gi1/1
R2(config-if)# ip address 192.168.0.2 255.255.255.0

R2#config t
R2(config)# router bgp 65001
R2(config-router)# neighbor 192.168.0.1 remote-as 65000

R2(config)# router ospf 1
R2(config)# router-id 2.2.2.2
R2(config)# network 192.168.1.2 0.0.0.0 area 0

R2(config)# router eigrp 1
R2(config)# eigrp router-id 1.1.1.1
R2(config)# network 192.168.0.1 0.0.0.0

R2(config)# ip route 10.1.1.0 255.255.255.0 192.168.0.1
```

Router R2 is configured with multiple routes to reach network 10 1.1 0/24 from router R1. What protocol is chosen by router R2 to reach the destination network 10.1 1 0/24?

A. eBGP
B. static
C. OSPF
D. EIGRP

Correct Answer: B
Section:

QUESTION 152
DRAG DROP
Drag and drop the functions of DHCP from the left onto any of the positions on the right Not all functions are used

Select and Place:

provides local control for network segments using a client-server scheme

reduces the administrative burden for onboarding end users

associates hostnames to IP addresses

maintains an address pool

assigns IP addresses to local hosts for a configurable lease time

offers domain name server configuration

uses authoritative servers for record keeping

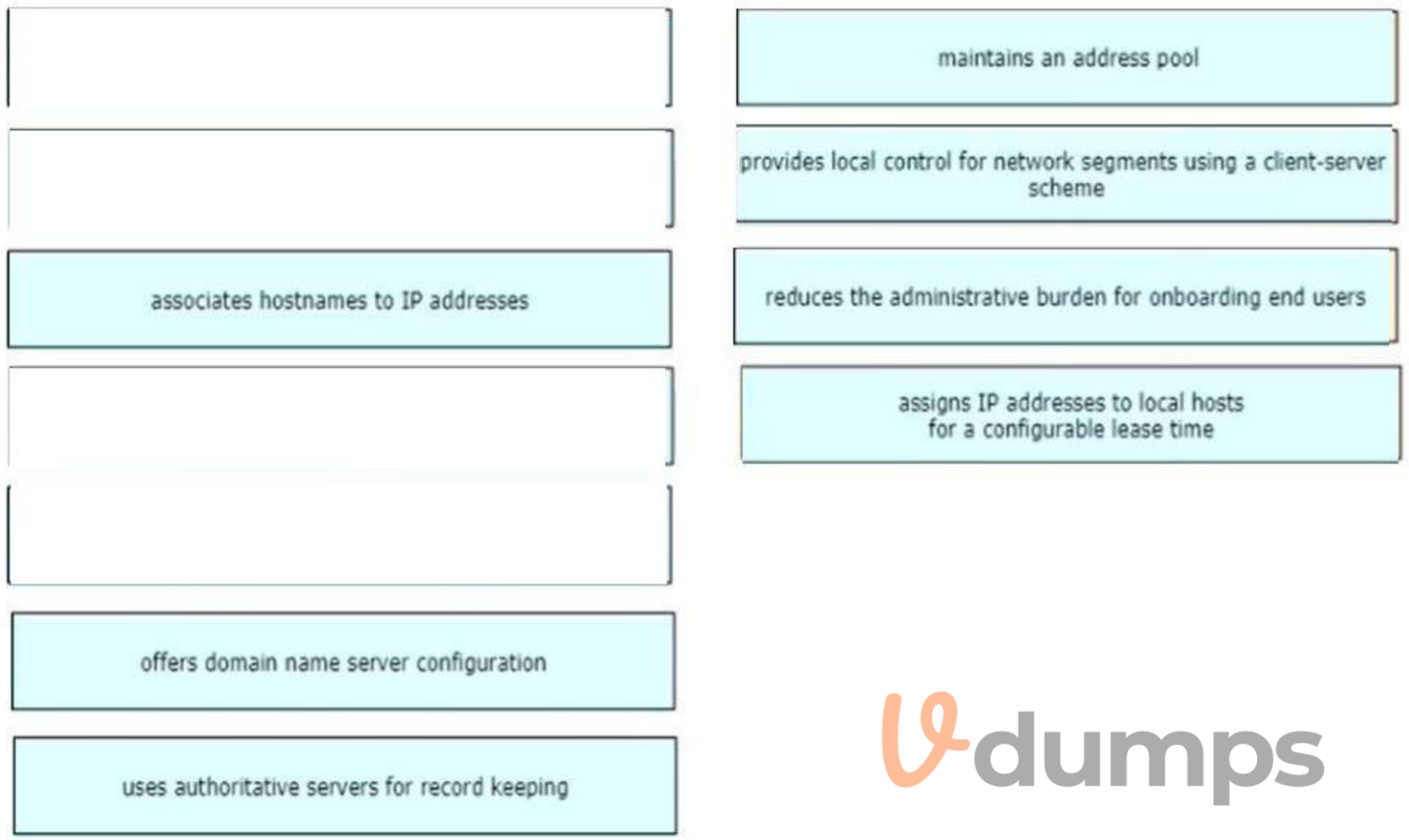
1

2

3

4

Correct Answer:



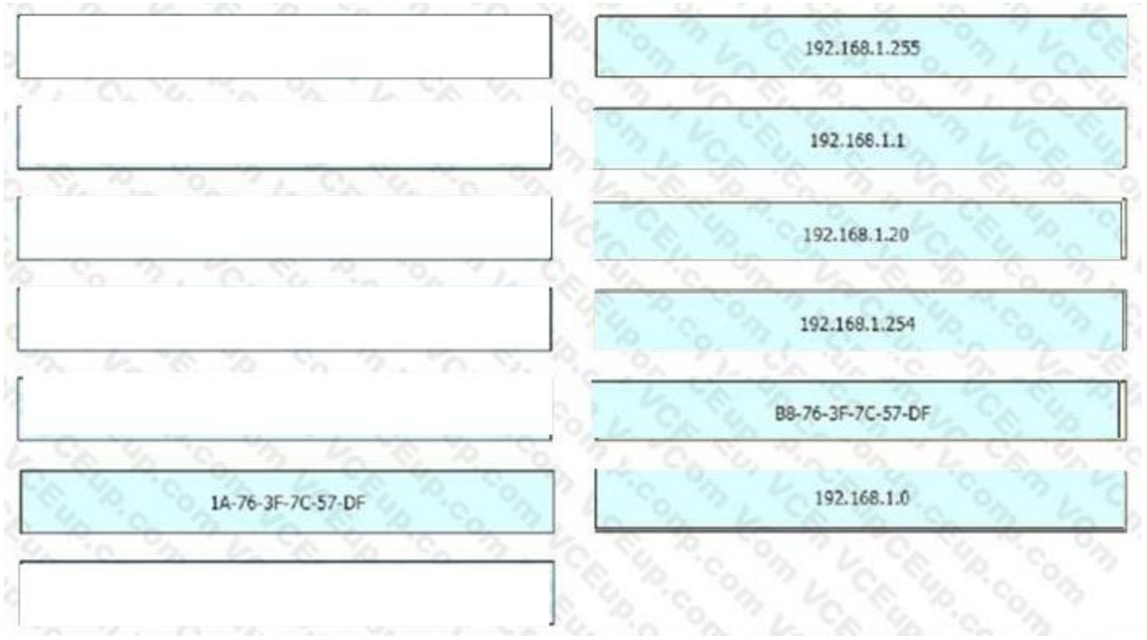
Section:
Explanation:

QUESTION 153
DRAG DROP
Refer to the exhibit.

An engineer is required to verify that the network parameters are valid for the users wireless LAN connectivity on a /24 subnet. Drag and drop the values from the left onto the network parameters on the right. Not all values are used.

Select and Place:

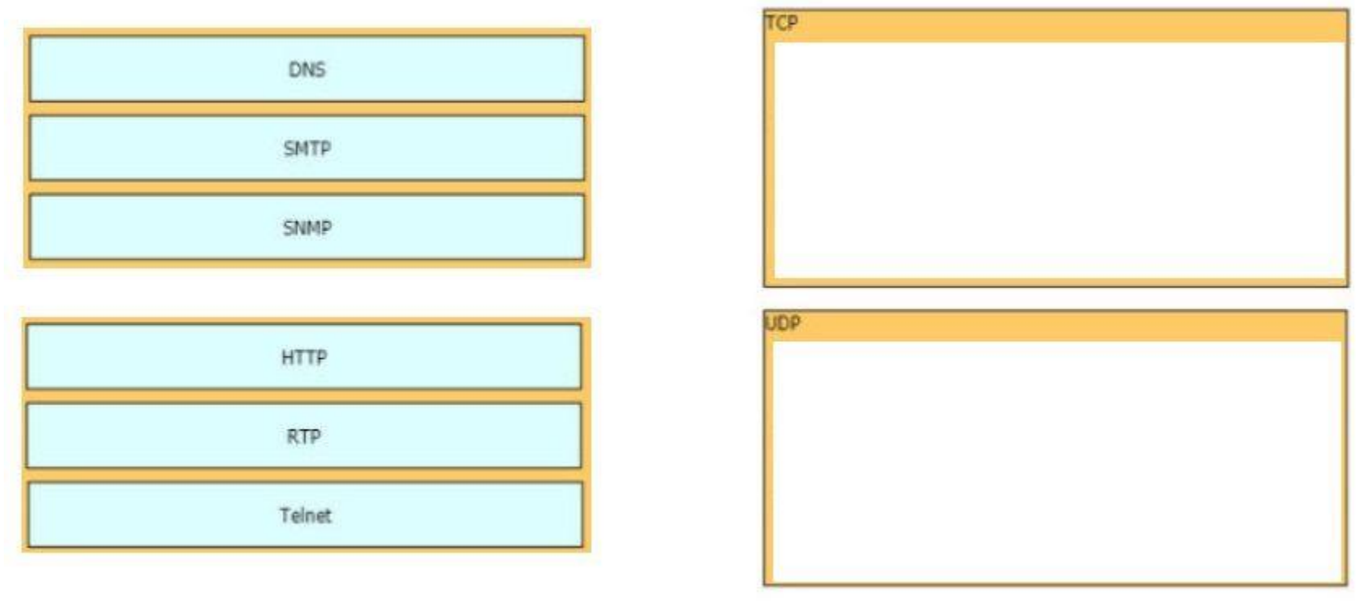
Correct Answer:



Section:
Explanation:

QUESTION 154
DRAG DROP
Drag and drop the TCP/IP protocols from the left onto the transmission protocols on the right

Select and Place:



Correct Answer:

Section:
Explanation:

QUESTION 155
Refer to the exhibit.

```
R#2show ip route
C        192.168.1.0/26 is directly connected, FastEthernet0/1
```

Which two prefixes are included in this routing table entry? (Choose two.)

A. 192.168.1.17
B. 192.168.1.61
C. 192.168.1.64
D. 192.168.1.127
E. 192.168.1.254

Correct Answer: A, B
Section:

QUESTION 156
which IPv6 address block forwards packets to a multicast address rather than a unicast address?

A. 2000::/3
B. FC00::/7
C. FE80::/10
D. FF00::/12

Correct Answer: D

Section:

QUESTION 157
What are two recommendations for protecting network ports from being exploited when located in an office space outside of an IT closer? (Choose two.)

A. enable the PortFast feature on ports
B. implement port-based authentication
C. configure static ARP entries
D. configure ports to a fixed speed
E. shut down unused ports

Correct Answer: B, E
Section:

QUESTION 158
Which technology can prevent client devices from arbitrarily connecting to the network without state remediation?

A. 802.1x
B. IP Source Guard
C. MAC Authentication Bypass
D. 802.11n

Correct Answer: A
Section:

QUESTION 159
What is a role of access points in an enterprise network?

A. connect wireless devices to a wired network
B. support secure user logins to devices or the network
C. integrate with SNMP in preventing DDoS attacks
D. serve as a first line of defense in an enterprise network

Correct Answer: A
Section:

QUESTION 160
What is a function of TFTP in network operations?

A. transfers a backup configuration file from a server to a switch using a username and password
B. transfers files between file systems on a router
C. transfers a configuration files from a server to a router on a congested link
D. transfers IOS images from a server to a router for firmware upgrades

Correct Answer: D
Section:

QUESTION 161
A network engineer must create a diagram of a multivendor network. Which command must be configured on the Cisco devices so that the topology of the network can be mapped?

A. Device(Config)#lldp run
B. Device(Config)#cdp run
C. Device(Config-if)#cdp enable
D. Device(Config)#flow-sampler-map topology

Correct Answer: A
Section:

QUESTION 162
What is the same for both copper and fiber interfaces when using SFP modules?

A. They support an inline optical attenuator to enhance signal strength
B. They provide minimal interruption to services by being hot-swappable
C. They offer reliable bandwidth up to 100 Mbps in half duplex mode
D. They accommodate single-mode and multi-mode in a single module

Correct Answer: B
Section:

QUESTION 163
When a WLAN with WPA2 PSK is configured in the Wireless LAN Controller GUI which format is supported?

A. Unicode
B. base64
C. decimal
D. ASCII

Correct Answer: D
Section:

QUESTION 164
When deploying syslog, which severity level logs informational message?

A. 0
B. 2
C. 4
D. 6

Correct Answer: D
Section:
Explanation:
https://en.wikipedia.org/wiki/Syslog

QUESTION 165

Refer to the exhibit.

```
R1#show ip interface brief
Interface                  IP-Address      OK? Method Status                Protocol
FastEthernet0/0            unassigned      YES NVRAM  administratively down down
GigabitEthernet1/0         192.168.0.1     YES NVRAM  up                    up
GigabitEthernet2/0         10.10.1.10      YES manual up                    up
GigabitEthernet3/0         10.10.10.20     YES manual up                    up
GigabitEthernet4/0         unassigned      YES NVRAM  administratively down down
Loopback0                  172.16.15.10    YES manual
```

What does router R1 use as its OSPF router-ID?

A. 10.10.1.10
B. 10.10.10.20
C. 172.16.15.10
D. 192.168.0.1

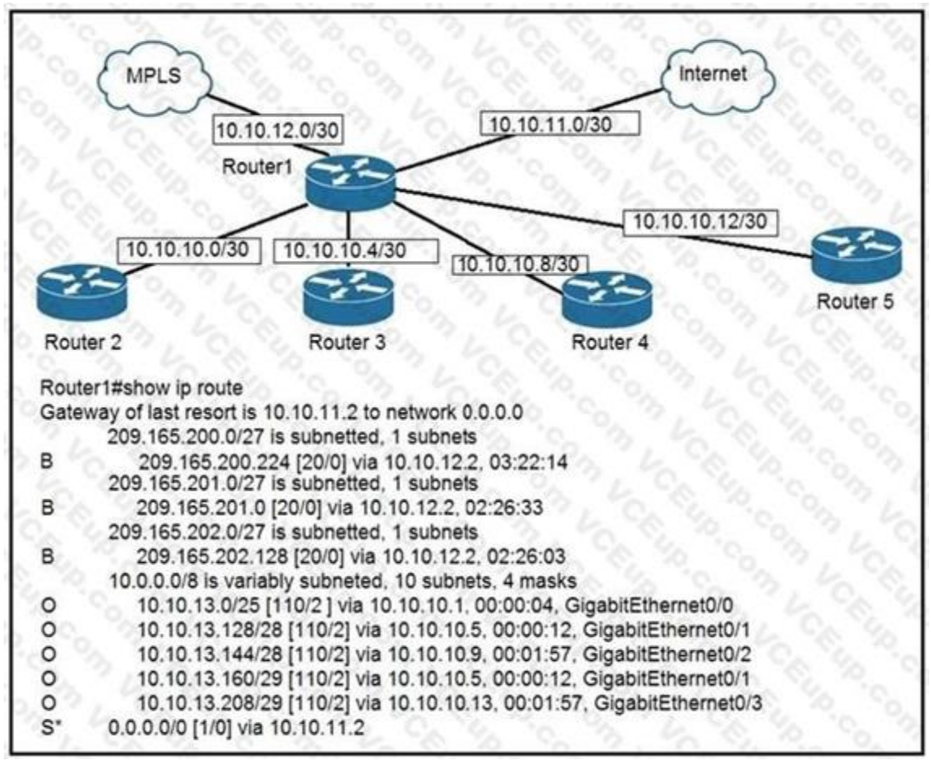
Correct Answer: C
Section:
Explanation:
OSPF uses the following criteria to select the router ID:
1. Manual configuration of the router ID (via the "router-id x.x.x.x" command under OSPF router configuration mode).
2. Highest IP address on a loopback interface.
3. Highest IP address on a non-loopback and active (no shutdown) interface.

QUESTION 166
Which protocol does an access point use to draw power from a connected switch?

A. Internet Group Management Protocol
B. Adaptive Wireless Path Protocol
C. Cisco Discovery Protocol
D. Neighbor Discovery Protocol

Correct Answer: C
Section:

QUESTION 167
Refer to the exhibit.




```
Router1#show ip route
Gateway of last resort is 10.10.11.2 to network 0.0.0.0
      209.165.200.0/27 is subnetted, 1 subnets
B        209.165.200.224 [20/0] via 10.10.12.2, 03:22:14
      209.165.201.0/27 is subnetted, 1 subnets
B        209.165.201.0 [20/0] via 10.10.12.2, 02:26:33
      209.165.202.0/27 is subnetted, 1 subnets
B        209.165.202.128 [20/0] via 10.10.12.2, 02:26:03
      10.0.0.0/8 is variably subnetted, 10 subnets, 4 masks
O        10.10.13.0/25 [110/2 ] via 10.10.10.1, 00:00:04, GigabitEthernet0/0
O        10.10.13.128/28 [110/2] via 10.10.10.5, 00:00:12, GigabitEthernet0/1
O        10.10.13.144/28 [110/2] via 10.10.10.9, 00:01:57, GigabitEthernet0/2
O        10.10.13.160/29 [110/2] via 10.10.10.5, 00:00:12, GigabitEthernet0/1
O        10.10.13.208/29 [110/2] via 10.10.10.13, 00:01:57, GigabitEthernet0/3
S*    0.0.0.0/0 [1/0] via 10.10.11.2
```

To which device does Router1 send packets that are destined to host 10.10.13.165?

A. Router2
B. Router3
C. Router4
D. Router5

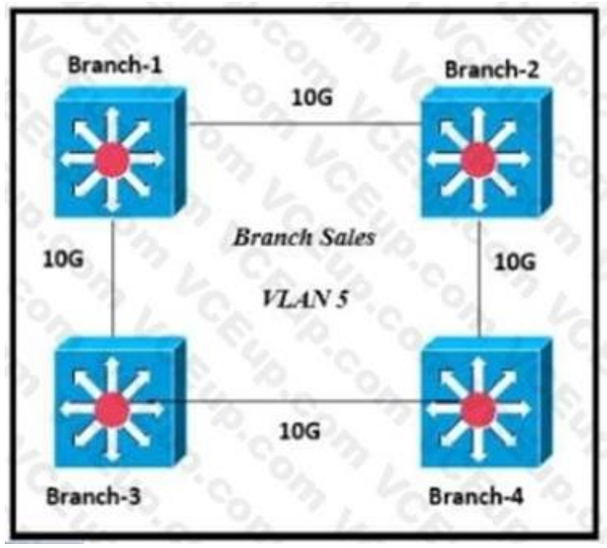
Correct Answer: B
Section:

QUESTION 168
Which networking function occurs on the data plane?

A. forwarding remote client/server traffic
B. facilitates spanning-tree elections
C. processing inbound SSH management traffic
D. sending and receiving OSPF Hello packets

Correct Answer: A
Section:

QUESTION 169
Refer to the exhibit.



Only four switches are participating in the VLAN spanning-tree process.
Branch-1 priority 614440
Branch-2: priority 39082416
Branch-3: priority 0
Branch-4: root primary
Which switch becomes the permanent root bridge for VLAN 5?

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

Correct Answer: C
Section:
Explanation:
Dynamic ARP inspection is an ingress security feature; it does not perform any egress checking.

QUESTION 170
Which two tasks must be performed to configure NTP to a trusted server in client mode on a single network device? (Choose two)

A. Enable NTP authentication.
B. Verify the time zone.
C. Disable NTP broadcasts
D. Specify the IP address of the NTP server
E. Set the NTP server private key

Correct Answer: A, D
Section:
Explanation:
https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst4000/8-2glx/configuration/guide/ntp.html
To configure authentication, perform this task in privileged mode:

Step 1: Configure an authentication key pair for NTP and specify whether the key will be trusted or untrusted.
Step 2: Set the IP address of the NTP server and the public key.
Step 3: Enable NTP client mode.
Step 4: Enable NTP authentication.
Step 5: Verify the NTP configuration.

QUESTION 171
Refer to the exhibit.

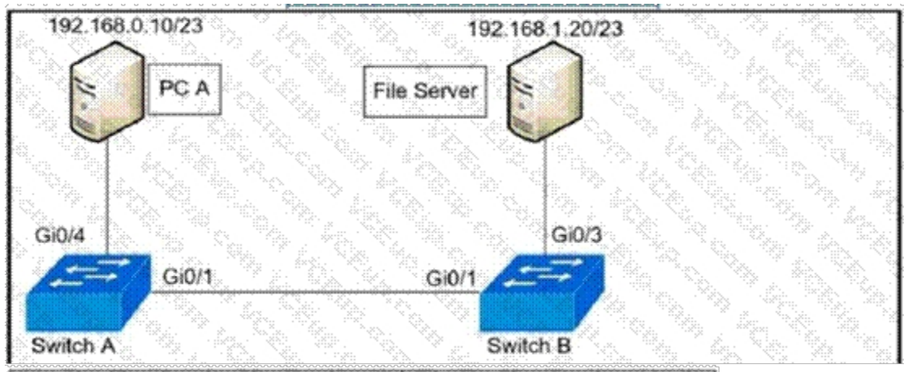
```
SiteA#show interface TenGigabitEthernet0/1/0
TenGigabitEthernet0/1/0 is up, line protocol is up
  Hardware is BUILT-IN-EPA-8x10G, address is 780c.f02a.db91 (bia 780a.f02b.db91)
  Description: Connection to SiteB
  Internet address is 10.10.10.1/30
  MTU 8146 bytes, BW 10000000 Kbit/sec, DLY 10 usec,
     reliability 166/255, txload 1/255, rxload 1/255
  Full Duplex, 10000Mbps, link type is force-up, media type is SFP-LR
  5 minute input rate 264797000 bits/sec, 26672 packets/sec
  5 minute output rate 122464000 bits/sec, 15724 packets/sec

SiteB#show interface TenGigabitEthernet0/1/0
TenGigabitEthernet0/1/0 is up, line protocol is up
  Hardware is BUILT-IN-EPA-8x10G, address is 780c.f02c.db26 (bia 780c.f02c.db26)
  Description: Connection to SiteA
  Internet address is 10.10.10.2/30
  MTU 8146 bytes, BW 10000000 Kbit/sec, DLY 10 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Full Duplex, 10000Mbps, link type is force-up, media type is SFP-LR
  5 minute input rate 122464000 bits/sec, 15724 packets/sec
  5 minute output rate 264797000 bits/sec, 26672 packets/sec
```

Shortly after SiteA was connected to SiteB over a new single-mode fiber path users at SiteA report intermittent connectivity issues with applications hosted at SiteB What is the cause of the intermittent connectivity issue?

A. Interface errors are incrementing
B. An incorrect SFP media type was used at SiteA
C. High usage is causing high latency
D. The sites were connected with the wrong cable type

Correct Answer: A
Section:

QUESTION 172
Refer to the exhibit.



Switch A
Vlan 10,11,12,13

```
interface GigabitEthernet0/1
 switchport mode trunk
 switchport trunk allowed vlan 10-12
!
interface GigabitEthernet0/4
 switchport access vlan 13
 switchport mode access
```

Switch B
Vlan 10,11,12,13

```
interface GigabitEthernet0/1
switchport mode trunk
!
interface GigabitEthernet0/3
 switchport access vlan 13
 switchport mode access
```

A network administrator assumes a task to complete the connectivity between PC A and the File Server. Switch A and Switch B have been partially configured with VLAN 10, 11, 12, and 13. What is the next step in the configuration?

A. Add PC A to VLAN 10 and the File Server to VLAN 11 fa VLAN segmentation
B. Add VLAN 13 to the trunk links on Switch A and Switch B for VLAN propagation
C. Add a router on a stick between Switch A and Switch B allowing for Inter-VLAN routing.
D. Add PC A to the same subnet as the Fie Server allowing for intra-VLAN communication.

Correct Answer: B
Section:

QUESTION 173
Which goal is achieved by the implementation of private IPv4 addressing on a network?

A. provides an added level of protection against Internet exposure
B. provides a reduction in size of the forwarding table on network routers
C. allows communication across the Internet to other private networks
D. allows servers and workstations to communicate across public network boundaries

Correct Answer: A
Section:

QUESTION 174
What is a characteristic of spine-and-leaf architecture?

A. Each device is separated by the same number of hops
B. It provides variable latency
C. It provides greater predictability on STP blocked ports.
D. Each link between leaf switches allows for higher bandwidth.

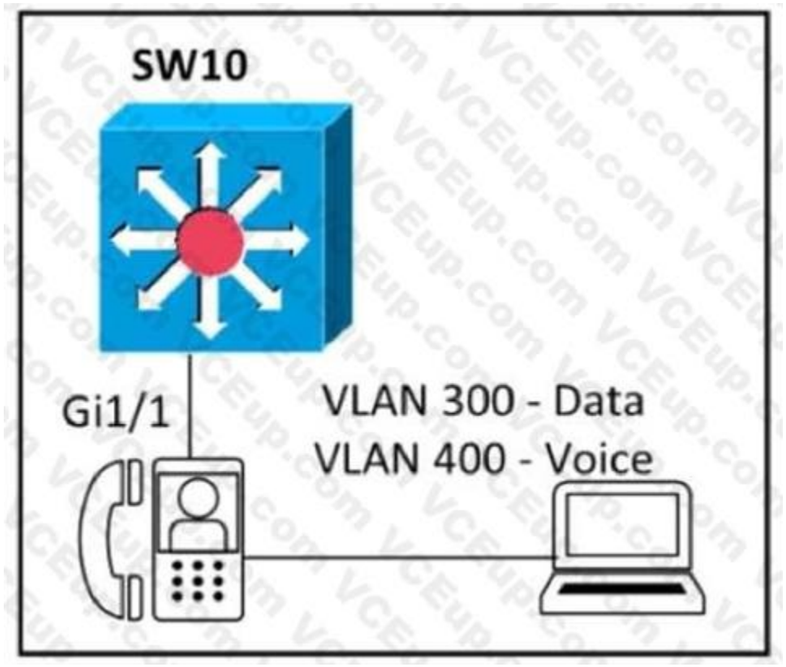
Correct Answer: A
Section:

QUESTION 175
A router running EIGRP has learned the same route from two different paths Which parameter does the router use to select the best path?

A. cost
B. adminstrative distance
C. metric
D. as-path

Correct Answer: C
Section:
Explanation:
If a router learns two different paths for the same network from the same routing protocol, it has to decide which route is better and will be placed in the routing table. Metric is the measure used to decide which route is better (lower number is better). Each routing protocol uses its own metric.
For example, RIP uses hop counts as a metric, while OSPF uses cost.

QUESTION 176
Refer to the exhibit.



An engineer must configure GigabitEthernet1/1 to accommodate voice and data traffic Which configuration accomplishes this task?

```
interface gigabitethernet1/1
switchport mode access
switchport access vlan 300
switchport voice vlan 400

interface gigabitethernet1/1
switchport mode trunk
switchport trunk vlan 300
switchport voice vlan 400

interface gigabitethernet1/1
switchport mode trunk
switchport trunk vlan 300
switchport trunk vlan 400

interface gigabitethernet1/1
switchport mode access
switchport voice vlan 300
switchport access vlan 400
```

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: A
Section:

QUESTION 177
What provides centralized control of authentication and roaming In an enterprise network?

A. a lightweight access point
B. a firewall
C. a wireless LAN controller
D. a LAN switch

Correct Answer: C
Section:

QUESTION 178
Refer to the exhibit.

```
R1# show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate
default
       U - per-user static route, o - ODR
Gateway of last resort is not set
C  192.168.3.5 is directly connected, Loopback0
     10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
O       10.0.1.3/32 [110/100] via 192.168.0.40, 00:39:08, Serial0
C       10.0.1.0/24 is directly connected, Serial0
O       10.0.1.190/32 [110/5] via 192.168.0.35, 00:39:08, Serial0
O       10.0.1.0/24 [110/10] via 192.168.0.4, 00:39:08, Gigabit Ethernet 0/0
D       10.0.1.0/28 [90/10]  via 192.168.0.7, 00:39:08, Gigabit Ethernet 0/0
```

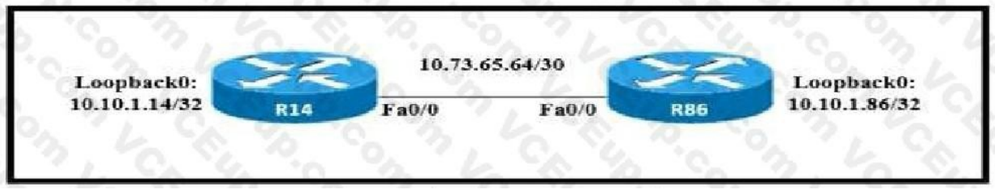
Traffic sourced from the loopback0 Interface is trying to connect via ssh to the host at 10.0.1.15.

What Is the next hop to the destination address?

A. 192.168.0.7
B. 192.168.0.4
C. 192.168.0.40
D. 192.168.3.5

Correct Answer: B
Section:

QUESTION 179
Refer to the exhibit.



Which configuration allows routers R14 and R86 to form an OSPFv2 adjacency while acting as a central point for exchanging OSPF information between routers?

A.

R14#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf network broadcast
ip ospf 10 area 0
ip mtu 1500

router ospf 10
ip ospf priority 255
router-id 10.10.1.14

R86#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
Ip address 10.73.65.66 255.255.255.252
Ip ospf network broadcast
Ip ospf 10 area 0
Ip mtu 1500

B.

R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf network broadcast
ip ospf priority 255
ip mtu 1500

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf network broadcast
ip mtu 1500

router ospf 10
router-id 10.10.1.86
network 10.10.1.86 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0

C.

R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf network broadcast
ip ospf priority 0
ip mtu 1400

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface Loopback0
ip address 10.10.1.86 255.255.255.255

D.

R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf network broadcast
ip ospf priority 255
ip mtu 1500

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf network broadcast
ip mtu 1400

router ospf 10
router-id 10.10.1.86
network 10.10.1.86 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0

Correct Answer: B
Section:

QUESTION 180
Refer to the exhibit.

```
R1# show ip route | begin gateway
Gateway of last resort is 209.165.200.254 to network 0.0.0.0
S* 0.0.0.0/0 [1/0] via 209.165.200.254, Serial0/0/1
                   is directly connected, Serial0/0/1
      172.16.0.0/16 is variably subnetted, 3 subnets, 2 masks
C     172.16.1.0/24 is directly connected, FastEthernet0/0
L     172.16.1.1/32 is directly connected, FastEthernet0/0
R     172.16.2.0/24 [120/2] via 207.165.200.250, 00:00:25, Serial0/0/0
O     192.168.1.0/24 [110/4437] via 207.165.200.254, 00:00:17, Serial0/0/1
D     192.168.2.0/24 [90/84437] via 207.165.200.254, 00:00:15, Serial0/0/1
      207.165.200.0/24 is variably subnetted, 5 subnets, 2 masks
S     207.165.200.244/30 [1/1] via 207.165.200.254, Serial0/0/1
C     207.165.200.248/30 is directly connected, Serial0/0/0
L     207.165.200.249/32 is directly connected, Serial0/0/0
C     207.165.200.252/30 is directly connected, Serial0/0/1
L     207.165.200.253/32 is directly connected, Serial0/0/1
```

Which network prefix was learned via EIGRP?

A. 172.16.0.0/16
B. 192.168.2.0/24
C. 207.165.200.0/24
D. 192.168.1.0/24

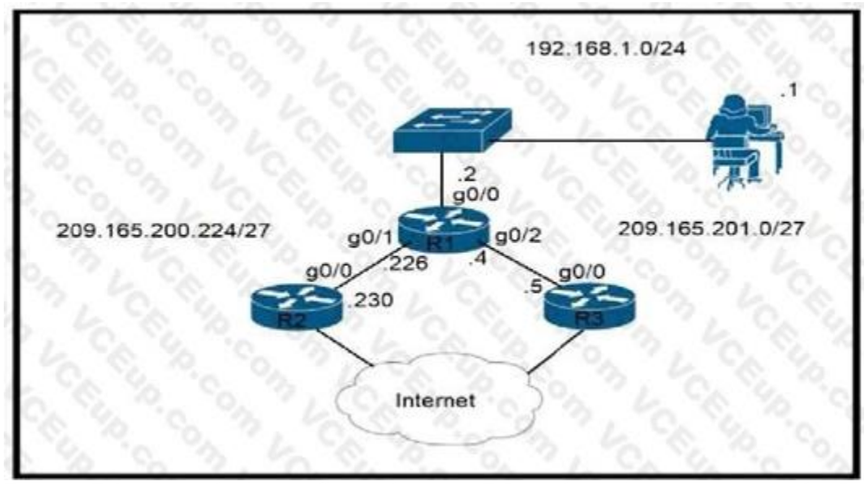
Correct Answer: B
Section:

QUESTION 181
What is the purpose of the ip address hcp command?

A. to configure an Interface as a DHCP server
B. to configure an interface as a DHCP helper
C. to configure an interface as a DHCP relay
D. to configure an interface as a DHCP client

Correct Answer: D
Section:

QUESTION 182
Refer to the exhibit.



Router R1 currently is configured to use R3 as the primary route to the Internet, and the route uses the default administrative distance settings. A network engineer must configure R1 so that it uses R2 as a backup, but only if R3 goes down.
Which command must the engineer configure on R1 so that it correctly uses R2 as a backup route, without changing the administrative distance configuration on the link to R3?

A. ip route 0.0.0.0 0.0.0.0 g0/1 1
B. ip route 0.0.0.0 0.0.0.0 209.165.201.5 10
C. ip route 0.0.0.0 0.0.0.0 209.165.200.226 1
D. ip route 0,0.0.0 0.0.0.0 g0/1 6

Correct Answer: D
Section:

QUESTION 183
Refer to the exhibit.

```
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
!
hostname R4
!
boot-start-marker
boot-end-marker
!
ip cef
!
interface FastEthernet0/0
description WAN_INTERFACE
ip address 10.0.1.2 255.255.255.252
ip access-group 100 in
!
interface FastEthernet0/1
description LAN_INTERFACE
ip address 10.148.2.1 255.255.255.0
duplex auto
speed auto
!
ip forward-protocol nd
!
access-list 100 permit eigrp any any
access-list 100 permit icmp any any
access-list 100 permit tcp 10.149.3.0 0.0.0.255 host 10.0.1.2 eq 22
access-list 100 permit tcp any any eq 80
access-list 100 permit tcp any any eq 443
access-list 100 deny ip any any log
```

Which configuration enables DHCP addressing for hosts connected to interface FastEthernetO/1 on router R4?

A. interface FastEthernet0/0 ip helper-address 10.0.1.1 i access-list 100 permit udp host 10.0.1.1 eq bootps host 10.148.2.1
B. interface FastEthernot0/1 ip helper-address 10.0.1.1 ! access-list 100 permit tcp host 10.0.1.1 eq 67 host 10.148.2.1
C. interface FastEthernetO/0 ip helper-address 10.0.1.1 I access-list 100 permit host 10.0.1.1 host 10.148.2.1 eq bootps
D. interface FastEthernet0/1 ip helper-address 10.0.1.1 ! access-list 100 permit udp host 10.0.1.1 eq bootps host 10.148.2.1

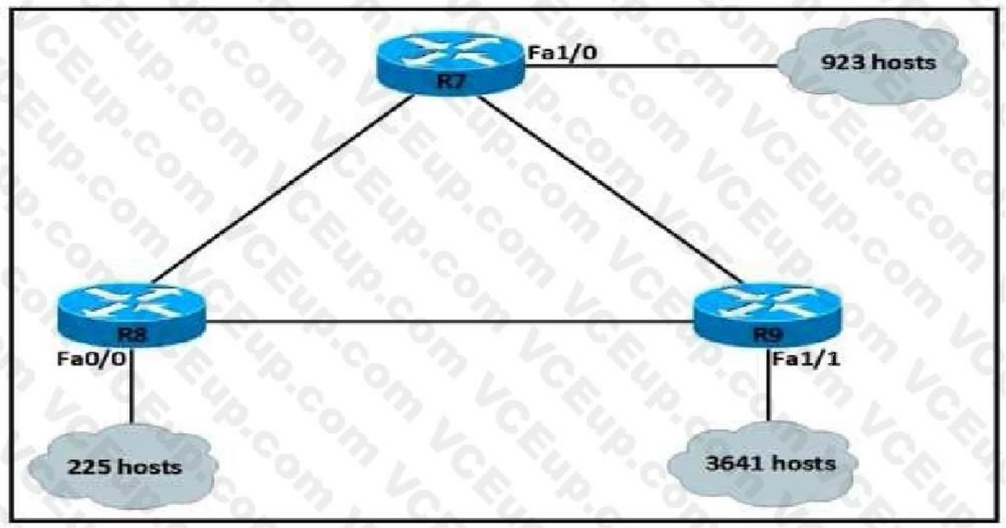
Correct Answer: D
Section:

QUESTION 184
OSPF must be configured between routers R1 and R2. Which OSPF configuration must be applied to router R1 to avoid a DR/BDR election?

A. router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf network broadcast
B. router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf network point-to-point
C. router ospf 1 network 192.168.1.1 0.0.0.0 area 0 interface e1/1 ip address 192.168.1.1 255.255.255.252 ip ospf cost 0
D. router ospf 1 network 192.168.1.1 0.0.0.0 area 0 hello interval 15 interface e1/1 Ip address 192.168.1.1 255.255.255.252

Correct Answer: B
Section:

QUESTION 185
Refer to the exhibit.



An IP subnet must be configured on each router that provides enough addresses for the number of assigned hosts and anticipates no more than 10% growth for now hosts. Which configuration script must be used?

A.

```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.252.0
no shutdown

R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.255.0
no shutdown

R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.240.0
no shutdown
```

B.

R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.248.0
no shutdown

R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.254.0
no shutdown

R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.248.0
no shutdown

C.

D.

```
R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.240.0
no shutdown

R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown

R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.192.0
no shutdown
```

R7#
configure terminal
interface Fa1/0
ip address 10.1.56.1 255.255.192.0
no shutdown

R8#
configure terminal
interface Fa0/0
ip address 10.9.32.1 255.255.224.0
no shutdown

R9#
configure terminal
interface Fa1/1
ip address 10.23.96.1 255.255.128.0
no shutdown

Correct Answer: C
Section:

QUESTION 186
Which wireless security protocol relies on Perfect Forward Secrecy?

A. WPA3
B. WPA
C. WEP
D. WPA2

Correct Answer: A
Section:

QUESTION 187
What is a function of an endpoint on a network?

A. forwards traffic between VLANs on a network
B. connects server and client devices to a network
C. allows users to record data and transmit to a tile server
D. provides wireless services to users in a building

Correct Answer: C
Section:
Explanation:
An endpoint is a host that acts as the source or destination of data traffic flowing through a network.When you are at your PC, editing your CV and uploading it to a file server, you are sitting at an endpoint

QUESTION 188
Refer to the exhibit.

```
EIGRP   10.10.10.0/24[90/1441]    via   F0/10
EIGRP   10.10.10.0/24[90/144]     via   F0/11
EIGRP   10.10.10.0/24[90/1441]    via   F0/12
OSPF    10.10.10.0/24[110/20]     via   F0/13
OSPF    10.10.10.0/24[110/30]     via   F0/14
```

Packets received by the router from BGP enter via a serial interface at 209.165.201.10. Each route is present within the routing table. Which interface is used to forward traffic with a destination IP of 10.10.10.24?

A. F0/10
B. F0/11
C. F0/12
D. F0/13

Correct Answer: B
Section:

QUESTION 189
Refer to the exhibit.

An engineer has started to configure replacement switch SW1. To verify part of the configuration, the engineer issued the commands as shown and noticed that the entry for PC2 is missing. Which change must be applied to SW1 so that PC1 and PC2 communicate normally?

A.

```
SW1(config)#interface fa0/2
SW1(config-if)#no switchport mode trunk
SW1(config-if)#no switchport trunk allowed vlan 3
SW1(config-if)#switchport mode access
```

B.

```
SW1(config)#interface fa0/1
SW1(config-if)#no switchport access vlan 2
SW1(config-if)#switchport trunk native vlan 2
SW1(config-if)#switchport trunk allowed vlan 3
```

C.

```
SW1(config)#interface fa0/1
SW1(config-if)#no switchport access vlan 2
SW1(config-if)#switchport access vlan 3
SW1(config-if)#switchport trunk allowed vlan 2
```

D.

```
SW1(config)#interface fa0/2
SW1(config-if)#no switchport access vlan 2
SW1(config-if)#no switchport trunk allowed vlan 3
SW1(config-if)#switchport trunk allowed vlan 2
```

Correct Answer: A
Section:

QUESTION 190
What is a zero-day exploit?

A. It is when a new network vulnerability is discovered before a fix is available
B. It is when the perpetrator inserts itself in a conversation between two parties and captures or alters data.
C. It is when the network is saturated with malicious traffic that overloads resources and bandwidth
D. It is when an attacker inserts malicious code into a SOL server.

Correct Answer: A
Section:
Explanation:
https://www.kaspersky.com/resource-center/definitions/zero-day-exploit

QUESTION 191
A network engineer is replacing the switches that belong to a managed-services client with new Cisco Catalyst switches. The new switches will be configured for updated security standards, including replacing Telnet services with encrypted connections and doubling the modulus size from 1024. Which two commands must the engineer configure on the new switches? (Choose two.)

A. crypto key generate rsa general-keys modulus 1024
B. transport input all
C. crypto key generate rsa usage-keys
D. crypto key generate rsa modulus 2048
E. transport Input ssh

Correct Answer: A, E
Section:

QUESTION 192
Which QoS queuing method discards or marks packets that exceed the desired bit rate of traffic flow?

A. shaping
B. policing
C. CBWFQ
D. LLQ

Correct Answer: B
Section:

QUESTION 193
What is the role of disaggregation in controller-based networking?

A. It divides the control-plane and data-plane functions.
B. It summarizes the routes between the core and distribution layers of the network topology.
C. It enables a network topology to quickly adjust from a ring network to a star network
D. It streamlines traffic handling by assigning individual devices to perform either Layer 2 or Layer 3 functions.

Correct Answer: A
Section:

QUESTION 194
Refer to the exhibit.

```
R1# show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set
      10.0.0.0/24 is subnetted, 5 subnets
D     10.1.2.0/24 [90/2170112] via 10.165.20.226, 00:01:30, Serial0/0
D     10.1.3.0/24 [90/2170112] via 10.165.20.226, 00:01:30, Serial0/0
D     10.1.2.0/25 [90/2170112] via 10.165.20.126, 00:01:30, Serial0/0
D     10.1.3.0/25 [90/2170112] via 10.165.20.146, 00:01:30, Serial0/0
D     10.1.4.0/25 [90/2170112] via 10.165.20.156, 00:01:30, Serial0/0
      192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C     192.18.10.0/24 is directly connected, GigabitEthernet0/0
      192.168.21.0/24 is variably subnetted, 2 subnets, 2 masks
C     192.168.11.0/24 is directly connected, GigabitEthernet0/1
     10.165.20.0/24 is variably subnetted, 2 subnets, 2 masks
C    10.165.20.224/24 is directly connected, Serial0/0
S     10.1.2.112/28 [1/0] via 10.165.20.166
```

What is the next hop for traffic entering R1 with a destination of 10.1.2 126?

A. 10.165 20.126
B. 10.165.20.146
C. 10.165.20.166
D. 10.165 20.226

Correct Answer: D
Section:

QUESTION 195
Refer to the exhibit.

```
   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  :
   Description . . . . . . . . . . . : Realtek PCIe GBE Family
Controller
   Physical Address. . . . . . . . . : 3C-52-82-33-F3-8F
   DHCP Enabled. . . . . . . . . . . : Yes
   Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Wi-Fi:
   Connection-specific DNS Suffix  : arcep.se
   Description . . . . . . . . . . . : Intel(R) Dual Band
Wireless-AC 7265
   Physical Address. . . . . . . . . : C8-21-58-B4-F3-EF
   DHCP Enabled. . . . . . . . . . . : Yes
   Autoconfiguration Enabled . . . . : Yes
   Link-local IPv6 Address . . . . . : fe80::45a1:b3fa:2f37:bf37%2(Preferred)
   IPv4 Address. . . . . . . . . . . : 192.168.1.226(Preferred)
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Lease Obtained. . . . . . . . . . : October 3, 2019 12:28:08 PM
   Lease Expires . . . . . . . . . . : October 3, 2019 7:18:37 PM
   Default Gateway . . . . . . . . . : 192.168.1.100
   DHCP Server . . . . . . . . . . . : 192.168.1.254
   DHCPv6 IAID . . . . . . . . . . . : 46670168
   DHCPv6 Client DUID. . . . . . . . : 00-01-00-01-20-FF-05-55-3C-52-82-33-D3-84
   DNS Servers . . . . . . . . . . . : 192.168.1.253
   NetBIOS over Tcpip. . . . . . . . : Enabled
   Connection-specific DNS Suffix Search List :
                                       arcep.se
```

The given Windows PC is requesting the IP address of the host at www.cisco.com. To which IP address is the request sent?

A. 192.168.1.226
B. 192.168.1.100
C. 192.168.1.254
D. 192.168.1.253

Correct Answer: D
Section:

QUESTION 196
Why would VRRP be implemented when configuring a new subnet in a multivendor environment?

A. when a gateway protocol is required that support more than two Cisco devices for redundancy
B. to enable normal operations to continue after a member failure without requiring a change In a host ARP cache
C. to ensure that the spanning-tree forwarding path to the gateway is loop-free
D. to interoperate normally with all vendors and provide additional security features for Cisco devices

Correct Answer: A
Section:

QUESTION 197
An engineer has configured the domain name, user name, and password on the local router. What is the next step to complete the configuration tor a Secure Shell access RSA key?

A. crypto key Import rsa pem
B. crypto key pubkey-chain rsa
C. crypto key generate rsa
D. crypto key zeroize rsa

Correct Answer: C
Section:

QUESTION 198
An engineer is configuring SSH version 2 exclusively on the R1 router. What is the minimum configuration required to permit remote management using the cryptographic protocol?

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: C

Section:

QUESTION 199
After a recent security breach and a RADIUS failure, an engineer must secure the console port of each enterprise router with a local username and password. Which configuration must the engineer apply to accomplish this task?

```
aaa new-model
line con 0
password plaintextpassword
privilege level 15

username localuser secret plaintextpassword
line con 0
login authentication default
privilege level 15

username localuser secret plaintextpassword
line con 0
no login local
privilege level 15

aaa new-model
aaa authorization exec default local
aaa authentication login default radius
username localuser privilege 15 secret plaintextpassword
```

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: B
Section:

QUESTION 200
Which REST method updates an object in the Cisco DNA Center Intent API?

A. CHANGE
B. UPDATE
C. POST
D. PUT

Correct Answer: D
Section:
Explanation:
PUT is most-often utilized for **update** capabilities, PUT-ing to a known resource URI with the request body containing the newly-updated representation of the original resource.
However, PUT can also be used to create a resource in the case where the resource ID is chosen by the client instead of by the server. In other words, if the PUT is to a URI that contains the value of a non-existent resource ID.
Again, the request body contains a resource representation. Many feel this is convoluted and confusing. Consequently, this method of creation should be used sparingly, if at all.
Alternatively, use POST to create new resources and provide the client-defined ID in the body representation—presumably to a URI that doesn't include the ID of the resource (see POST below).
On successful update, return 200 (or 204 if not returning any content in the body) from a PUT. If using PUT for create, return HTTP status 201 on successful creation. A body in the response is optional—providing one consumes more bandwidth. It is not necessary to return a link via a Location header in the creation case since the client already set the resource ID.
PUT is not a safe operation, in that it modifies (or creates) state on the server, but it is idempotent. In other words, if you create or update a resource using PUT and then make that same call again, the resource is still there and still has the same state as it did with the first call.
If, for instance, calling PUT on a resource increments a counter within the resource, the call is no longer idempotent. Sometimes that happens and it may be enough to document that the call is not idempotent. However, it's recommended to keep PUT requests idempotent. It is strongly recommended to use POST for non-idempotent requests.

Examples:
https://www.restapitutorial.com/lessons/httpmethods.html

QUESTION 201
Which two practices are recommended for an acceptable security posture in a network? (Choose two)

A. Backup device configurations to encrypted USB drives for secure retrieval
B. maintain network equipment in a secure location
C. Use a cryptographic keychain to authenticate to network devices
D. Place internal email and file servers in a designated DMZ
E. Disable unused or unnecessary ports, interfaces and services

Correct Answer: C, E
Section:

QUESTION 202
An administrator must use the password complexity not manufacturer-name command to prevent users from adding "cisco" as a password. Which command must be issued before this command?

A. Password complexity enable
B. confreg 0x2142
C. Login authentication my-auth-list
D. service password-encryption

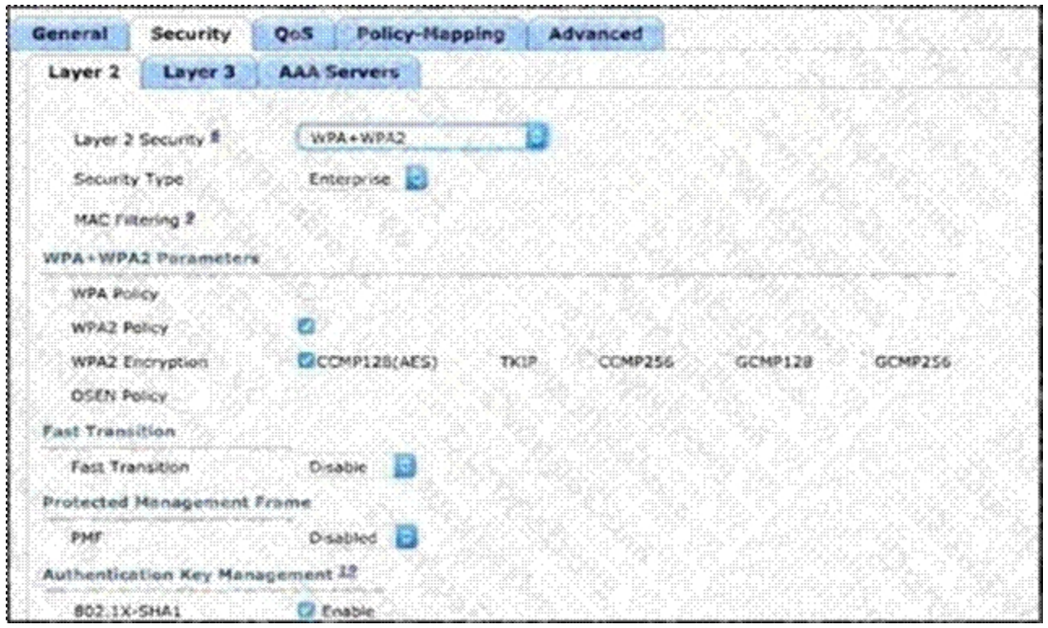
Correct Answer: A
Section:

QUESTION 203
An engineer is configuring router R1 with an IPv6 static route for prefix 2019:C15C:0CAF:E001::/64.
The next hop must be 2019:C15C:0CAF:E002::1 The route must be reachable via the R1 Gigabit 0/0 interface. Which command configures the designated route?

A. R1(config)#ipv6 route 2019:C15C:0CAF:E001::/64 2019:C15C:0CAF:E002::1
B. R1(config-if)#ipv6 route 2019:C15C:0CAF:E001::/64 2019:C15C:0CAF:E002::1
C. R1(config-if)#ip route 2019:C15C:0CAF:E001::/64 GigabitEthernet0/0
D. R1(config)#ip route 2019:C15C:0CAF:E001::/64 GigabitEthernet0/0

Correct Answer: C
Section:

QUESTION 204
Refer to the exhibit.



What must be configured to enable 802.11w on the WLAN?

A. Set PMF to Required.
B. Enable MAC Filtering.
C. Enable WPA Policy.
D. Set Fast Transition to Enabled

Correct Answer: A
Section:

QUESTION 205
Refer to the exhibit.

A network engineer configures the Cisco WLC to authenticate local wireless clients against a RADIUS server Which task must be performed to complete the process?

A. Change the Server Status to Disabled

B. Select Enable next to Management
C. Select Enable next to Network User
D. Change the Support for CoA to Enabled.

Correct Answer: C
Section:

QUESTION 206
What is a function of Cisco Advanced Malware Protection for a Next-Generation IPS?

A. authorizing potentially compromised wireless traffic
B. inspecting specific files and file types for malware
C. authenticating end users
D. URL filtering

Correct Answer: B
Section:
Explanation:
AMP gives you real-time blocking of malware and advanced sandboxing, that is backed up by world class global threat intelligence, to provide rapid detection, containment and removal of advanced malware
https://www.cisco.com/c/en/us/products/security/amp-appliances/index.html

QUESTION 207
Refer to the exhibit.

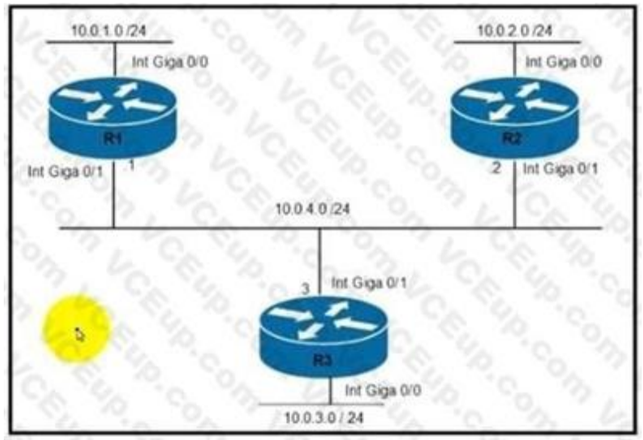
```
{
    "SW1" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
    "SW2" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
    "SW3" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"],
    "SW4" : ["Ten-GigabitEthernet0/0", "Ten-GigabitEthernet0/1"]
}
```

How many JSON objects are represented?

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

Correct Answer: D
Section:

QUESTION 208
Refer to the exhibit.



Router R1 must be configured to reach the 10.0.3.0/24 network from the 10.0.1.0/24 segment.
Which command must be used to configure the route?

A. ip route 10.0.3.0 0.255255.255 10.0.4.2
B. route add 10.0.3.0 mask 255.255.255.0 10.0.4.3
C. Ip route 10.0.3.0 255.255.255.0 10.0.4.3
D. route add 10.0.3.0 0.255.255.255 10.0.4.2

Correct Answer: C
Section:

QUESTION 209
Refer to the exhibit.

```
Codes: C - Connected, L - Local, S - Static, U - Per-user Static route
       B - BGP, R - RIP, H - NHRP, I1 - ISIS L1
       I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary, D - EIGRP
       EX - EIGRP external, ND - ND Default, NDp - ND Prefix, DCE - Destination
       NDr - Redirect, O - OSPF Intra, OI - OSPF Inter, OE1 - OSPF ext 1
       OE2 - OSPF ext 2, ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
       la - LISP alt, lr - LISP site-registrations, ld - LISP dyn-eid
       lA - LISP away, le - LISP extranet-policy, lp - LISP publications
ND   ::/0 [2/0]
     via FE80::A8BB:CCFF:FE00:200, Ethernet0/0
NDp 2001:DB8:1234:1::/64 [2/0]
     via Ethernet0/0, directly connected
L    2001:DB8:1234:1:A8BB:CCFF:FE00:100/128 [0/0]
     via Ethernet0/0, receive
C    2001:DB8:1234:2::/64 [0/0]
     via Ethernet0/1, directly connected
L    2001:DB8:1234:2:A8BB:CCFF:FE00:110/128 [0/0]
     via Ethernet0/1, receive
L    FF00::/8 [0/0]
     via Null0, receive
```

The administrator must configure a floating sialic default route that points to 2001:db8:1234:2::1 and replaces the current default route only if it fails. Which command must the engineer configure on the CPE?

A. ipv6 route ::/0 2001:db8:1234:2::1 3
B. ipv6 route ::/128 2001 :db8:1234:2::1 3

C. ipv6 route ::/0 2001:db8:1234:2::1 1
D. ipv6 route ::/0 2001:db8:1234:2::1 2

Correct Answer: B
Section:

QUESTION 210
What is the function of "off-the-shell" switches in a controller-based network?

A. providing a central view of the deployed network
B. forwarding packets
C. making routing decisions
D. setting packet-handling policies

Correct Answer: D
Section:

QUESTION 211
Which command do you enter so that a switch configured with Rapid PVST + listens and learns for a specific time period?

A. switch(config)#spanning-tree vlan 1 max-age 6
B. switch(config)#spanning-tree vlan 1 hello-time 10
C. switch(config)#spanning-tree vlan 1 priority 4096
D. switch(config)#spanning-tree vlan 1 forward-time 20

Correct Answer: D
Section:
Explanation:
Forward time : Determines how long each of the listening and learning states last before the port begins forwarding.
Switch(config)# [no] spanning-tree vlan vlan_ID forward-time forward_time Configures the forward time of a VLAN. The forward_time value can be from 4 to 30 seconds.
https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst4500/12-2/15-02SG/configuration/guide/config/spantree.html#56177

QUESTION 212
Refer to the exhibit.

```
R1# show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate default
       U - per-user static route, o - ODR
Gateway of last resort is not set
C    172.16.0.0/16 is directly connected, Loopback0
     172.16.0.0/16 is variably subnetted, 4 subnets, 2 masks
O       172.16.1.3/2  [110/100] via 192.168.7.40, 00:39:08, Serial0
C       172.16.1.0/24 is directly connected, Serial0
O       172.16.1.184/29 [110/5] via 192.168.7.35, 00:39:08, Serial0
O       172.16.3.0/24 [110/10] via 192.168.7.4, 00:39:08, Gigabit Ethernet 0/0
O       172.16.1.0/28 [90/10]  via 192.168.7.7, 00:39:06, Gigabit Ethernet 0/0
```

Load-balanced traffic is coming in from the WAN destined to a host at 172.16.1.190. Which next-hop is used by the router to forward the request?

A. 192.168.7.4
B. 192.168.7.7
C. 192.168.7.35
D. 192.168.7.40

Correct Answer: D
Section:

QUESTION 213
An engineer is configuring data and voice services to pass through the same port. The designated switch interface fastethernet0/1 must transmit packets using the same priority for data when they are received from the access port of the IP phone. Which configuration must be used?
A)

```
interface fastethernet0/1
switchport voice vlan untagged
```

B)

```
interface fastethernet0/1
switchport voice vlan untagged
```

C)

```
interface fastethernet0/1
switchport voice vlan dot1p
```

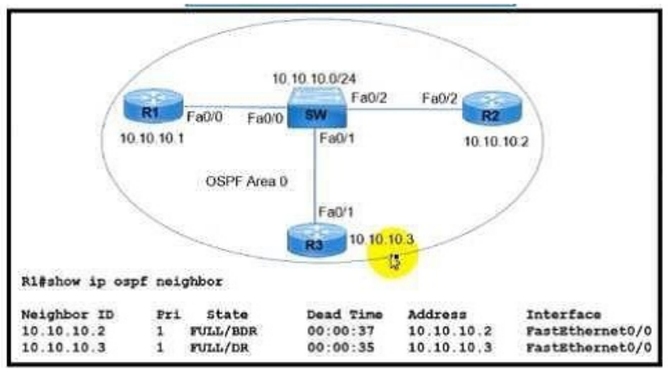
D)

```
interface fastethernet0/1
switchport priority extend trust
```

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: A
Section:

QUESTION 214
Refer to the exhibit.



R1 has taken the DROTHER role in the OSPF DR/BDR election process. Which configuration must an engineer implement so that R1 is elected as the DR?

- R1(config)#interface FastEthernet 0/0
  R1(config-if)#ip ospf priority 1
  R1#clear ip ospf process
- R1(config)#interface FastEthernet 0/0
  R1(config-if)#ip ospf priority 200
  R1#clear ip ospf process
- R3(config)#interface FastEthernet 0/1
  R3(config-if)#ip ospf priority 200
  R3#clear ip ospf process
- R2(config)#interface FastEthernet 0/2
  R2(config-if)#ip ospf priority 1
  R2#clear ip ospf process

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: B
Section:

QUESTION 215
What is a feature of WPA?

A. 802.1x authentication
B. preshared key
C. TKIP/MIC encryption
D. small Wi-Fi application

Correct Answer: A
Section:

QUESTION 216
Refer to the exhibit.

```
Cat9K-1# show lldp entry Cat9K-2

Local Intf: Gi1/0/21
Chassis id: 308b.b2b3.2880
Port id: Gi1/0/21
Port Description: GigabitEthernet1/0/21
System Name: Cat9K-2

Management Addresses:
   IP: 10.5.110.2
```

The network administrator must prevent the switch Cat9K-2 IP address from being visible in LLDP without disabling the protocol. Which action must be taken must be taken to complete the task?

A. Configure the no lldp tlv-select-management-address command globally on Cat9K-2
B. Configure the no lldp transmit command on interface G1/0/21 in Cat9K-1
C. Configure the no lldp receive command on interface G1/0/21 on Cat9K-1
D. Configure the no lldp mac-phy-cfg command globally on Cat9K-2

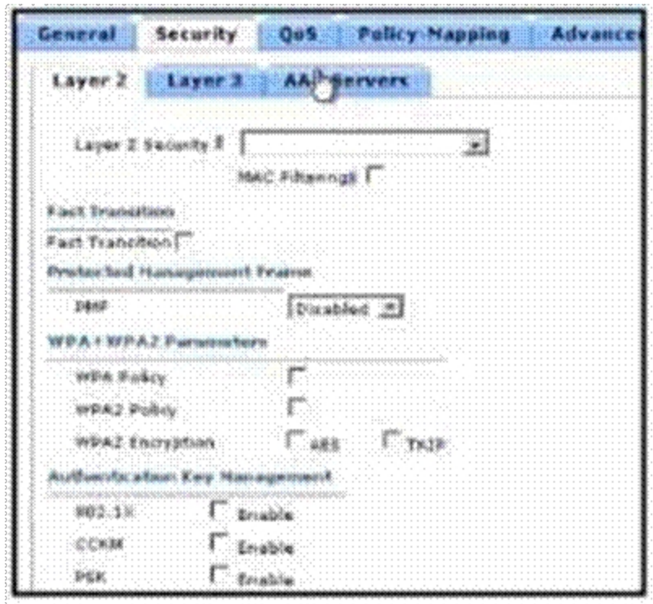
Correct Answer: A
Section:

QUESTION 217
Which WAN topology has the highest degree of reliability?

A. full mesh
B. Point-to-point
C. hub-and-spoke
D. router-on-a-stick

Correct Answer: A
Section:

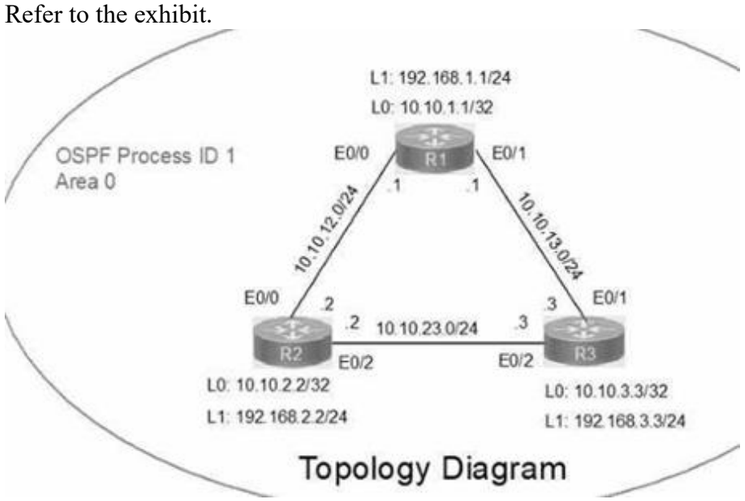
QUESTION 218
What are the two steps an engineer must take to provide the highest encryption and authentication using domain credentials from LDAP?



A. Select PSK under Authentication Key Management
B. Select WPA+WPA2 on Layer 2 Security
C. Select Static-WEP + 802.1X on Layer 2 Security
D. Select WPA Policy with TKIP Encryption
E. Select 802.1X from under Authentication Key Management

Correct Answer: B, E
Section:

QUESTION 219
Refer to the exhibit.



Guidelines

This is a lab item in which tasks will be performed on virtual devices.

- Refer to the **Tasks** tab to view the tasks for this lab item.
- Refer to the **Topology** tab to access the device console(s) and perform the tasks.
- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary preconfigurations have been applied.
- Do not change the enable password or hostname for any device.
- **Save your configurations** to NVRAM before moving to the next item.
- Click **Next** at the bottom of the screen to submit this lab and move to the next question.
- When **Next** is clicked, the lab closes and cannot be reopened.

IP connectivity between the three routers is configured. OSPF adjacencies must be established.

A. Configure R1 and R2 Router IDs using the interface IP addresses from the link that is shared between them.
B. Configure the R2 links with a max value facing R1 and R3. R2 must become the DR. R1 and R3 links facing R2 must remain with the default OSPF configuration for DR election. Verify the configuration after clearing the OSPF process.
C. Using a host wildcard mask, configure all three routers to advertise their respective Loopback1 networks.
D. Configure the link between R1 and R3 to disable their ability to add other OSPF routers.
E.

Correct Answer: A
Section:
Explanation:
Answer: A
Explanation:
Answer as below configuration:

```
on R1
conf terminal
interface Loopback0
ip address 10.10.1.1 255.255.255.255
!i
nterface Loopback1
ip address 192.168.1.1 255.255.255.0
!i
nterface Ethernet0/0
no shut
ip address 10.10.12.1 255.255.255.0
ip ospf 1 area 0
duplex auto
!i
nterface Ethernet0/1
no shut
ip address 10.10.13.1 255.255.255.0
ip ospf 1 area 0
duplex auto
!
router ospf 1
router-id 10.10.12.1
network 10.10.1.1 0.0.0.0 area 0
network 192.168.1.0 0.0.0.255 area 0
!
copy run star
----------------------------------------
```

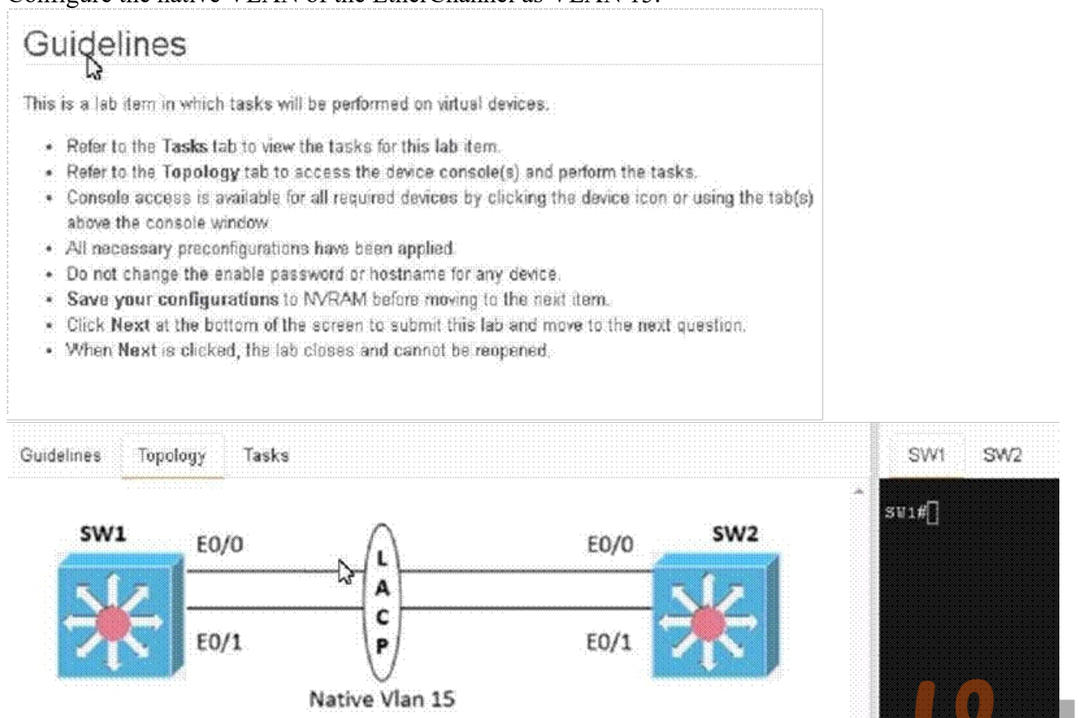
On R2
conf terminal
interface Loopback0
ip address 10.10.2.2 255.255.255.255
!i
nterface Loopback1
ip address 192.168.2.2 255.255.255.0
!i
nterface Ethernet0/0
no shut
ip address 10.10.12.2 255.255.255.0
ip ospf priority 255
ip ospf 1 area 0
duplex auto
!i
nterface Ethernet0/2
no shut
ip address 10.10.23.2 255.255.255.0
ip ospf priority 255
ip ospf 1 area 0
duplex auto
!
router ospf 1
network 10.10.2.2 0.0.0.0 area 0
network 192.168.2.0 0.0.0.255 area 0
!
copy runs start

On R3
conf ter
interface Loopback0
ip address 10.10.3.3 255.255.255.255
!i
nterface Loopback1
ip address 192.168.3.3 255.255.255.0
!i
nterface Ethernet0/1
no shut
ip address 10.10.13.3 255.255.255.0
ip ospf 1 area 0
duplex auto
!i
nterface Ethernet0/2
no shut
ip address 10.10.23.3 255.255.255.0
ip ospf 1 area 0
duplex auto
!
router ospf 1
network 10.10.3.3 0.0.0.0 area 0
network 192.168.3.0 0.0.0.255 area 0
!
copy run start
!

QUESTION 220
Physical connectivity is implemented between the two Layer 2 switches, and the network connectivity between them must be configured

A. Configure an LACP EtherChannel and number it as 1; configure it between switches SW1 and SVV2 using interfaces Ethernet0/0 and Ethernet0/1 on both sides. The LACP mode must match on both ends 2 Configure the EtherChannel as a trunk link.

B. Configure the trunk link with 802.1 q tags.
C. Configure the native VLAN of the EtherChannel as VLAN 15.

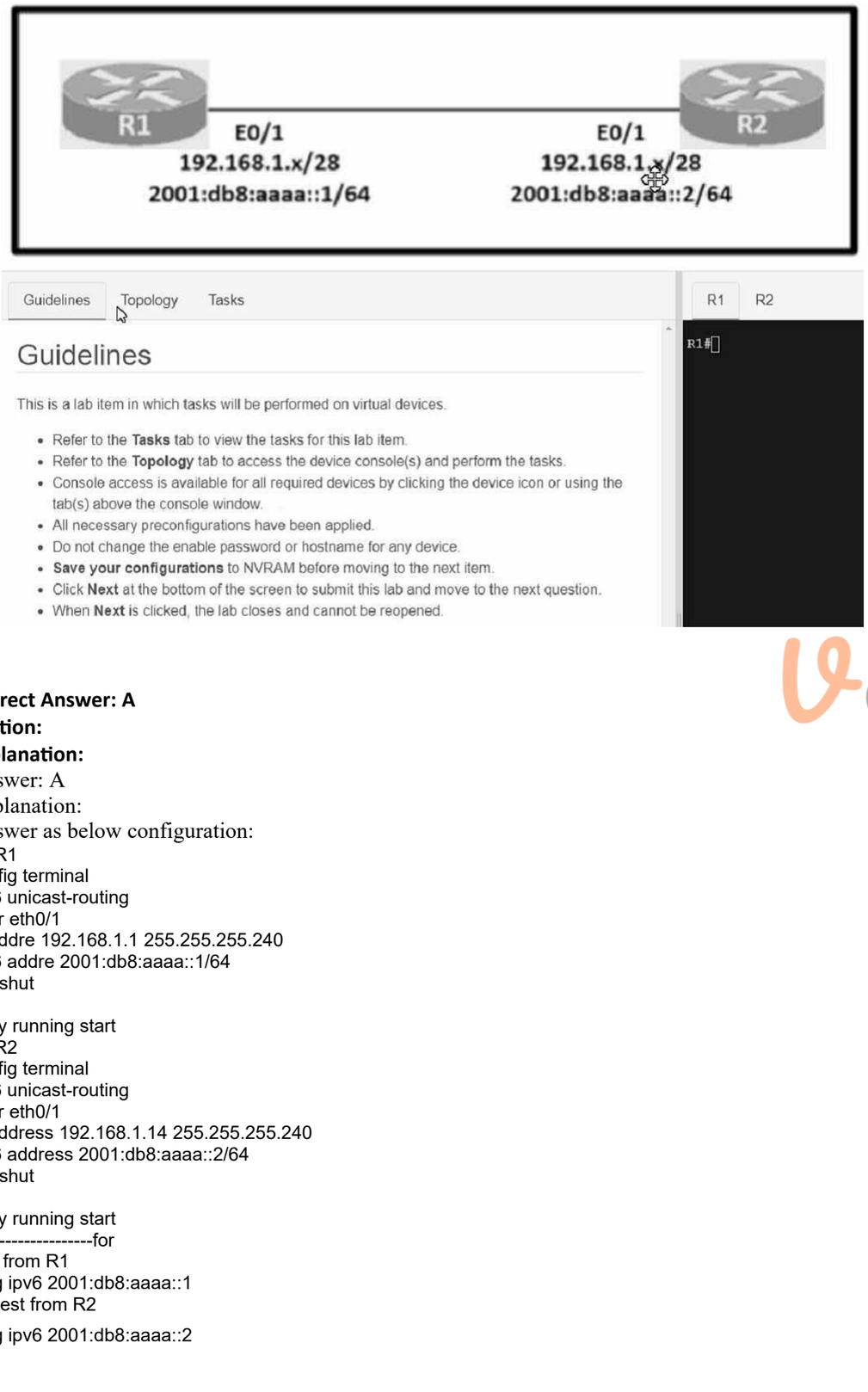


D.

Correct Answer: A
Section:
Explanation:
Answer: A
Explanation:
Answer as below configuration:
On SW1:
conf terminal vlan 15 exit interface range eth0/0 - 1 channel-group 1 mode active exit interface port-channel 1 switchport trunk encapsulation dot1q switchport mode trunk switchport trunk native vlan 15 end copy run start on SW2:
conf terminal vlan 15 exit interface range eth0/0 - 1 channel-group 1 mode active exit interface port-channel 1 switchport trunk encapsulation dot1q switchport mode trunk switchport trunk native vlan 15 end copy run start

QUESTION 221
Configure IPv4 and IPv6 connectivity between two routers. For IPv4, use a /28 network from the 192.168.1.0/24 private range. For IPv6, use the first /64 subnet from the 2001:0db8:aaaa::/48 subnet.

A. Using Ethernet0/1 on routers R1 and R2, configure the next usable/28 from the 192.168.1.0/24 range. The network 192.168.1.0/28 is unavailable.
B. For the IPv4 /28 subnet, router R1 must be configured with the first usable host address.
C. For the IPv4 /28 subnet, router R2 must be configured with the last usable host address.
D. For the IPv6 /64 subnet, configure the routers with the IP addressing provided from the topology.
E. A ping must work between the routers on the IPv4 and IPv6 address ranges.



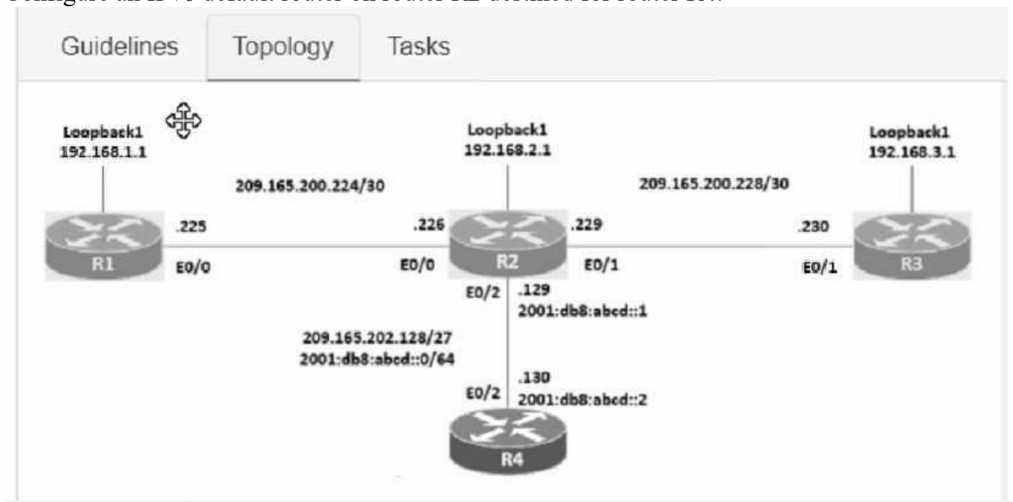
F.

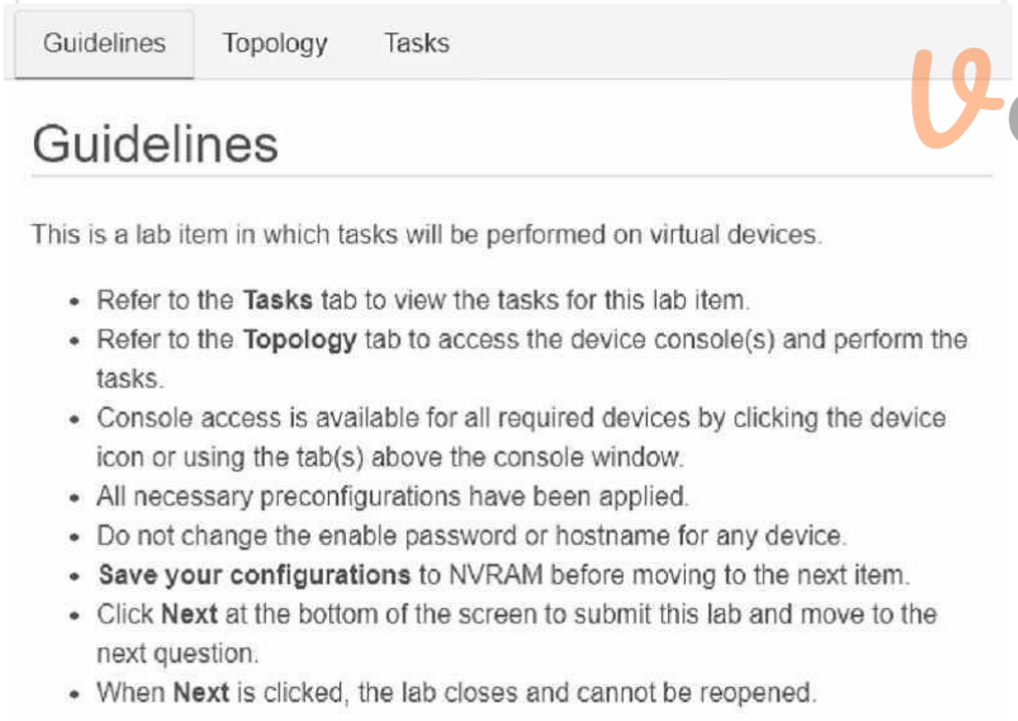
Correct Answer: A
Section:
Explanation:
Answer: A
Explanation:
Answer as below configuration:
on R1
config terminal
ipv6 unicast-routing
inter eth0/1
ip addre 192.168.1.1 255.255.255.240
ipv6 addre 2001:db8:aaaa::1/64
not shut
end
copy running start
on R2
config terminal
ipv6 unicast-routing
inter eth0/1
ip address 192.168.1.14 255.255.255.240
ipv6 address 2001:db8:aaaa::2/64
not shut
end
copy running start
----------for
test from R1
ping ipv6 2001:db8:aaaa::1
for test from R2

ping ipv6 2001:db8:aaaa::2

QUESTION 222
Connectivity between four routers has been established. IP connectivity must be configured in the order presented to complete the implementation. No dynamic routing protocols are included.

A. Configure static routing using host routes to establish connectivity from router R3 to the router R1 Loopback address using the source IP of 209.165.200.230.
B. Configure an IPv4 default route on router R2 destined for router R4.
C. Configure an IPv6 default router on router R2 destined for router R4.





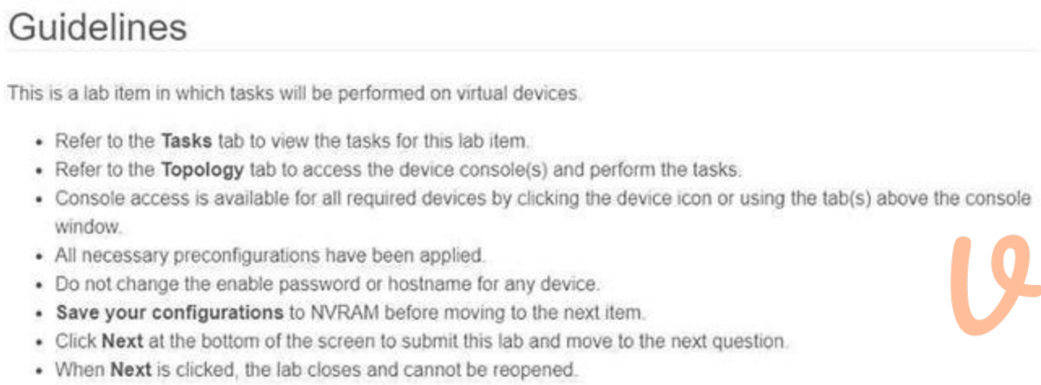
D.

Correct Answer: A
Section:
Explanation:

Answer: A
Explanation:
1.- on R3
config terminal
ip route 192.168.1.1 255.255.255.255 209.165.200.229
end
copy running start
2.- on R2
config terminal
ip route 0.0.0.0 0.0.0.0 209.165.202.130
end
copy running start
3.- on R2
config terminal
ipv6 route ::/0 2001:db8:abcd::2
end

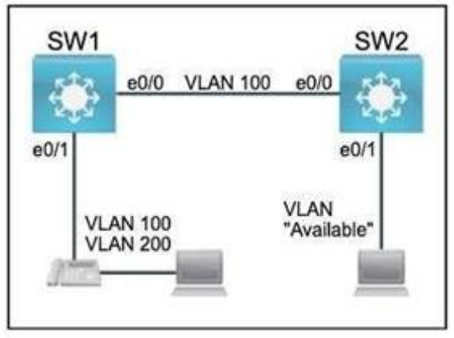
copy running start

QUESTION 223



All physical cabling between the two switches is installed. Configure the network connectivity between the switches using the designated VLANs and interfaces.

A. Configure VLAN 100 named Compute and VLAN 200 named Telephony where required for each task.
B. Configure Ethernet0/1 on SW2 to use the existing VLAN named Available.
C. Configure the connection between the switches using access ports.
D. Configure Ethernet0/1 on SW1 using data and voice VLANs.
E. Configure Ethemet0/1 on SW2 so that the Cisco proprietary neighbor discovery protocol is turned off for the designated interface only.



F.

Correct Answer: A
Section:
Explanation:
Answer: A
Explanation:
on sw1
enable
conf t
vlan 100
name Compute
vlan 200
name Telephony
int e0/1
switchport voice vlan 200
switchport access vlan 100
int e0/0
switchport mode access
do wr
on sw2

Vlan 99

Name Available
Int e0/1
Switchport access vlan 99

do wr

QUESTION 224
Refer to the exhibit.

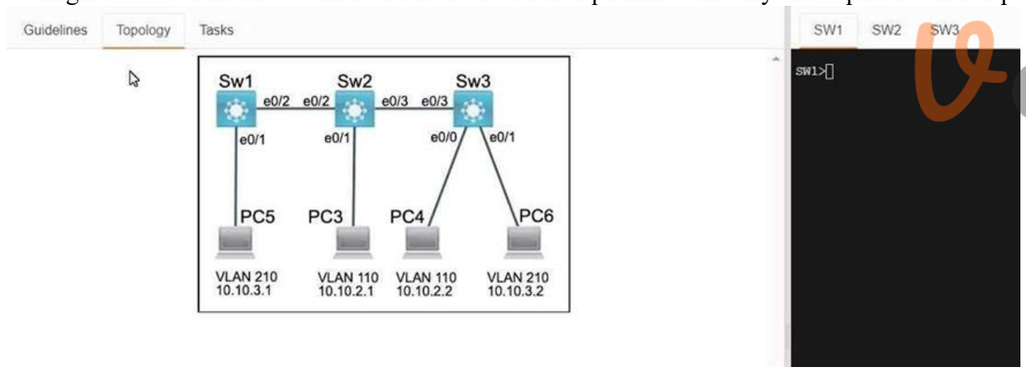
Guidelines

This is a lab item in which tasks will be performed on virtual devices.

- Refer to the **Tasks** tab to view the tasks for this lab item.
- Refer to the **Topology** tab to access the device console(s) and perform the tasks.
- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary preconfigurations have been applied.
- Do not change the enable password or hostname for any device.
- **Save your configurations** to NVRAM before moving to the next item.
- Click **Next** at the bottom of the screen to submit this lab and move to the next question.
- When **Next** is clicked, the lab closes and cannot be reopened.

Three switches must be configured for Layer 2 connectivity. The company requires only the designated VLANs to be configured on their respective switches and permitted accross any links between switches for security purposes. Do not modify or delete VTP configurations.
The network needs two user-defined VLANs configured:
VLAN 110: MARKETING
VLAN 210: FINANCE

A. Configure the VLANs on the designated switches and assign them as access ports to the interfaces connected to the PCs.
B. Configure the e0/2 interfaces on Sw1 and Sw2 as 802.1q trunks with only the required VLANs permitted.
C. Configure the e0/3 interfaces on Sw2 and Sw3 as 802.1q trunks with only the required VLANs permitted.

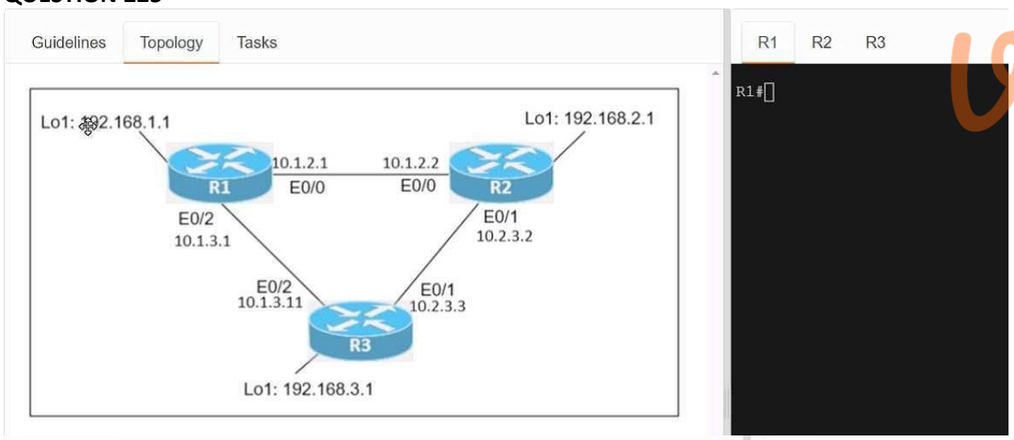


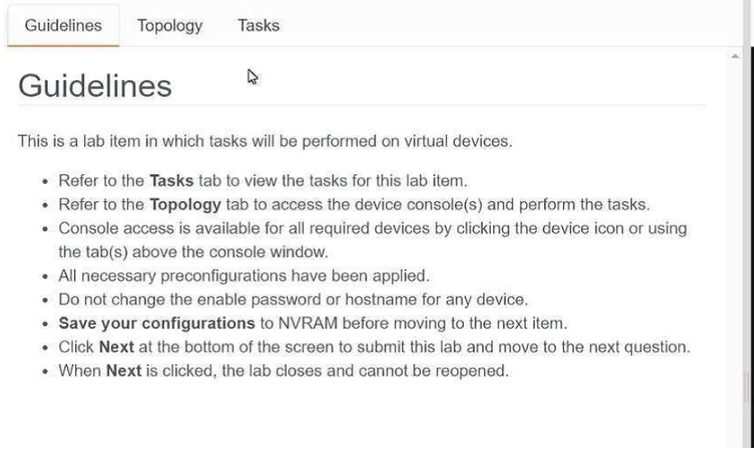
D.

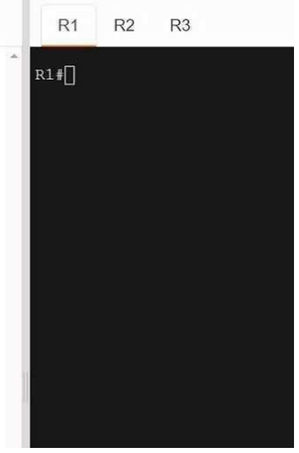
Correct Answer: A
Section:
Explanation:
Answer: A
Explanation:
Sw1 enbale config t
Vlan 210
Name FINANCE
Inter e0/1
Switchport access vlan 210 do wr
Sw2
Enable config t
Vlan 110
Name MARKITING

Int e0/1
Switchport acees vlan 110 do wr
Sw3
Enable config t
Vlan 110
Name MARKITING
Vlan 210
Name FINANCE
Int e0/0
Switchport access vlan 110
Int e0/1
Switchport access vlan 210
Sw1
Int e0/1
Switchport allowed vlan 210
Sw2
Int e0/2
Switchport trunk allowed vlan 210
Sw3
Int e0/3
Switchport trunk allowed vlan 210
Switchport trunk allowed vlan 210,110

QUESTION 225







Connectivity between three routers has been established, and IP services must be configured jn the order presented to complete the implementation Tasks assigned include configuration of NAT, NTP, DHCP, and SSH services.

1. All traffic sent from R3 to the R1 Loopback address must be configured for NAT on R2. All source addresses must be translated from R3 to the IP address of Ethernet0/0 on R2, while using only a standard access list named NAT To verify, a ping must be successful to the R1 Loopback address sourced from R3. Do not use NVI NAT configuration.

2. Configure R1 as an NTP server and R2 as a client, not as a peer, using the IP address of the R1 Ethernet0/2 interface. Set the clock on the NTP server for midnight on January 1, 2019.

3. Configure R1 as a DHCP server for the network 10.1.3.0/24 in a pool named TEST. Using a single command, exclude addresses 1-10 from the range. Interface Ethernet0/2 on R3 must be issued the IP address of 10.1.3.11 via DHCP.

4. Configure SSH connectivity from R1 to R3, while excluding access via other remote connection protocols. Access for user root and password Cisco must be set on router R3 using RSA and 1024 bits.

Verify connectivity using an SSH session from router R1 using a destination address of 10.1.3.11. Do NOT modify console access or line numbers to accomplish this task.

A. See the Explanation below.

Correct Answer: A
Section:
Explanation:
Answer as below configuration:

NAT:
R2(config)# ip access list standard PUBNET
R2(config-std-nacl)# permit 10.2.3.3
R2(config-std-nacl)# permit 10.1.3.11
R2(config-std-nacl)# permit 192.168.3.1
R2(config-std-nacl)# exit
R2(config)# interface e0/1
R2(config-if)# ip nat inside
R2(config)# interface e0/0
R2(config-if)# ip nat outside
R2(config)# ip nat inside source list PUBNET interface e0/0 overload

Verification
R3#ping 192.168.1.1

NTP:
R1#clock set 00:00:00 January 1 2019 //Midnight means 00:00:00
R1(config)# ntp master 1
R2(config)# ntp server 10.1.3.1

DHCP:
R1(config)# ip dhcp pool NETPOOL
R1(dhcp-config)# network 10.1.3.0 255.255.255.0
R1(config)# exit
R1(config)# ip dhcp excluded-address 10.1. 3.1 10.1.3.10
R3(config)# interface e0/2
R3(config-if)# ip address dhcp

SSH:
R3(config)# username netadmin password N3t4ccess
R3(config)# line vty 0 4
R3(config-line)# login local
R3(config-line)# exit
R3(config)# ip domain-name cisco.com
R3(config)# crypto key generate rsa modulus 1024

Verification
R1# ssh -l root -p cisco 10.1.3.11

As the guidelines clearly stated that we have to save the configuration to NVRAM so please save all your configurations on R1, R2 and R3:
R1#, R2#, R3#copy running-config startup-config

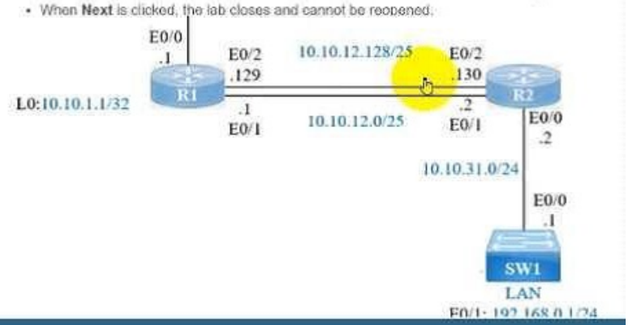
QUESTION 226
Refer to the exhibit.

Guidelines Topology Tasks

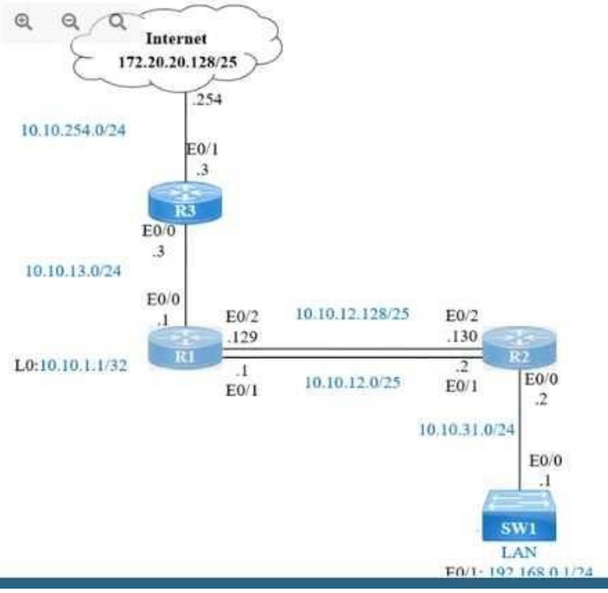
Guidelines

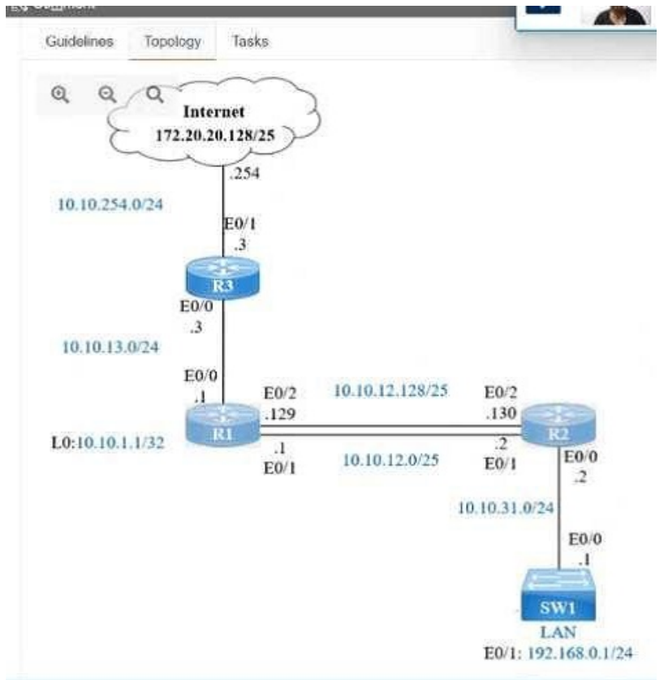
This is a lab item in which tasks will be performed on virtual devices.

- Refer to the **Tasks** tab to view the tasks for this lab item.
- Refer to the **Topology** tab to access the device console(s) and perform the tasks.
- Console access is available for all required devices by clicking the device icon or using the tab(s) above the console window.
- All necessary preconfigurations have been applied.
- Do not change the enable password or hostname for any device.
- **Save your configurations** to NVRAM before moving to the next item.
- Click **Next** at the bottom of the screen to submit this lab and move to the next question.
- When **Next** is clicked, the lab closes and cannot be reopened.



Guidelines Topology Tasks





IP connectivity and OSPF are preconfigured on all devices where necessary. Do not make any changes to the IP addressing or OSPF. The company policy uses connected interfaces and next hops when configuring static routes except for load balancing or redundancy without floating static. Connectivity must be established between subnet 172.20.20.128/25 on the Internet and the LAN at 192.168.0.0/24 connected to SW1:

1. Configure reachability to the switch SW1 LAN subnet in router R2.
2. Configure default reachability to the Internet subnet in router R1.
3. Configure a single static route in router R2 to reach to the Internet subnet considering both redundant links between routers R1 and R2. A default route is NOT allowed in router R2.
4. Configure a static route in router R1 toward the switch SW1 LAN subnet where the primary link must be through Ethernet0/1. and the backup link must be through Ethernet0/2 using a floating route. Use the minimal administrative distance value when required.

A. See the Explanation below.

Correct Answer: A
Section:
Explanation:
Answer: A
Explanation:
On R2:
Enable
Conf t
Ip route 192.168.1.0 255.255.255.0 10.10.31.1
On R1:
Enable
Conf t
Ip route 0.0.0.0 0.0.0.0 10.10.13.3
On R2
Ip route 172.20.20.128 255.255.255.128 e0/2
Ip route 172.20.20.128 255.255.255.128 e0/1
On R1
Ip route 192.168.0.0 255.255.255.0 e0/1
Ip route 192.168.0.0 255.255.255.0 10.10.12.2 3

Save all configurations after every router from anyone of these command
Do wr
Or
Copy run start

QUESTION 227

An engineer must configure neighbor discovery between the company router and an ISP

```
interface gigabitethernet0/0
description Circuit-ATT4203-21099
duplex full
speed 1000
media-type gbic
negotiation auto
lldp transmit
lldp receive
```

What is the next step to complete the configuration if the ISP uses a third-party router?

A. Enable LLDP globally.
B. Disable CDP on gi0/0.
C. Enable LLDP TLVs on the ISP router.
D. Disable auto-negotiation.

Correct Answer: A
Section:

QUESTION 228
Refer to the exhibit.

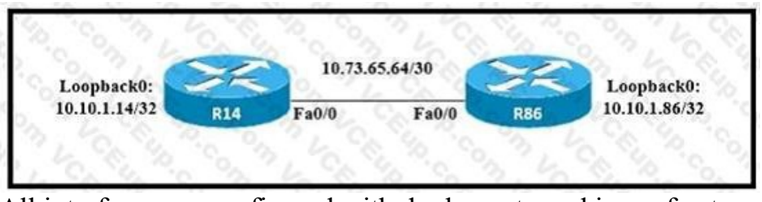
```
SW1#show spanning-tree vlan 30

VLAN0030
Spanning tree enabled protocol rstp
Root ID    Priority           32798
           Address            0025.63e9.c800
           Cost               19
           Port               1 (FastEthernet 2/1)
           Hello Time         2 sec
           Max Age            30 sec
           Forward Delay      20 sec

[Output suppressed]
```

What are two conclusions about this configuration? {Choose two.)

A. The spanning-tree mode is Rapid PVST+.
B. This is a root bridge.
C. The root port is FastEthernet 2/1.
D. The designated port is FastEthernet 2/1.
E. The spanning-tree mode is PVST+.

Correct Answer: A
Section:

QUESTION 229
Refer to the exhibit.



All interfaces are configured with duplex auto and ip ospf network broadcast. Which configuration allows routers R14 and R86 to form an OSPFv2 adjacency and act as a central point for exchanging OSPF information between routers?

R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf priority 0
ip mtu 1500

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip mtu 1500

router ospf 10
router-id 10.10.1.86
network 10.10.1.86 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0

R14#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf priority 255
ip ospf 10 area 0
ip mtu 1500

router ospf 10
router-id 10.10.1.14

R86#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf 10 area 0
ip mtu 1500

router ospf 10
router-id 10.10.1.86

R14#
interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf priority 255
ip mtu 1500

router ospf 10
router-id 10.10.1.14
network 10.10.1.14 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0
R86#
interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip mtu 1400

router ospf 10
router-id 10.10.1.86
network 10.10.1.86 0.0.0.0 area 0
network 10.73.65.64 0.0.0.3 area 0

R14#
interface Loopback0
ip ospf 10 area 0

interface FastEthernet0/0
ip address 10.73.65.65 255.255.255.252
ip ospf 10 area 0
ip mtu 1500

router ospf 10
router-id 10.10.1.14
R86#
interface Loopback0
ip ospf 10 area 0

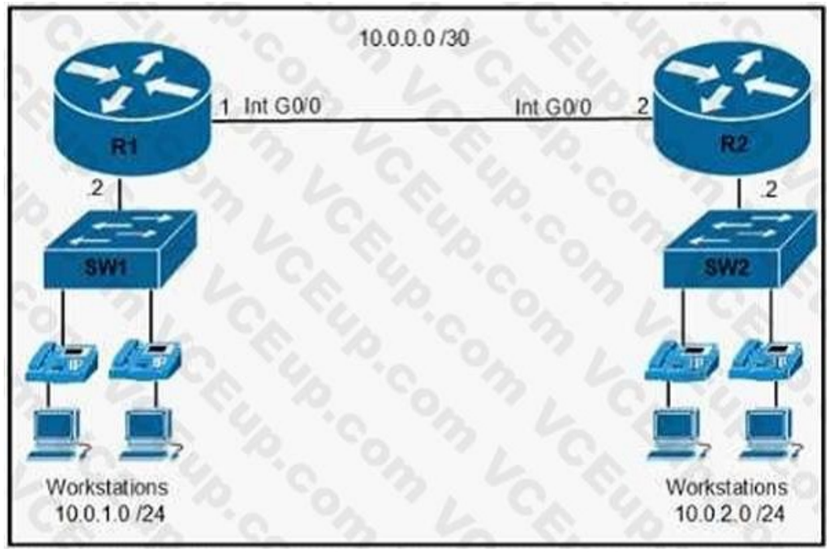
interface FastEthernet0/0
ip address 10.73.65.66 255.255.255.252
ip ospf 10 area 0
ip mtu 1500

router ospf 10
router-id 10.10.1.86

A. Option A
B. Option B
C. Option C
D. option D

Correct Answer: B
Section:

QUESTION 230
Refer to the exhibit.



An engineer is asked to confère router R1 so that it forms an OSPF single-area neighbor relationship with R2. Which command sequence must be implemented to configure the router?

router ospf 10
network 10.0.0.0 0.0.0.3 area 0
network 10.0.2.0 0.0.0.255 area 0

router ospf 10
network 10.0.0.0 0.0.0.3 area 0
network 10.0.1.0 0.0.0.255 area 0

router ospf 100
network 10.0.0.0 0.0.0.3 area 0
network 10.0.2.0 255.255.255.0 area 0

router ospf 100
network 10.0.0.0 0.0.0.252 area 0
network 10.0.1.0 0.0.0.255 area 0

A. Option A
B. Option B
C. Option C
D. Option D

Correct Answer: B
Section:

QUESTION 231
What is a function performed by a web server?

A. provide an application that is transmitted over HTTP
B. send and retrieve email from client devices
C. authenticate and authorize a user's identity
D. securely store flies for FTP access

Correct Answer: A
Section:

QUESTION 232
Which enhancements were implemented as part of WPA3?

A. 802.1x authentication and AES-128 encryption
B. TKIP encryption improving WEP and per-packet keying
C. AES-64 m personal mode and AES-128 in enterprise mode
D. forward secrecy and SAE in personal mode for secure initial key exchange

Correct Answer: D
Section:

QUESTION 233
How is noise defined in Wi-Fi?

A. ratio of signal-to-noise rating supplied by the wireless device
B. signals from other Wi-Fi networks that interfere with the local signal
C. measured difference between the desired Wi-Fi signal and an interfering Wi-Fi signal
D. any interference that is not Wi-Fi traffic that degrades the desired signal

Correct Answer: A
Section:

QUESTION 234
What is the difference between an IPv6 link-local address and a unique local address?

A. The scope of an IPv6 link-local address is limited to a loopback address, and an IPv6 unique local address is limited to a directly attached interface.
B. The scope of an IPv6 link-local address can be used throughout a company site or network, but an IPv6 unique local address is limited to a loopback address.
C. The scope of an IPv6 link-local address is global, but the scope of an IPv6 unique local address is limited to a loopback address.
D. The scope of an IPv6 link-local address is limited to a directly attached interface, but an IPv6 unique local address is used throughout a company site or network.

Correct Answer: B
Section:

QUESTION 235
What is a difference between an IPv6 multicast address and an IPv6 anycast address?

A. A packet sent to an IPv6 multicast address is delivered to one or more destinations at once, but a packet sent to an IPv6 anycast address is routed to the closest interface with that address.
B. An IPv6 multicast address uses the prefix 2002::/15 and forwards to one destination, and an IPv6 anycast address uses the prefix ff00::/8 and forwards to any destination in a group.
C. IPv6 multicast addresses are used to transition from IPv4 to IPv6, and IPv6 anycast addresses are used for address aggregation in an IPv6-only environment.
D. An IPv6 multicast address is assigned to numerous interfaces within a subnet, but an IPv6 anycast address is used for a predefined group of nodes in an all-IPv6 routers group.

Correct Answer: A
Section:

QUESTION 236
Which interface is used for out-of-band management on a WLC?

A. dynamic
B. service port
C. virtual
D. management

Correct Answer: D
Section:

QUESTION 237
How is a configuration change made to a wireless AP in lightweight mode?

A. SSH connection to the management IP of the AP
B. EolP connection via the parent WLC
C. CAPWAP/LWAPP connection via the parent WLC
D. HTTPS connection directly to the out-of-band address of the AP

Correct Answer: C
Section:

QUESTION 238
Refer to the exhibit.

```
{
"Cisco Devices": [
{
"name": "ASA - Security Device",
"name": "Cisco 1100 ASR Router",
"name": "Cisco 6800 Switch"
}
]
```

What is missing from this output for it to be executed?

A. double quotes C') around the 'Cisco Devices' string
B. curly brace ()) at the end
C. exclamation point (!) at the beginning of each line
D. square bracket ([) at the beginning

Correct Answer: B
Section:

QUESTION 239
Which group of channels in the 802.1ib/g/n/ac/ax 2.4 GHz frequency Bands are nonoverlapping channels?

A. channels 1, 5, and 10
B. channels 1,6, and 11

C. channels 1,5, and 11
D. channels 1,6, and 10

Correct Answer: B
Section:

QUESTION 240
Refer to the exhibit.

```
Cat9300# show cdp
Global CDP information:
   Sending CDP packets every 60 seconds
   Sending a holdtime value of 180 seconds
   Sending CDPv2 advertisements is enabled
```

Which action must be taken so that neighbofing devices rapidly discover switch Cat9300?

A. Configure the cdp timer 10 command on switch Cat9300.
B. Enable portfast on the ports that connect to neighboring devices.
C. Configure the cdp holdtime 10 command on switch Cat9300.
D. Configure the cdp timer 10 command on the neighbors of switch Cat9300.

Correct Answer: A
Section:

QUESTION 241
A network engineer starts to implement a new wireless LAN by configuring the authentication server and creating the dynamic Interface. What must be performed next to complete the basic configuration?

A. Install the management interface and add the management IP.
B. Configure high availability and redundancy tor the access points.
C. Enable Telnet and RADIUS access on the management interface.
D. Create the new WLAN and bind the dynamic interface to It.

Correct Answer: D
Section:

QUESTION 242
Which EtherChannel mode must be configured when using LAG on a WLC?

A. on
B. active
C. auto
D. passive

Correct Answer: A
Section:

QUESTION 243
What are two reasons lo configure PortFast on a switch port attached to an end host? (Choose two.)

A. to enable the number of MAC addresses learned on the port to l
B. to protect the operation of the port from topology change processes
C. to enable the pod to enter the forwarding state immediately when the host boots up
D. to prevent the port from participating in Spanning Tree Protocol operations
E. to block another switch or host from communicating through the port

Correct Answer: B, C
Section:

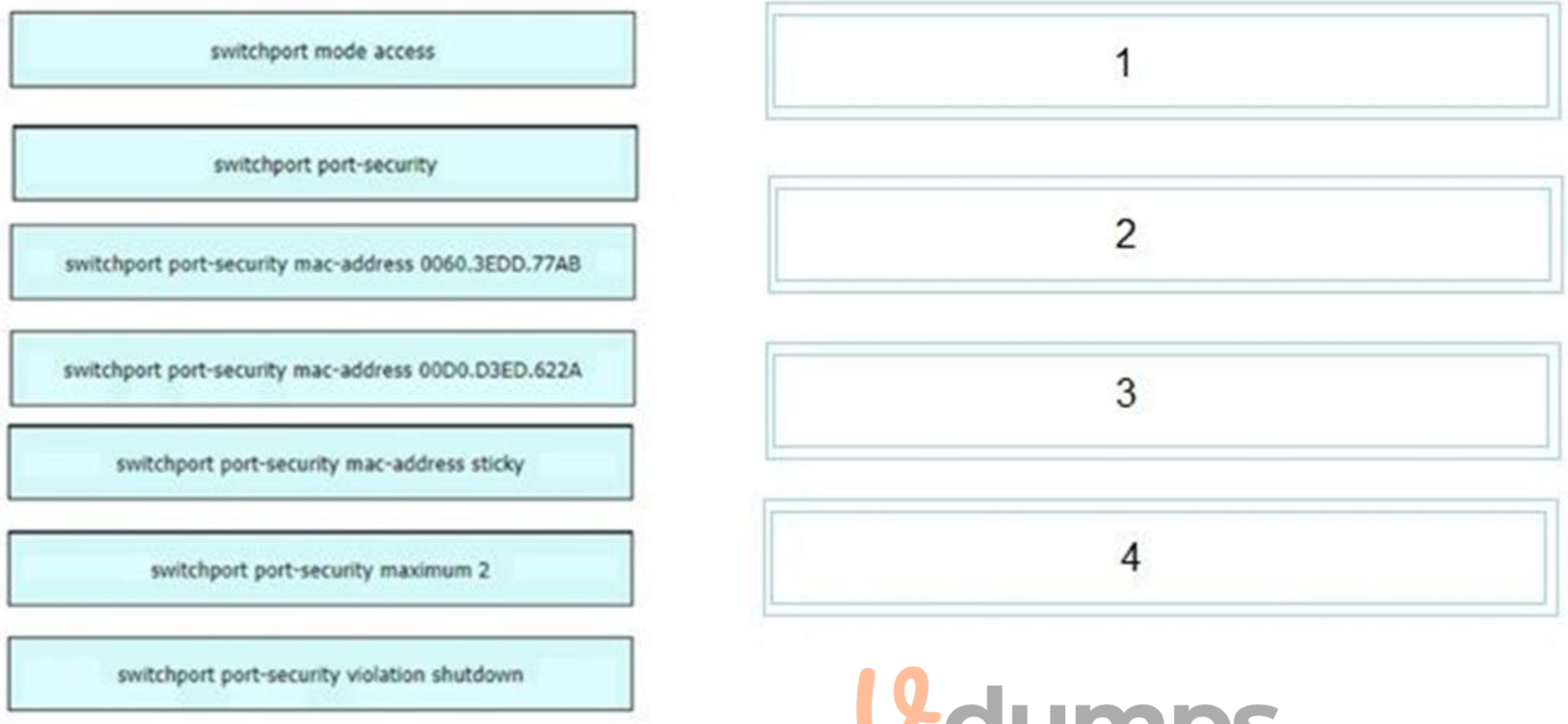
QUESTION 244
Which action must be taken when password protection is Implemented?

A. Use less than eight characters in length when passwords are complex.
B. Store passwords as contacts on a mobile device with single-factor authentication.
C. Include special characters and make passwords as long as allowed.
D. Share passwords with senior IT management to ensure proper oversight.

Correct Answer: D
Section:

QUESTION 245
DRAG DROP
An engineer is tasked to configure a switch with port security to ensure devices that forward unicasts, multicasts, and broadcasts are unable to flood the port. The port must be configured to permit only two random MAC addresses at a time.
Drag and drop the required configuration commands from the left onto the sequence on the right. Not all commands are used.

Select and Place:



Correct Answer:

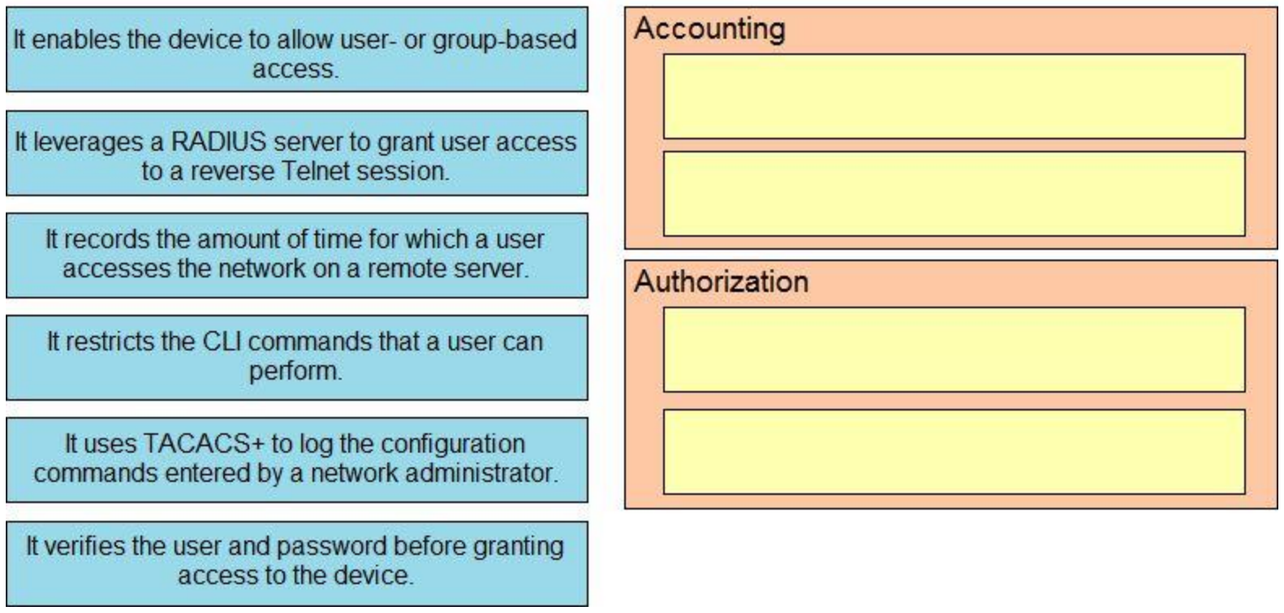
Section:

Explanation:
https://www.cisco.com/en/US/docs/switches/lan/catalyst3850/software/release/3se/consolidated_guide/b_consolidated_3850_3se_cg_chapter_01000000.html

QUESTION 246
DRAG DROP
Drag and drop the AAA features from the left onto the corresponding AAA security services on the right. Not all options are used.

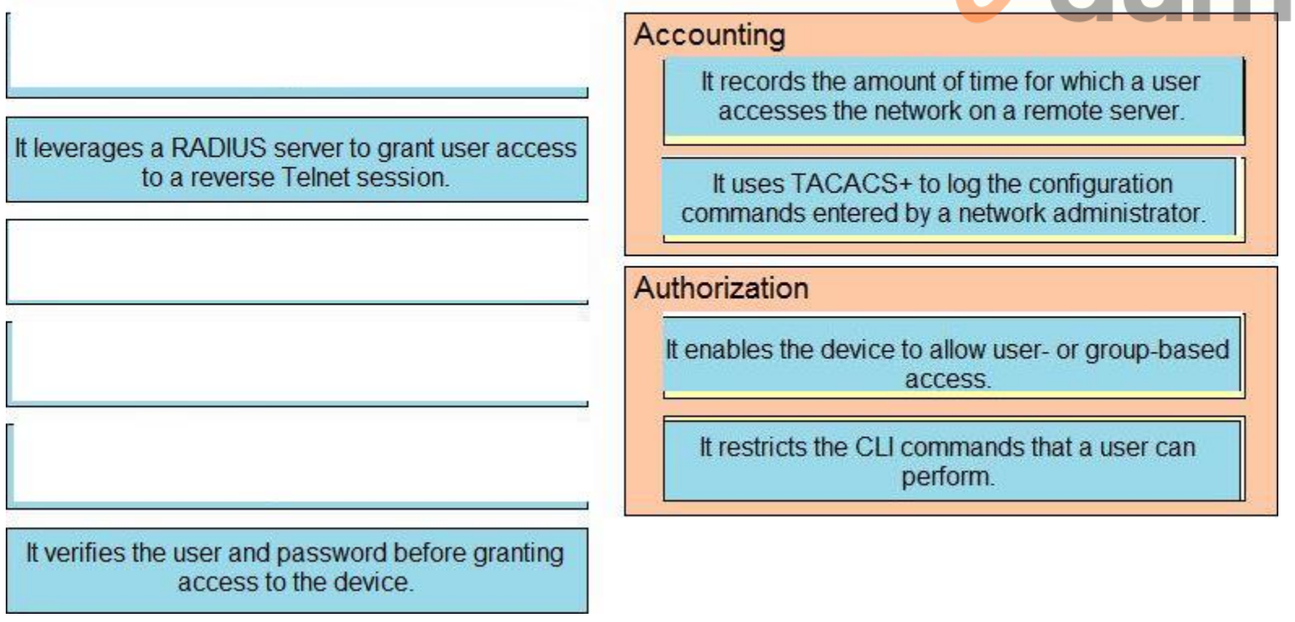
Select and Place:

Answer Area



Correct Answer:

Answer Area

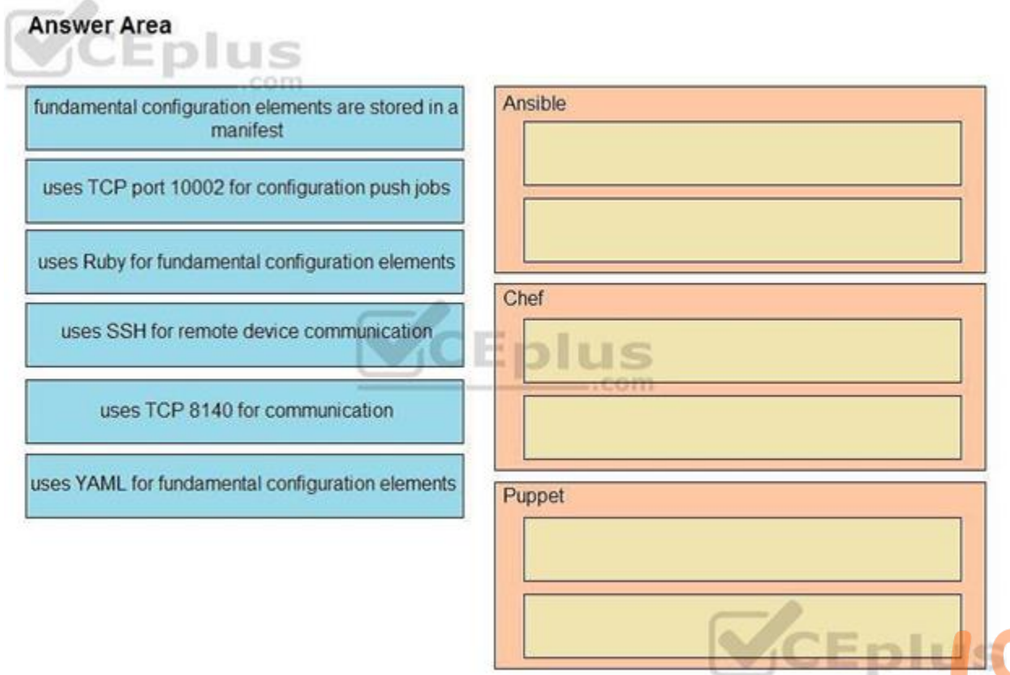


Section:
Explanation:

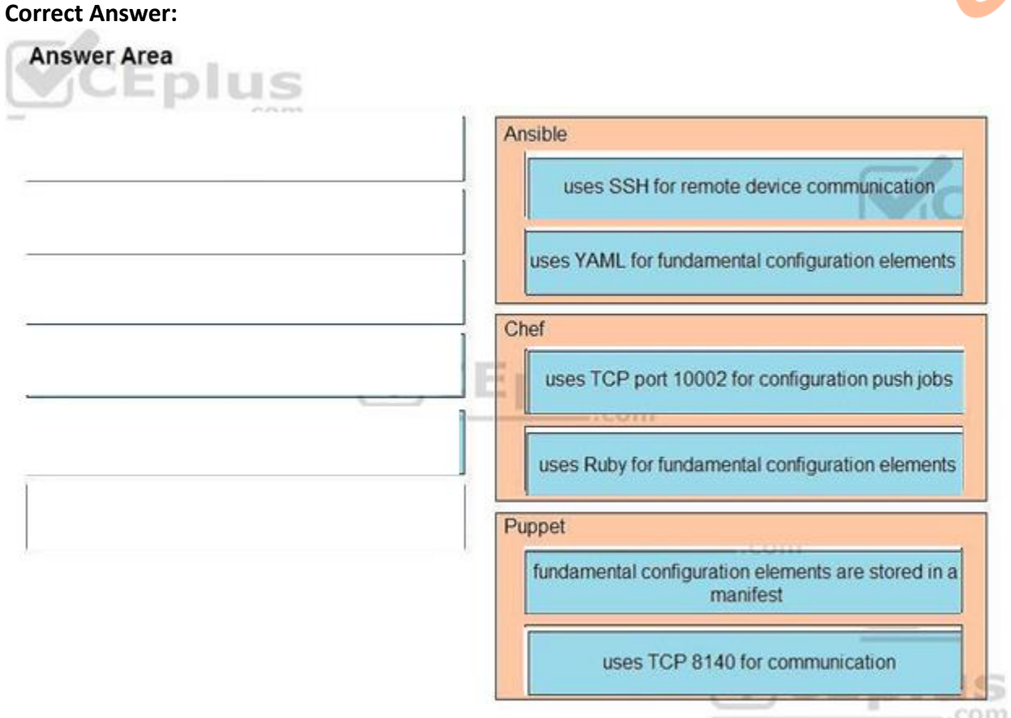
QUESTION 247
DRAG DROP

Drag and drop the descriptions from the left onto the configuration-management technologies on the right.

Select and Place:



Correct Answer:

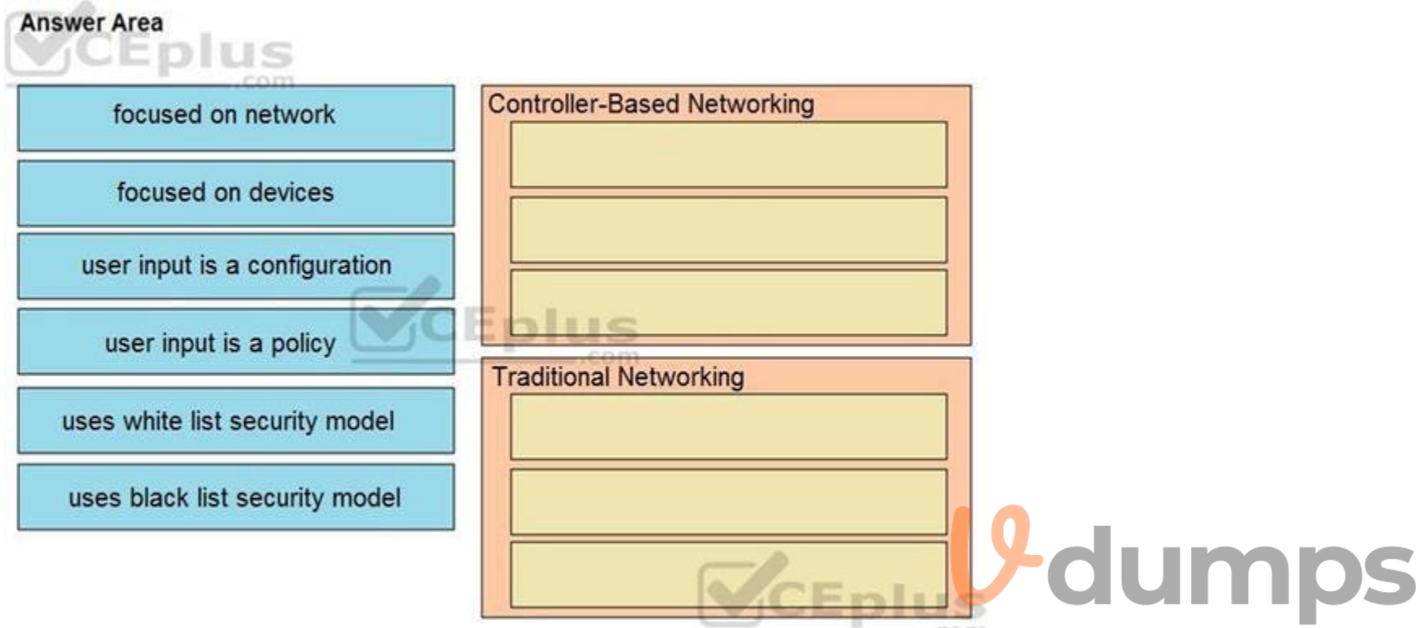


Section:

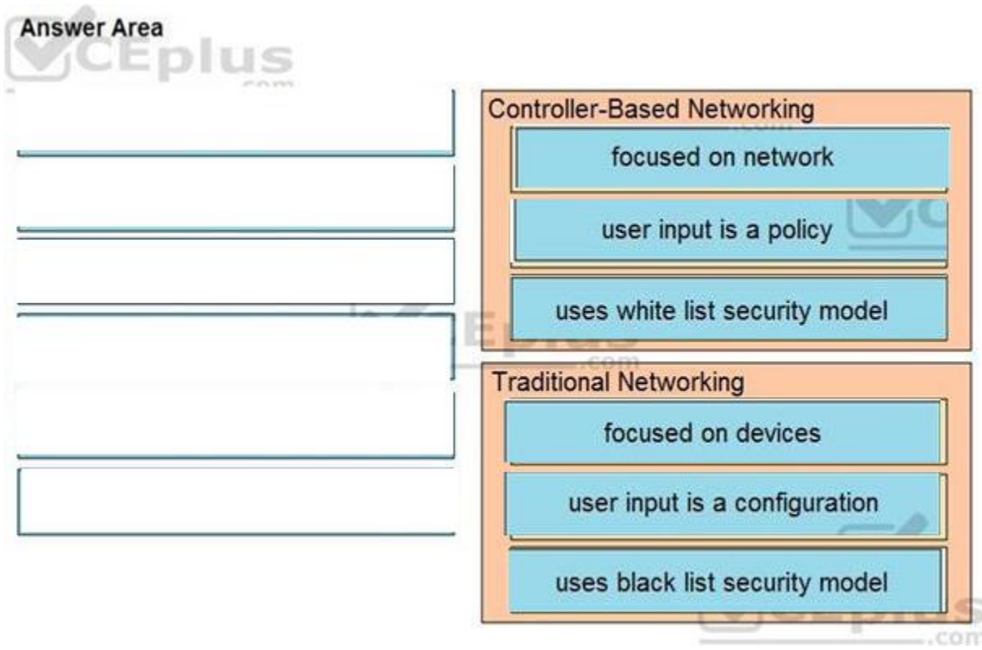
Explanation:

QUESTION 248
DRAG DROP
Drag and drop the characteristics of networking from the left onto the correct networking types on the right.

Select and Place:



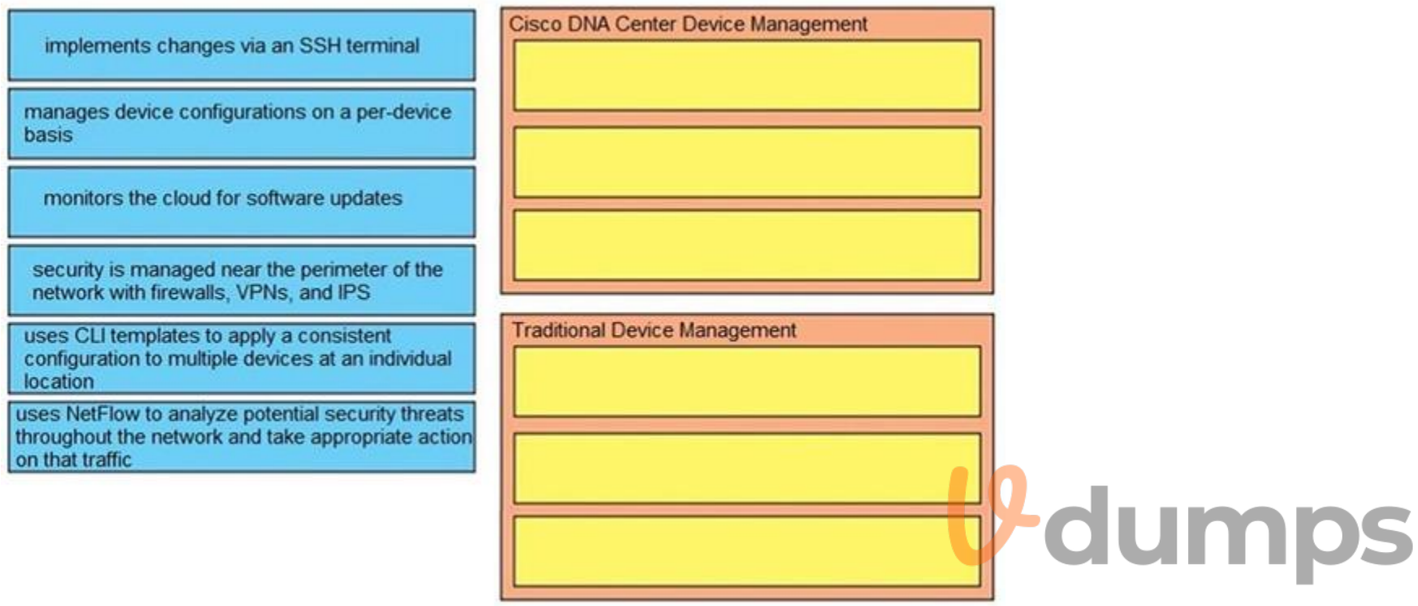
Correct Answer:



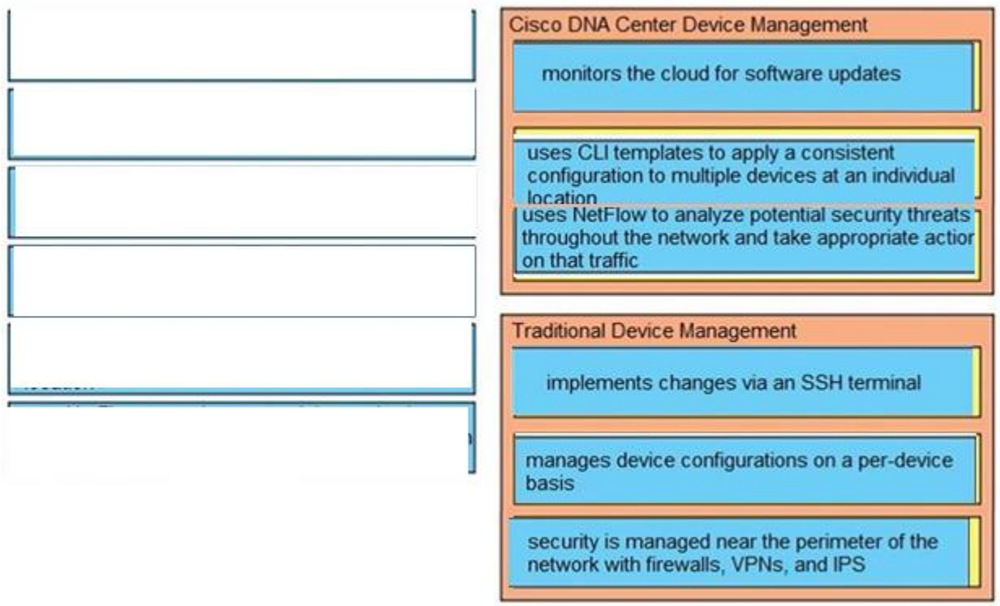
Section:
Explanation:

QUESTION 249
DRAG DROP
Drag the descriptions of device management from the left onto the types of device management on the right.

Select and Place:



Correct Answer:



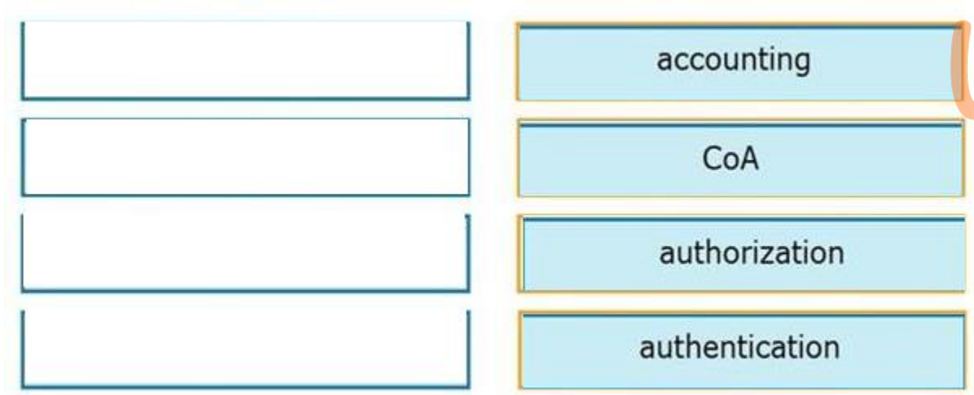
Section:

Explanation:

QUESTION 250
DRAG DROP
Drag and drop the AAA terms from the left onto the descriptions on the right.

Select and Place:

Correct Answer:

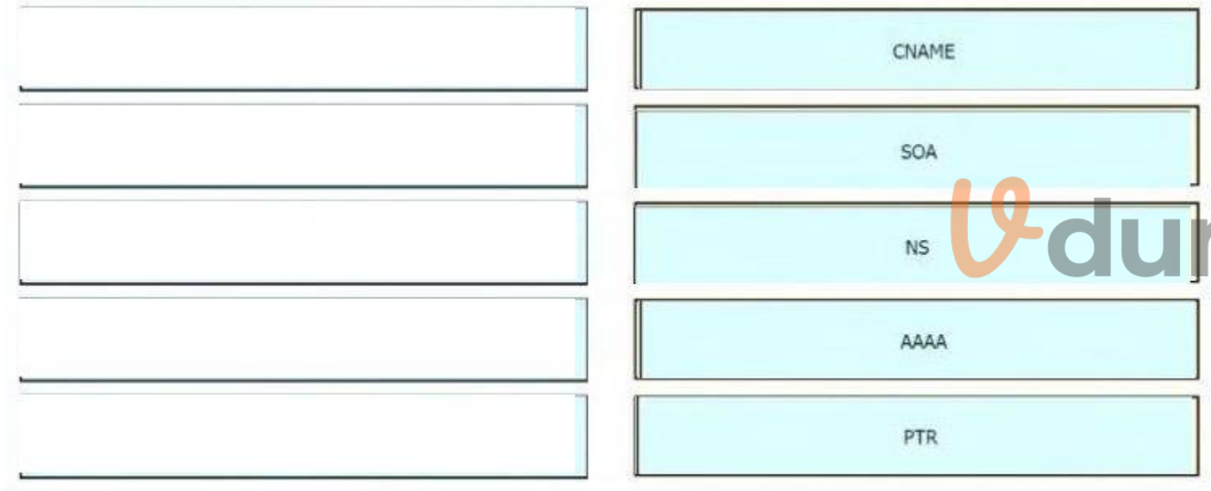


Section:
Explanation:

QUESTION 251
DRAG DROP
Drag the IPv6 DNS record types from the left onto the description on the right.

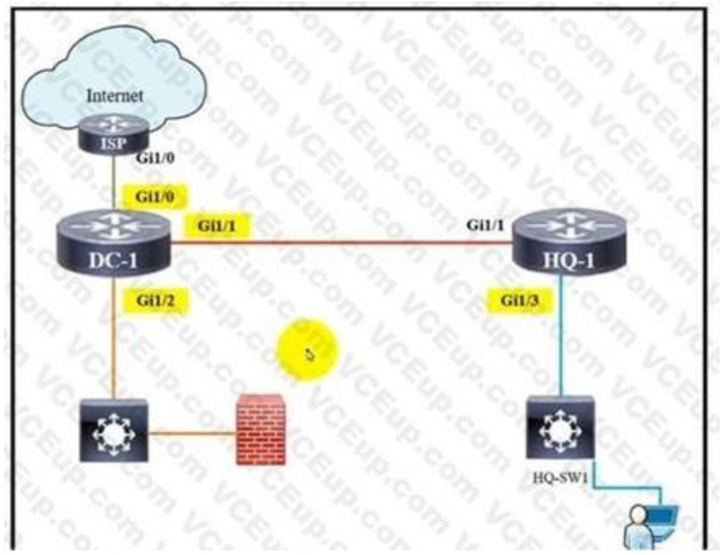
Select and Place:

Correct Answer:



Section:
Explanation:
https://ns1.com/resources/dns-types-records-servers-andqueries#:~:text=Address%20Mapping%20record%20(A%20Record,a%20hostname%20to%20another%20hostname.

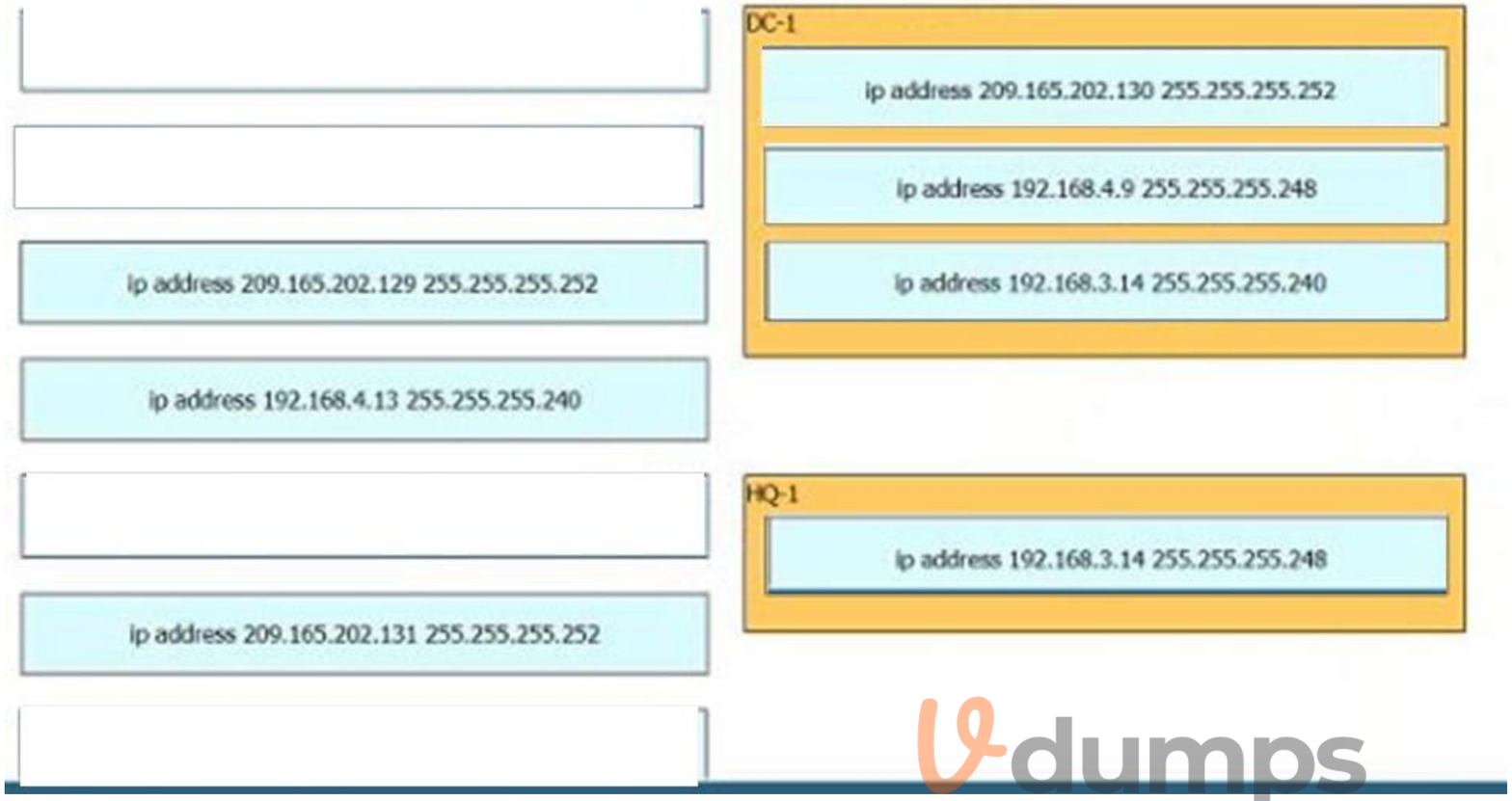
QUESTION 252
DRAG DROP
Refer to Exhibit.



Rotor to the exhibit. The IP address configurations must be completed on the DC-1 and HQ-1 routers based on these requirements:
DC-1 Gi1/0 must be the last usable address on a /30
DC-1 Gi1/1 must be the first usable address on a /29
DC-1 Gi1/2 must be the last usable address on a /28
HQ-1 Gil/3 must be the last usable address on a /29
Drag and drop the commands from the left onto the destination interfaces on the right. Not all commands are used

Select and Place:

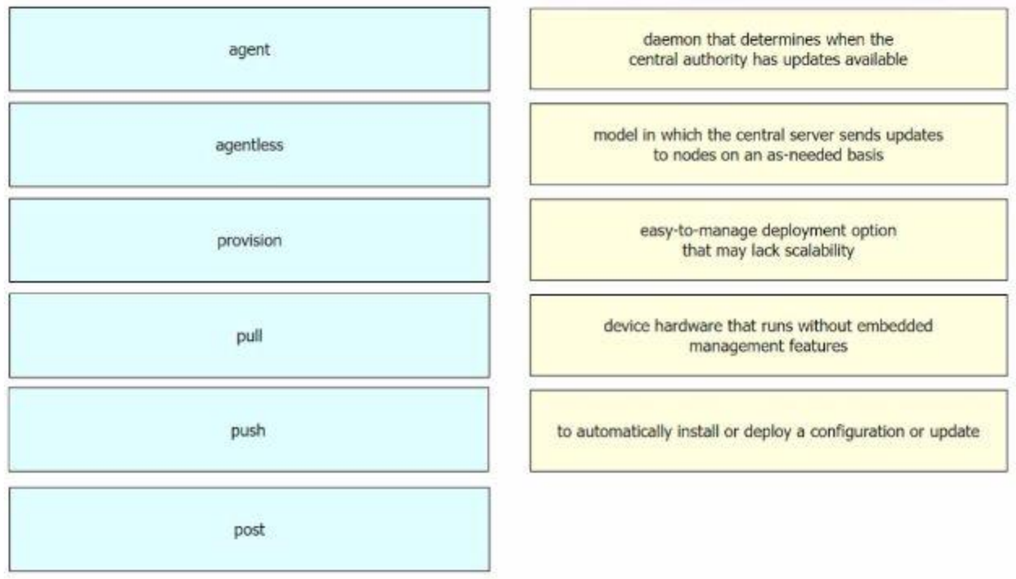
Correct Answer:



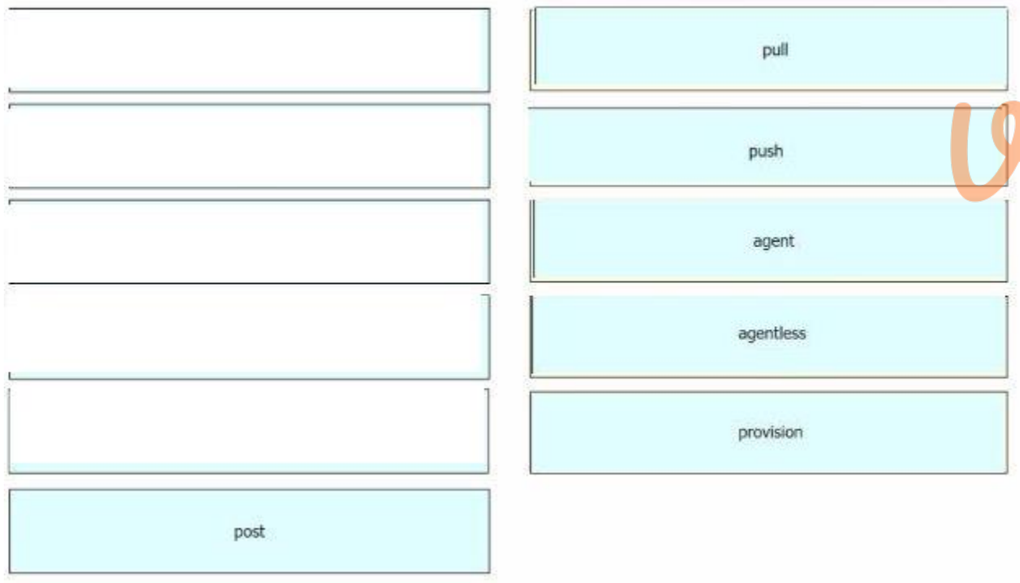
Section:
Explanation:

QUESTION 253
DRAG DROP
Drag and drop the configuration management terms from the left onto the descriptions on the right.
Not all terms are used.

Select and Place:



Correct Answer:



Section:
Explanation:

QUESTION 254
DRAG DROP
Drag and drop the QoS congestion management terms from the left onto the description on the right.

Select and Place:

CBWGQ	places packets into one of four priority-based queue
CQ	provides guaranteed bandwidth to a specified class of traffic
FIFO	provides minimum guaranteed bandwidth to one or more flows
PQ	services a specified number of bytes in one queue before continuing to the next queue
WFQ	uses store-and-forward queuing

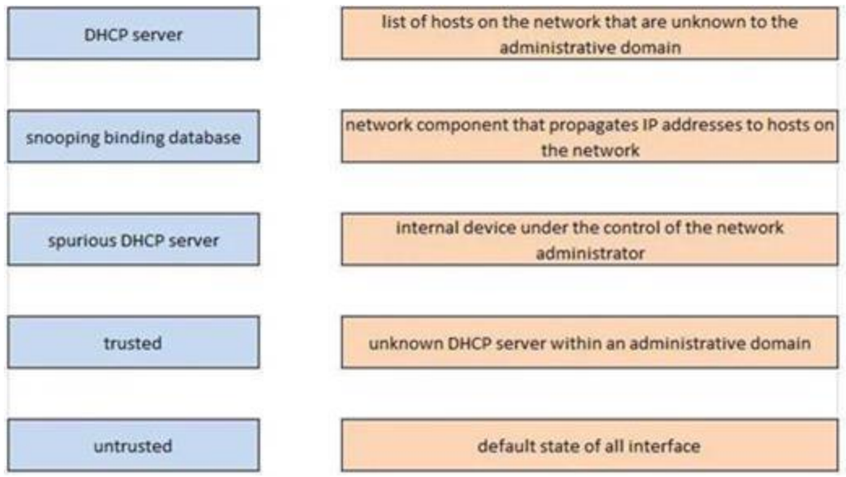
Correct Answer:

	WFQ based
	CBWGQ cified
	FIFO to one
	PQ one eue
	CQ

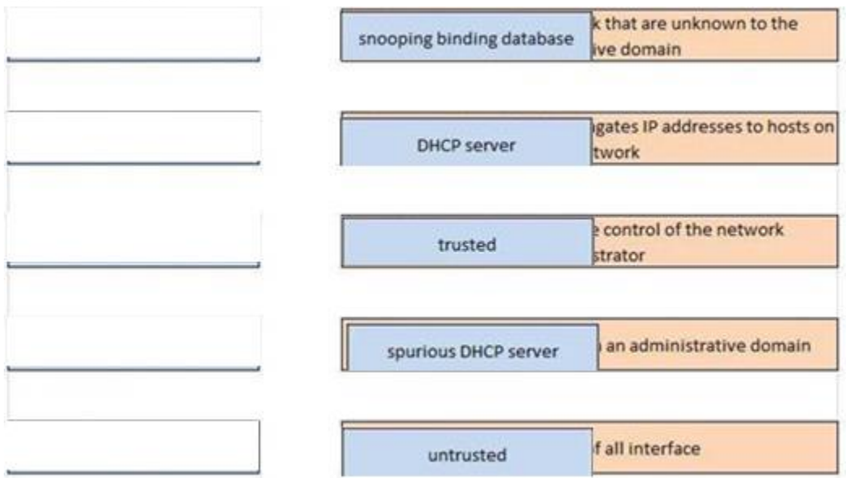
Section:
Explanation:

QUESTION 255
DRAG DROP
Drag and drop the DHCP snooping terms from the left onto the descriptions on the right.

Select and Place:



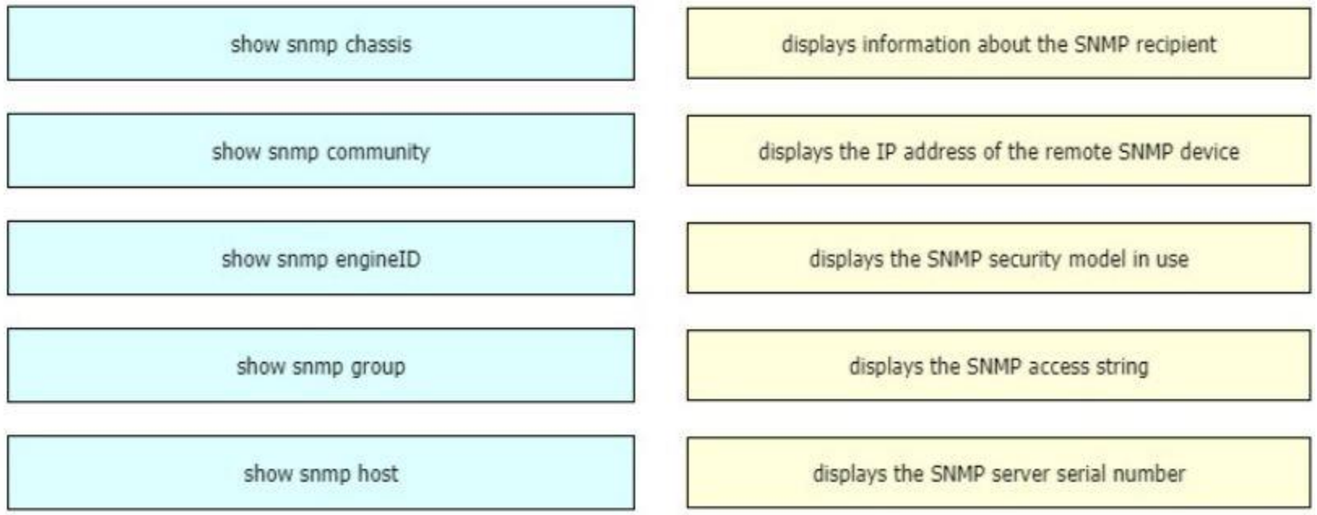
Correct Answer:



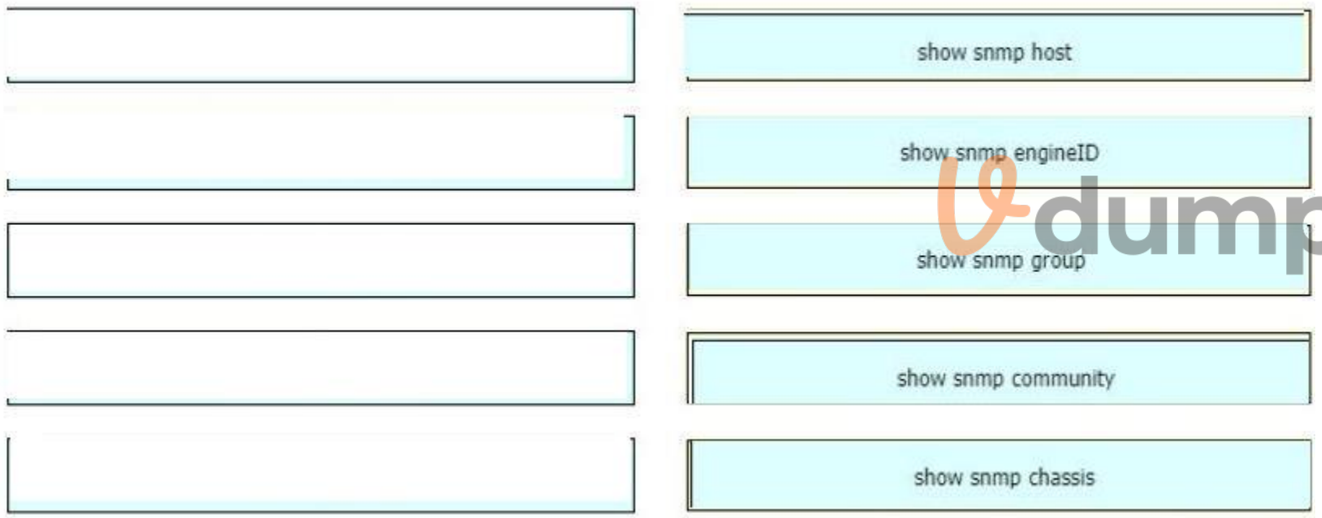
Section:
Explanation:

QUESTION 256
DRAG DROP
Drag and drop the SNMP manager and agent identifier commands from the left onto the functions on the right

Select and Place:



Correct Answer:



Section:
Explanation:

QUESTION 257
DRAG DROP
Drag and drop the 802.11 wireless standards from the left onto the matching statements on the right

Select and Place:

802.11a	Operates in the 2.4 GHz and 5 GHz bands.
802.11ac	Operates in the 2.4 GHz band only and supports a maximum data rate of 54 Mbps.
802.11b	Operates in the 5 GHz band only and supports a maximum data rate that can exceed 100 Mbps.
802.11g	Supports a maximum data rate of 11 Mbps.
802.11n	Operates in the 5 GHz band only and supports a maximum data rate of 54 Mbps.

Correct Answer:

	802.11n
	802.11g
	802.11ac
	802.11b
	802.11a

Section:
Explanation:
n
g
ac
b
a

QUESTION 258
DRAG DROP
Drag and drop the DNS lookup components from the left onto the functions on the right.

Select and Place:

domain	service that maps hostname to IP addresses
cache	local database of address mappings that improves name resolution performance
name resolver	in response to client requests, queries a name server for IP address information
DNS	component of a URL that indicates the location or organization type
no ip domain-lookup	disables DNS services on a Cisco device

Correct Answer:

	DNS
	cache
	name resolver
	domain
	no ip domain-lookup

Section:
Explanation:

QUESTION 259
DRAG DROP

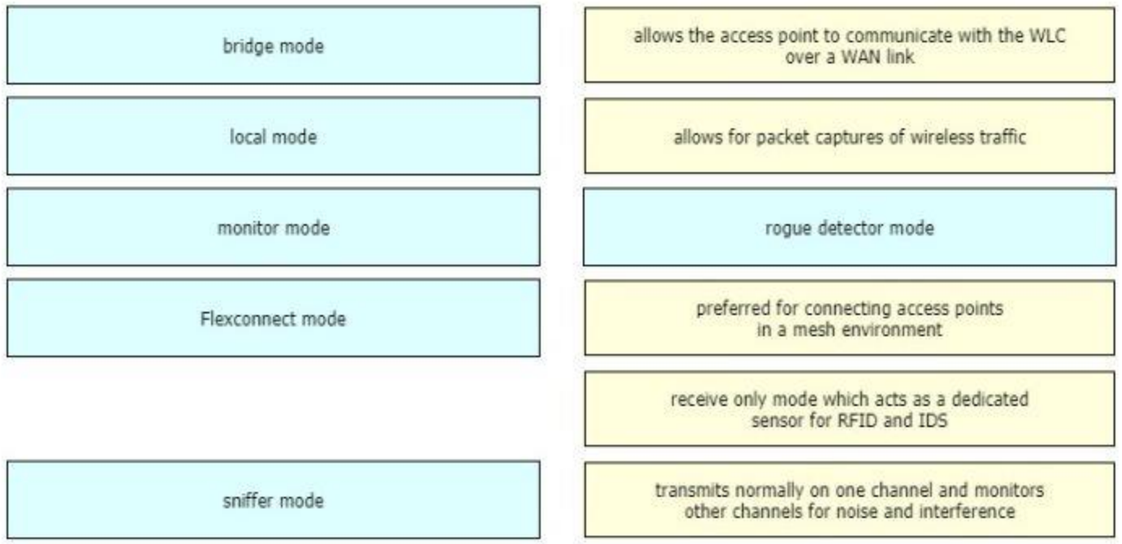
Select and Place:

Correct Answer:

Section:
Explanation:

QUESTION 260
DRAG DROP
Drag and drop the lightweight access point operation modes from the left onto the descriptions on the right

Select and Place:

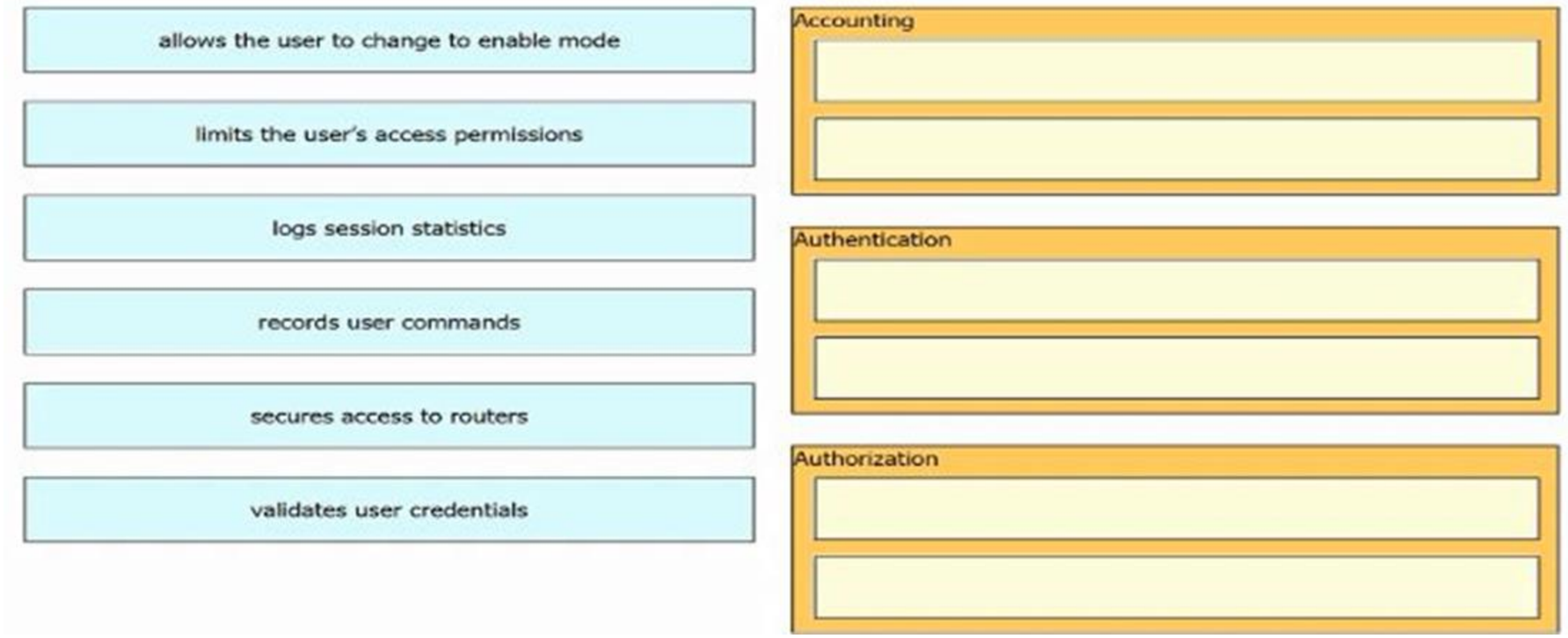


Correct Answer:

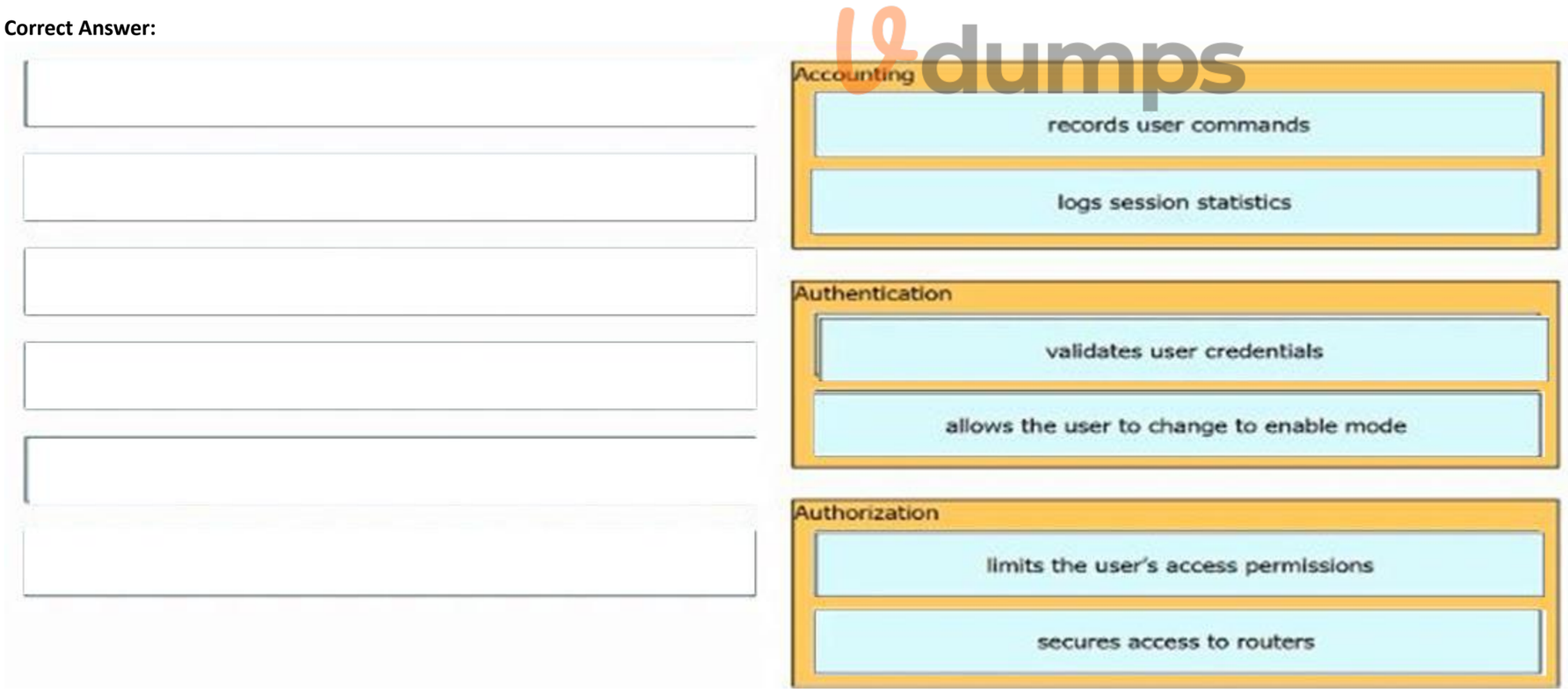
Section:
Explanation:

QUESTION 261
DRAG DROP
Drag and drop the descriptions of AAA services from the left onto the corresponding services on the right.

Select and Place:



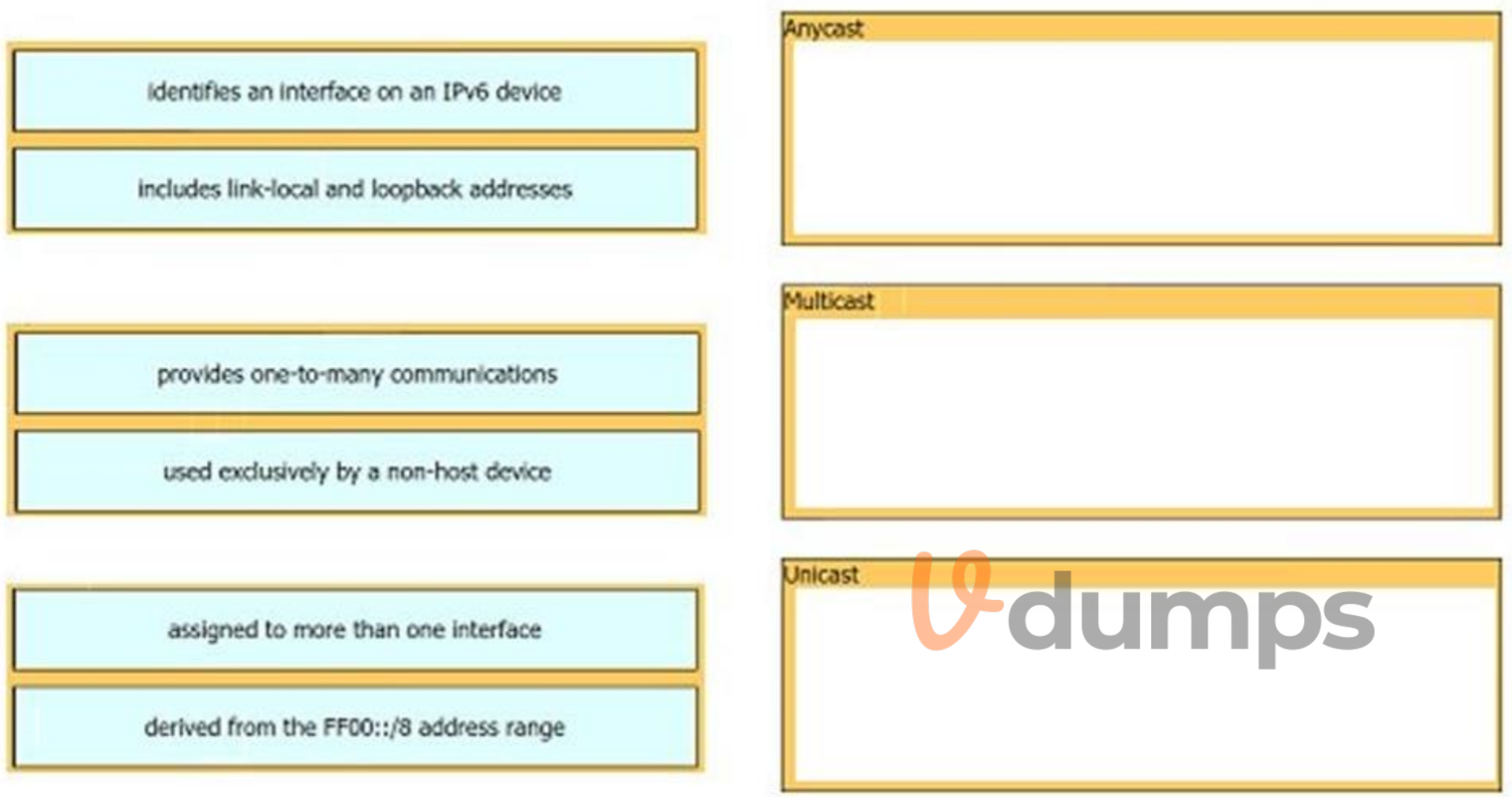
Correct Answer:



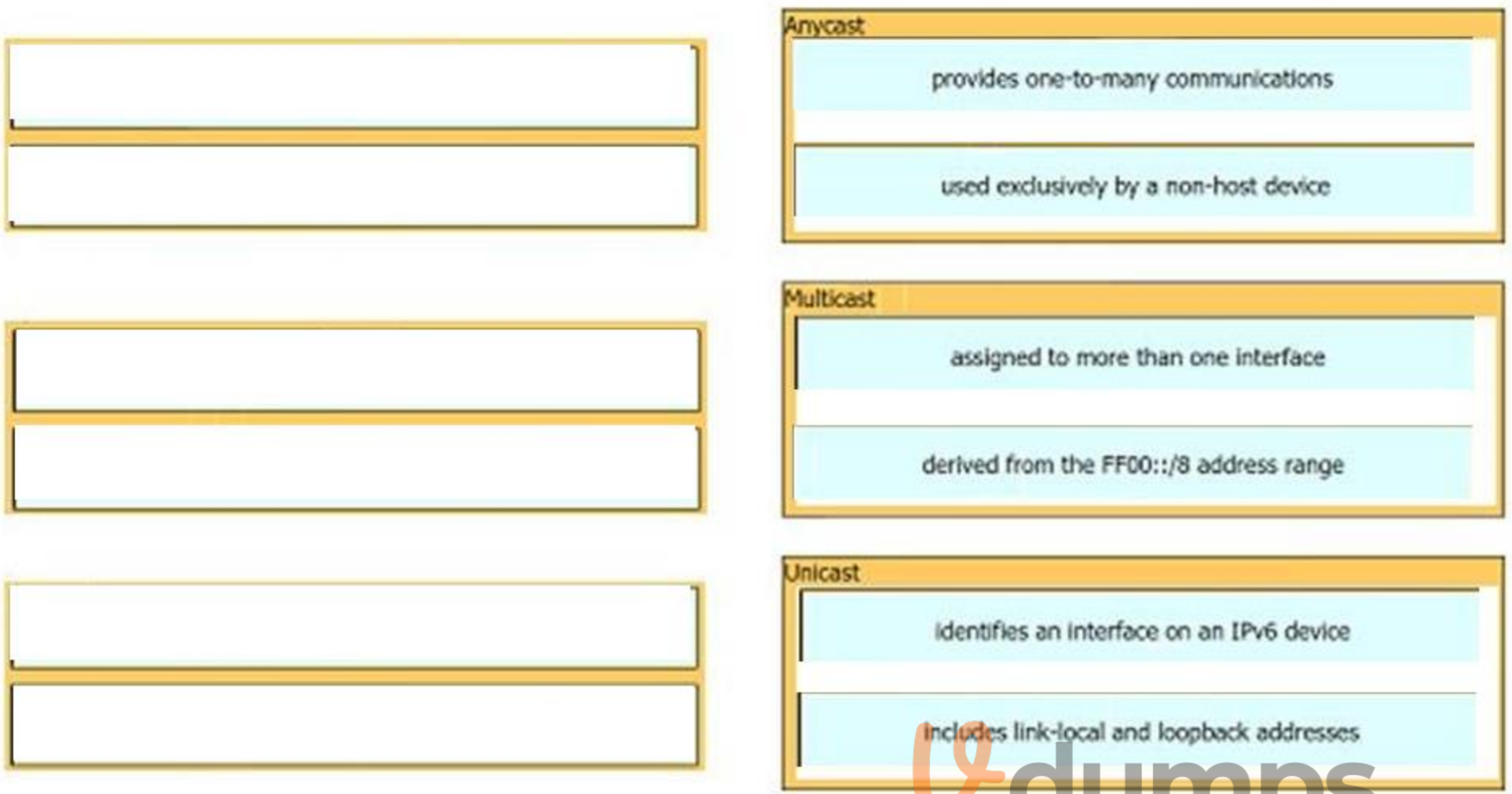
Section:
Explanation:

QUESTION 262
DRAG DROP
Drag and drop the IPv6 address details from the left onto the corresponding types on the right.

Select and Place:

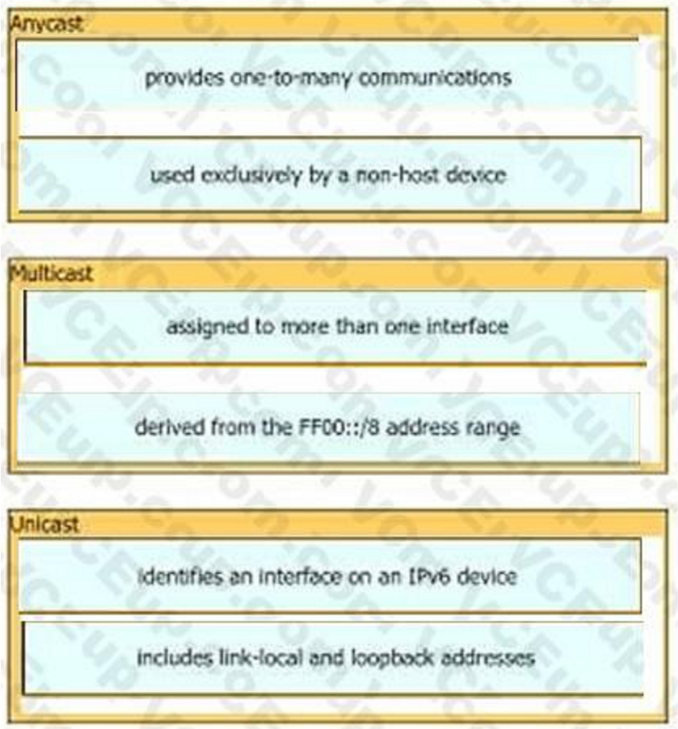


Correct Answer:



Section:

Explanation:



QUESTION 263
DRAG DROP
Drag and drop each characteristic of device-management technologies from the left onto the deployment type on the right.

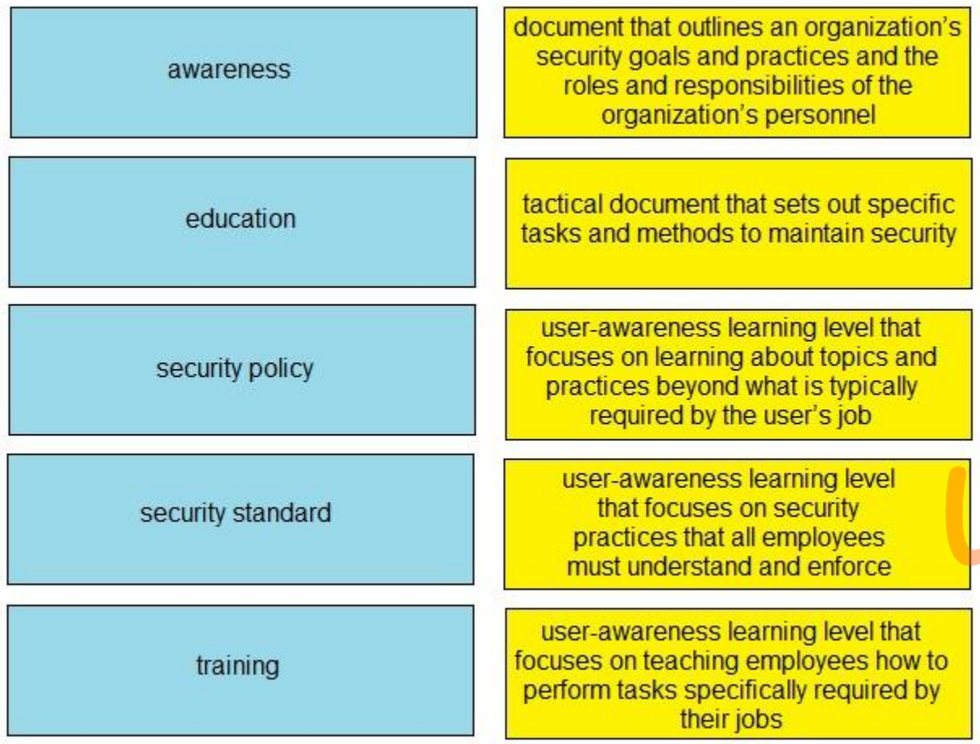
Select and Place:

Correct Answer:

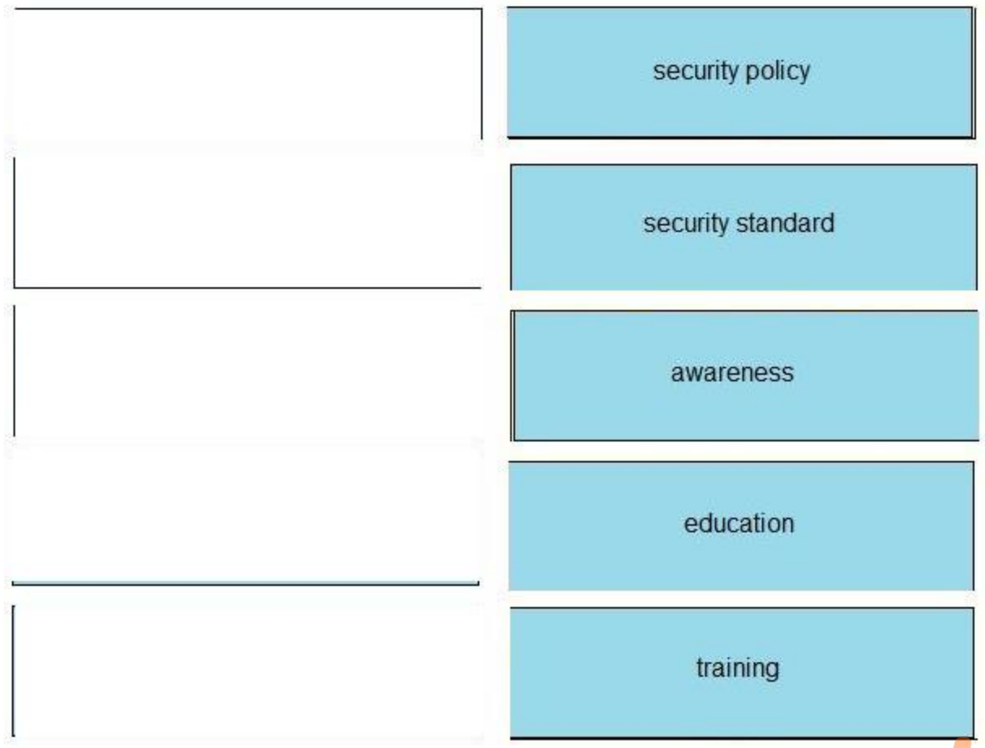
Section:
Explanation:

QUESTION 264
DRAG DROP
Drag and drop the elements of a security program from the left onto the corresponding descriptions on the right

Select and Place:



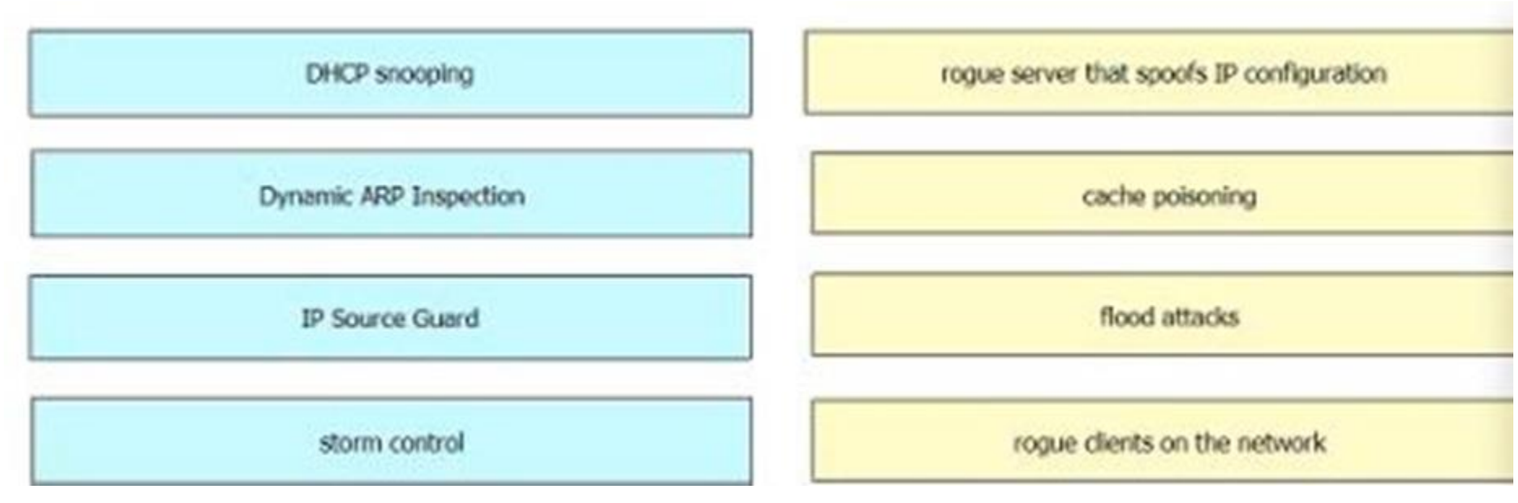
Correct Answer:



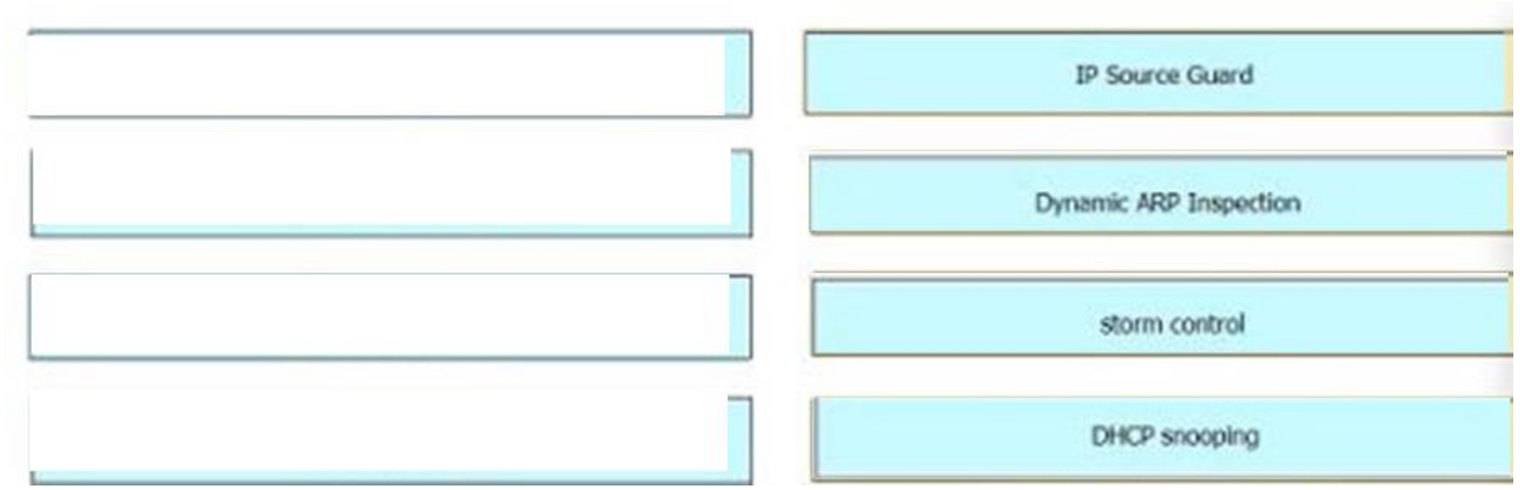
Section:
Explanation:

QUESTION 265
DRAG DROP
Drag and drop the Cisco IOS attack mitigation features from the left onto the types of network attack they mitigate on the right.

Select and Place:



Correct Answer:

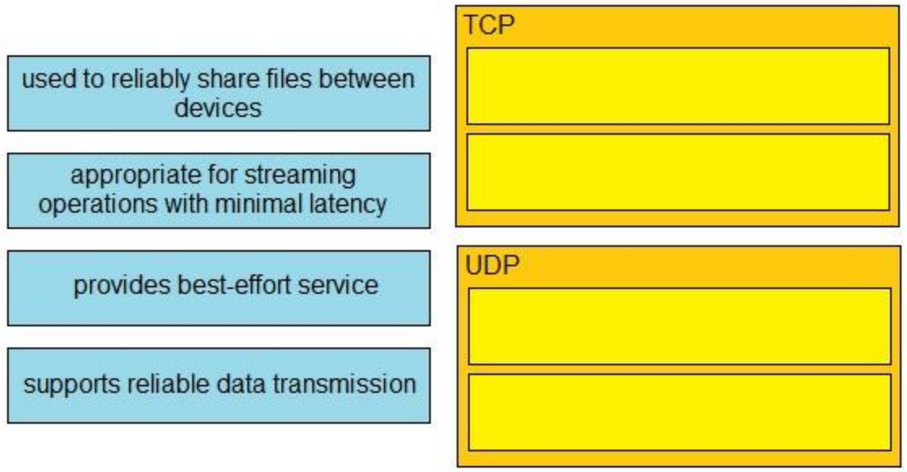


Section:
Explanation:

QUESTION 266
DRAG DROP
Drag and drop the TCP or UDP details from the left onto their corresponding protocols on the right.

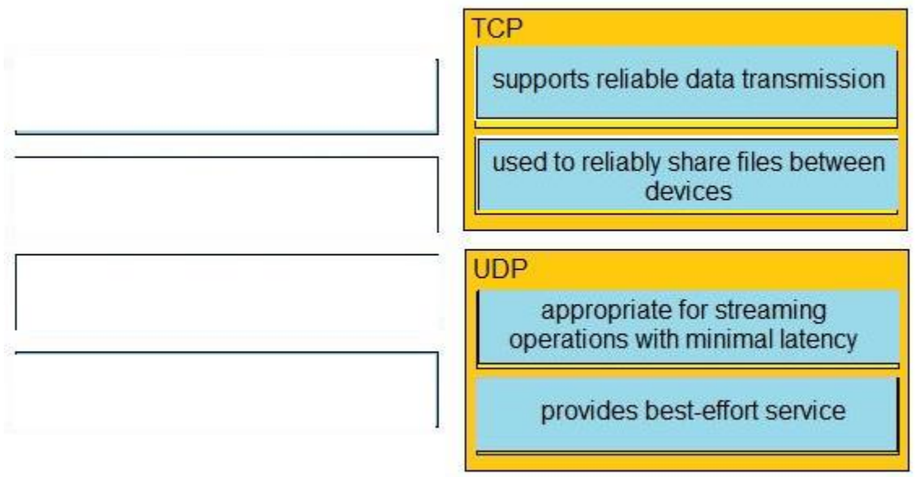
Select and Place:

Answer Area



Correct Answer:

Answer Area



Section:
Explanation:

QUESTION 267
DRAG DROP
Drag and drop the device behaviors from the left onto the matching HSRP slate on the right.

Select and Place:

has heard from the neighbor device and is receiving hello packets	Active
is forwarding packets	Learn
is ready to forward packets if the device that is currently forwarding packets fails	Listen
is transmitting and receiving hello packets	Speak
is waiting to hear from the neighbor device	Standby

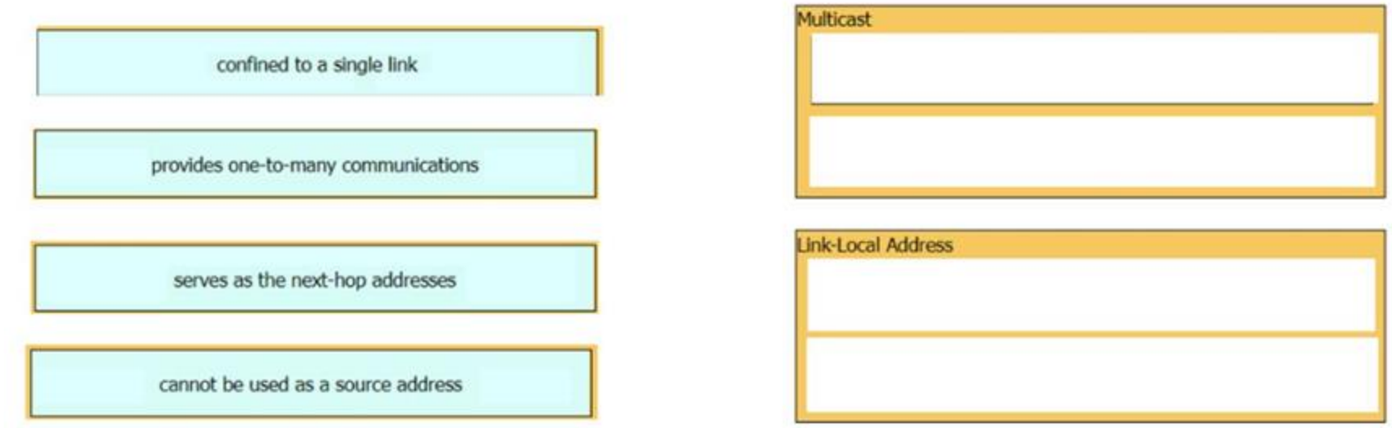
Correct Answer:

	is forwarding packets
	has heard from the neighbor device and is receiving hello packets
	is waiting to hear from the neighbor device
	is transmitting and receiving hello packets
	is ready to forward packets if the device that is currently forwarding packets fails

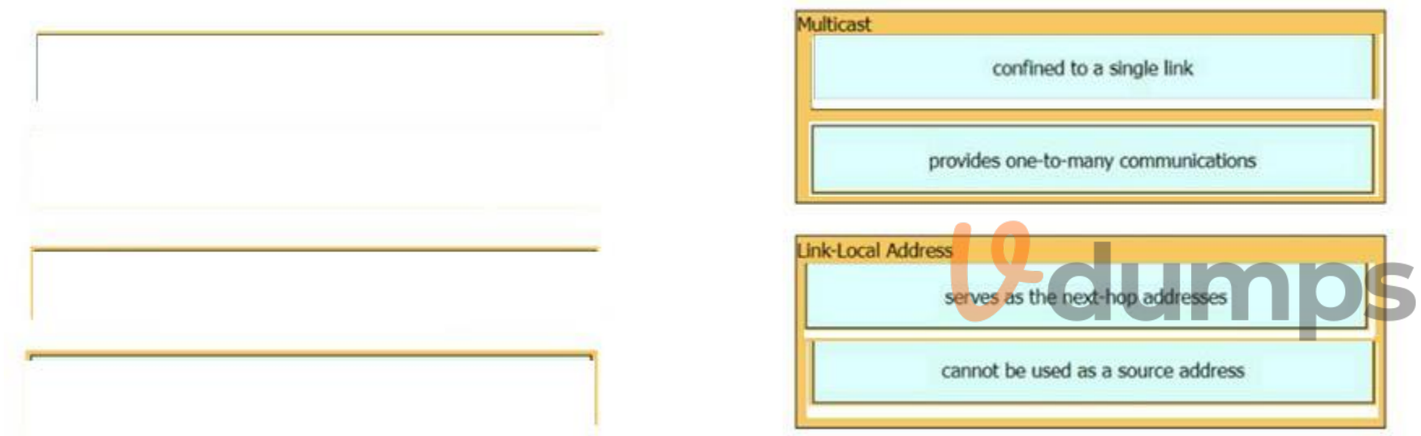
Section:
Explanation:

QUESTION 268
DRAG DROP
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

Select and Place:



Correct Answer:



Section:
Explanation:

QUESTION 269
DRAG DROP
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

Select and Place:

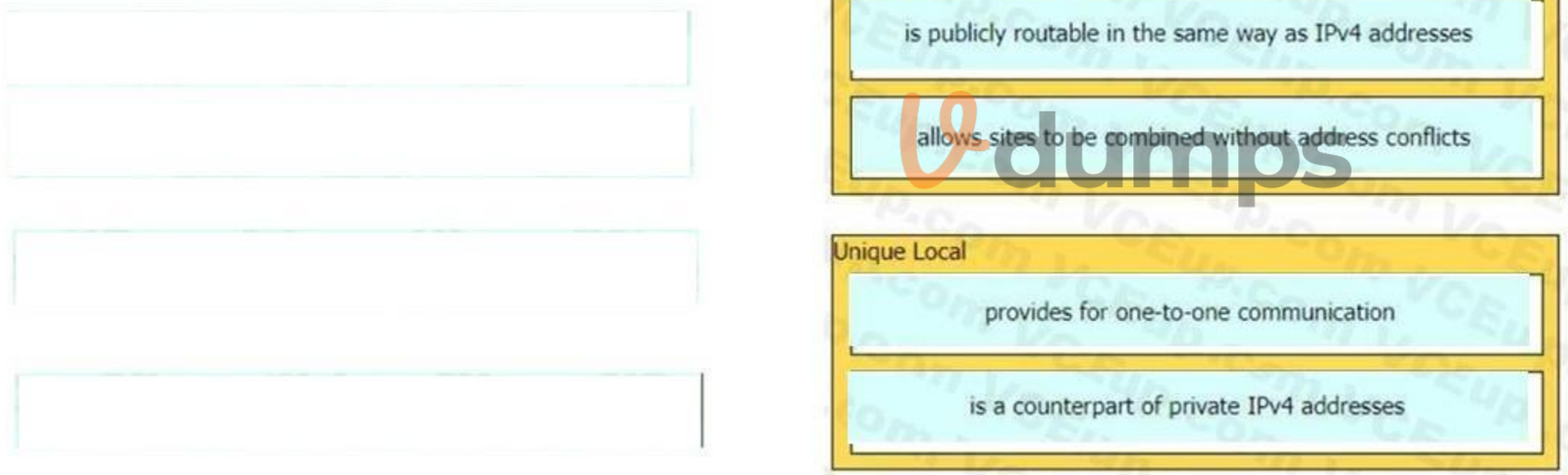
Correct Answer:

Section:
Explanation:

QUESTION 270
DRAG DROP
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

Select and Place:

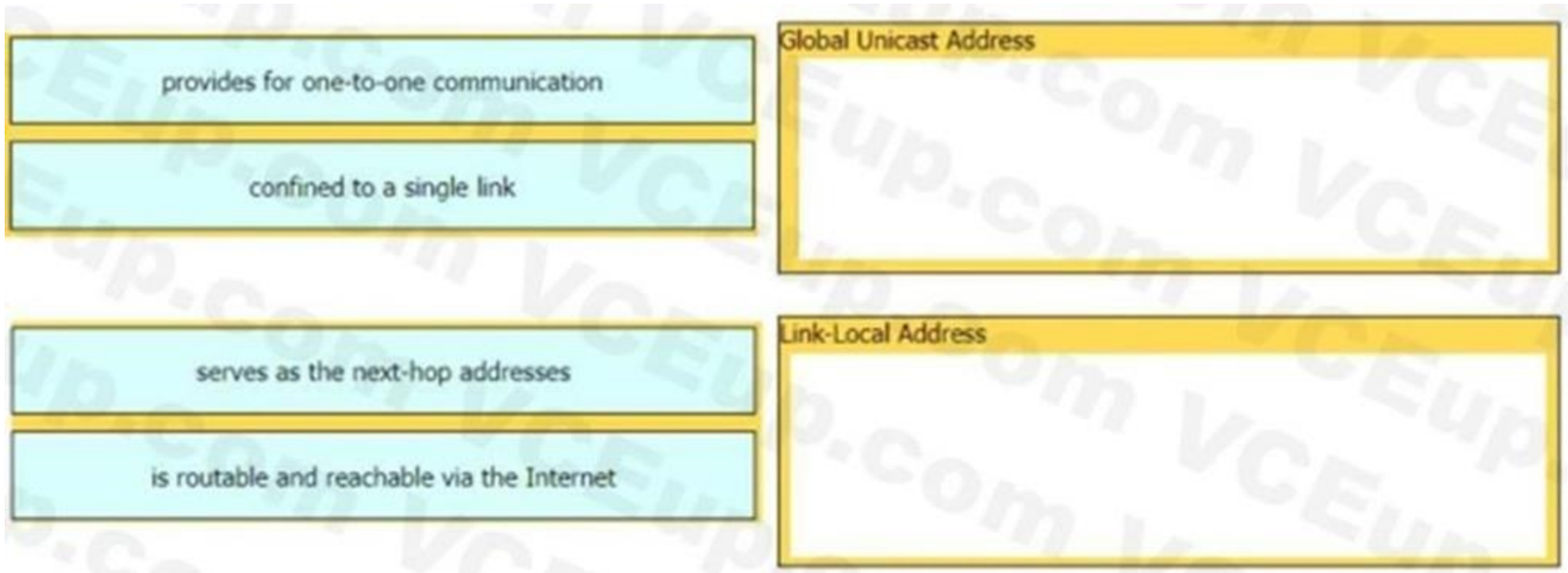
Correct Answer:



Section:
Explanation:

QUESTION 271
DRAG DROP
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

Select and Place:

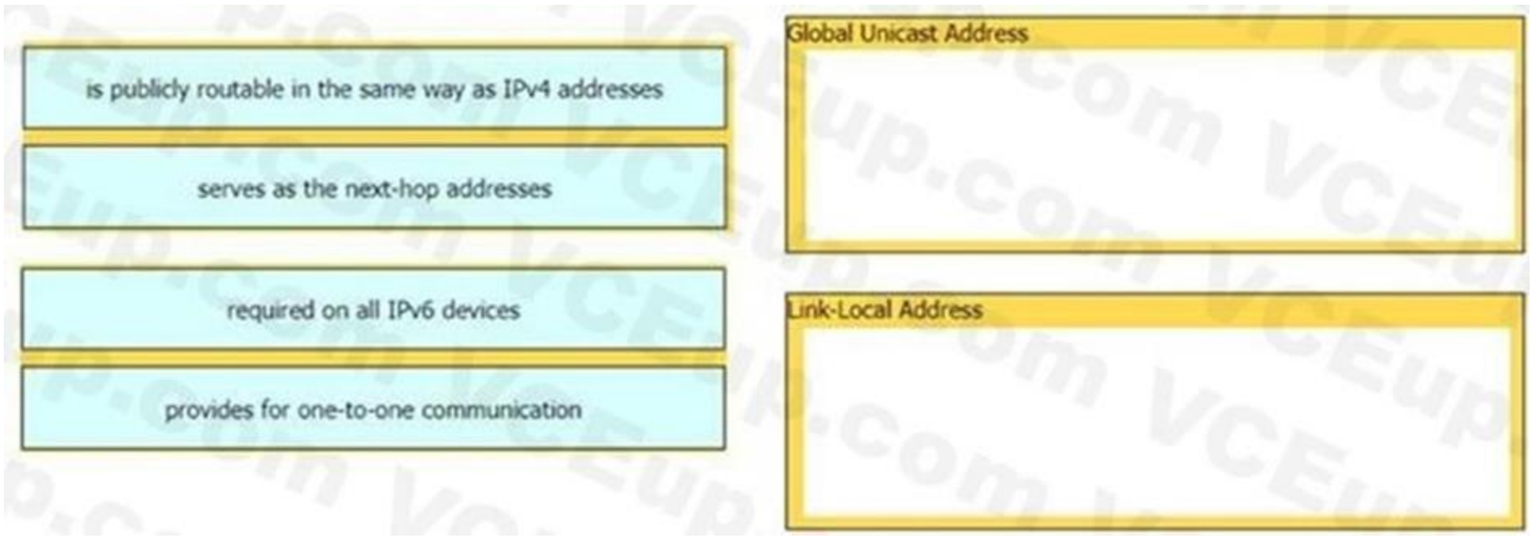


Correct Answer:

Section:
Explanation:

QUESTION 272
DRAG DROP
Drag and drop the characteristic from the left onto the IPv6 address type on the right.

Select and Place:



Correct Answer:

Section:
Explanation: