

CCNP ENTERPRISE LATEST CERTIFICATION BLUEPRINT

ENCUR 350-401

- + MULTIPLE CHOICES
- + LABS AND SIMULATIONS
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9TUT OFFICIAL

CCNP Enterprise 350-401 ENCOR

Cisco Certified Network Professional

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New ENCOR Questions 1

Question 1

An engineer must export the contents of the devices object in JSON format. Which statement must be use?

```
import json
from json import dumps, loads

Devices=[

    'name': 'distsw1',

    'ip': '192.168.255.1',

    'type': 'Catalyst C9407R',

    'user': 'netadmin',

    'pass': '383847459c9484940373dc038484943'
```

- A. json.print(Devices)
- B. json.loads(Devices)
- C. json.dumps(Devices)
- D. json.repr(Devices)

Answer: C

Question 2

What is the function of Cisco DNA Center in a Cisco SD-Access deployment?

- A. It is responsible for routing decisions inside the fabric
- B. It is responsible for the design, management, provisioning, and assurance of the fabric network devices
- C. It possesses information about all endpoints, nodes, and external networks related to the fabric
- D. It provides integration and automation for all nonfabric nodes and their fabric counterparts

Answer: B

Question 3

Refer to the exhibit.

R1#ping 10.1.3.2

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 10.1.3.2, timeout is 2 seconds:

Success rate is 100 percent (5/5), round-trip min/avg/max = 24/43/72 ms

R1#ping 10.1.3.2 size 1500

Type escape sequence to abort.

Sending 5, 1500-byte ICMP Echos to 10.1.3.2, timeout is 2 seconds: !!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 24/48/60 ms

R1#debug ip icmp ICMP packet debugging is on

R1#ping 10.1.3.2 size 1500 df-bit
Type escape sequence to abort.
Sending 5, 1500-byte ICMP Echos to 10.1.3.2, timeout is 2 seconds:
Packet sent with the DF bit set
MMMMM
Success rate is 0 percent (0/5)

An engineer troubleshoots connectivity issues with an application. Testing is performed from the server gateway, and traffic with the DF bit set is dropped along the path after increasing packet size. Removing the DF bit setting at the gateway prevents the packets from being dropped. What is the cause of this issue?

- A. PMTUD does not work due to ICMP Packet Too Big messages being dropped by an ACL
- B. The remote router drops the traffic due to high CPU load
- C. The server should not set the DF bit in any type of traffic that is sent toward the network
- D. There is a CoPP policy in place protecting the WAN router CPU from this type of traffic

Answer: C

Question 4

Refer to the exhibit.

```
username admin privilege 15 password 0 Cisco13579!
aaa new-model
!
aaa authentication login default local
aaa authentication enable default none
!
aaa common-criteria policy Administrators
min-length 1
max-length 127
char-changes 4
lifetime month 2
```

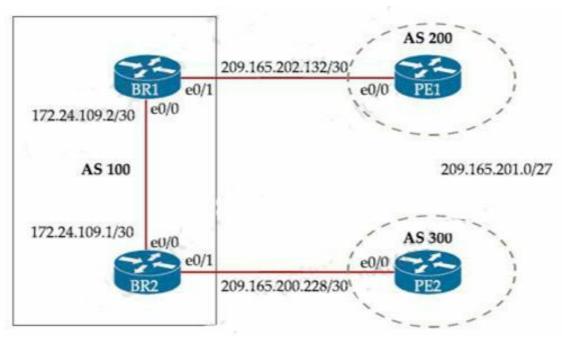
A network engineer must configure a password expiry mechanism on the gateway router for all local passwords to expire after 60 days. What is required to complete this task?

- A. Add the username admin privilege 15 common-criteria-policy Administrators password 0 Cisco013579! command
- B. No further action is required. The configuration is complete
- C. Add the aaa authentication enable default Administrators command
- D. The password expiry mechanism is on the AAA server and must be configured there

Answer: A

Question 5

Refer to the exhibit.



BR1 router bgp 100 neighbor 172.24.109.1 remote-as 100	PE1 router bgp 200 bgp log-neighbor-changes		
neighbor 172.24.109.1 next-hop self neighbor 209.165.202.134 remote-as 200	neighbor 209.165.202.133 remote as 100		
BR2 router bgp 100 neighbor 172.24.109.2 remote-as 100 neighbor 172.24.109.2 next-hop-self neighbor 209.165.200.230 remote-as 300	PE2 router bgp 300 bgp log-neighbor-changes neighbor 209.165.200.229 remote as 100		
BR2#sh ip route i 209.165.201.0 209.165.201.0/27 is subnetted, 1 B 209.165.201.0 [20/0] via 209.16	subnets		

Which configuration change will force BR2 to reach 209.165.201.0/27 via BR1?

- A. Set the origin to igp on BR2 toward PE2 inbound
- B. Set the local preference to 150 on PE1 toward BR1 outbound
- C. Set the weight attribute to 65,535 on BR1 toward PE1
- D. Set the MED to 1 on PE2 toward BR2 outbound

Answer: D

Question 6

What are two benefits of YANG? (Choose two)

- A. It collects statistical constraint analysis information
- B. In enforces the use of specific encoding format for NETCONF
- C. In enforces configuration semantics
- D. It enables multiple leaf statements to exist within a leaf list
- E. It enforces configuration constraints

Answer: B E

Question 7

Refer to the exhibit.

```
R1#show running-config interface fa0/0
Building configuration...

Current configuration: 192 bytes
!
interface FastEthernet0/0
ip address 192.68.3.5 255.255.255.0
duplex full
vrrp 1 ip 192.168.3.1
vrrp 1 priority 110
vrrp 1 authentication text cisco
vrrp 1 track 20 decrement 20
end

R1#show running-config | include track 20
track 20 ip route 10.10.1.1 255.255.255.255 reachability
```

```
R2#show running-config interface fa0/0
Building configuration...

Current configuration: 141 bytes
!
interface FastEthernet0/0
ip address 192.68.3.2 255.255.255.0
duplex full
vrrp 1 ip 192.168.3.1
vrrp 1 authentication text cisco
end
```

An engineer configures VRRP and issues the show commands to verify

operation. What does the engineer confirm about VRRP group 1 from the output?

- A. There is no route to 10.10.1.1/32 in R2's routing table
- B. If R1 reboots, R2 becomes the master virtual router until R2 reboots
- C. Communication between VRRP members is encrypted using MD5
- D. R1 is master if 10.10.1.1/32 is in its routing table

Answer: D

Question 8

Refer to the exhibit.

```
flow record Recorder
match ipv4 protocol
match 1pv4 source address
match ipv4 destination address
match transport source-port
match transport destination-port
flow exporter Exporter
destination 192.168.100.22
transport udp 2055
flow monitor Monitor
exporter Exporter
record Recorder
et-analytics
ip flow-export destination 192.168.100.22 2055
interface gi1
ip flow monitor Monitor input
ip flow monitor Monitor output
et-analytics enable
```

An engineer must add the SNMP interface table to the NetFlow protocol flow records. Where should the SNMP table option be added?

- A. under the interface
- B. under the flow record
- C. under the flow monitor
- D. under the flow exporter

Answer: D

Question 9

Refer to the exhibit.



BR(config)#interface tunnel1 BR(config-if)#keepalive 5 3 HQ(config)#interface tunnel1 HQ(config-if)#keepalive 5 3

What is the effect of these commands on the BR and HQ tunnel interfaces?

- A. The tunnel line protocol goes down when the keepalive counter reaches 6
- B. The keepalives are sent every 5 seconds and 3 retries
- C. The keepalives are sent every 3 seconds and 5 retries.
- D. The tunnel line protocol goes down when the keepalive counter reaches 5

Answer: B

Question 10

In Cisco SD-WAN, which protocol is used to measure link quality?

- A. OMP
- B. BFD
- C. RSVP
- D. IPsec

Answer: B

Question 11

What is used to perform QoS packet classification?

- A. the Options field in the Layer 3 header
- B. the Type field in the Layer 2 frame
- C. the Flags field in the Layer 3 header
- D. the ToS field in the Layer 3 header

Answer: D

Question 12

Refer to the exhibit.

```
def get_token():
    device_url="https://192.168.1.1/dna/sytem/api/v1/auth/token"
    http_result = requests.post(device_url, auth = ("test","test34393838!"))
    if http_result.status_code != requests.codes.ok:
        print("Call failed!" Review get_token().")
        sys.exit()
    return(http_result.json()["Token"])
```

Which HTTP code must be returned to prevent the script from exiting?

A. 200

- B. 201
- C. 300
- D. 301

Answer: A

Question 13

Which LISP component is required for a LISP site to communicate with a non-LISP site?

- A. ETR
- B. ITR
- C. Proxy ETR
- D. Proxy ITR

Answer: C

Question 14

What is a characteristic of a next-generation firewall?

- A. only required at the network perimeter
- B. required in each layer of the network
- C. filters traffic using Layer 3 and Layer 4 information only
- D. provides intrusion prevention

Answer: D

Question 15

Which technology is used as the basis for the Cisco SD-Access data plane?

- A. IPsec
- B. LISP
- C. VXLAN

D. 802.1Q

Answer: C

Question 16

—HTTP/1.1 204 content | 1s returned when cur -l -x DELETE command is issued. Which situation has occurred?

- A. The object could not be located at the URI path
- B. The command succeeded in deleting the object
- C. The object was located at the URI, but it could not be deleted
- D. The URI was invalid

Answer: B

Question 17

An engineer must provide wireless converge in a square office. The engineer has only one AP and believes that it should be placed it in the middle of the room. Which antenna type should the engineer use?

- A. directional
- B. polarized
- C. Yagi
- D. omnidirectional

Answer: D

Question 18

While configuring an IOS router for HSRP with a virtual IP of 10.1.1.1, an engineer sees this log message:

Jan 1 12:12:14.122: %HSRP-4-DIFFVIP1: GigabitEthernet0/0 Grp 1 active routers virtual IP address 10.1.1.1 is different to the locally configured

Which configuration change must the engineer make?

- A. Change the HSRP group configuration on the remote router to 1
- B. Change the HSRP virtual address on the local router to 10.1.1.1
- C. Change the HSRP virtual address on the remote router to 10.1.1.1
- D. Change the HSRP group configuration on the local router to 1

Answer: B

Question 19

What is a characteristic of YANG?

- A. It is a Cisco proprietary language that models NETCONF data
- B. It allows model developers to create custom data types
- C. It structures data in an object-oriented fashion to promote model reuse
- D. It provides loops and conditionals to control now within models

Answer: C

Question 20

What is the function of the LISP map resolver?

- A. to send traffic to non-LISP sites when connected to a service provider that does not accept nonroutable EIDs as packet sources
- B. to connect a site to the LISP-capable part of a core network, publish the EID-to-RLOC mappings for the site and respond to map-request messages
- C. to decapsulate map-request messages from ITRs and forward the messages to the MS
- D. to advertise routable non-USP traffic from one address family to LISP sites in a different address family

Answer: C

Question 21

When is an external antenna used inside a building?

- A. only when using 5 GHz
- B. only when using 2.4 GHz
- C. when it provides the required coverage
- D. only when using Mobility Express

Answer: C

Question 22

Drag and drop the snippets onto the blanks within the code construct a script that configure a loopback interface with an IP address. Not all options are used.

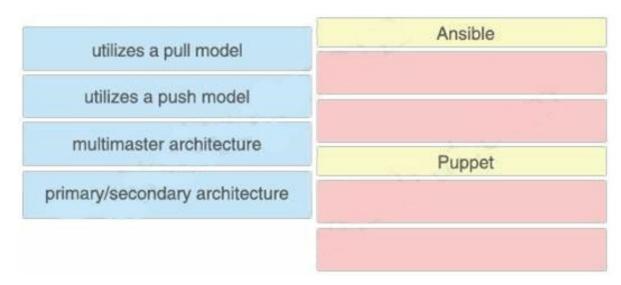
```
"@message-id": "101",
 "edit-config": {
        "running": null
                                                                         "fixed":
      "config": {
                                                                         "config":
       "native": {
        "interface": {
                                                                         "mask":
             "Loopback": {
                                                                         "primary":
                  "ip": {
                                                                         "target":
                   "address": {
                                                                        "name": "100"
                           "address": "10.10.10.10",
                                               "255.255.255.255"
                                  4
}
```

Answer:

- 1-B
- 2-F
- 3-D
- 4–C

Question 23

Drag and drop the characteristics from the left onto the orchestration tools they describe on the right.



Answer:

Ansıble

- + utılızes a push model
- + primary/secondary architecture

Puppet

- + utılızes a pull model
- + multimaster architecture

Question 24

Refer to the exhibit.

DSW1#sh spanning-tree int fa1/0/7

Vlan	Role	Sts	Cost	Prio.Nbr	Type	
VLAN0001	Desg	FWD	2	128.9	P2p	Edge
VLAN0010	Desg	FWD	2	128.9	P2p	Edge
VLAN0020	Desg	FWD	2	128.9	P2p	Edge
VLAN0030	Desg	FWD	2	128.9	P2p	Edge
VLAN0040	Desg	FWD	2	128.9	P2p	Edge

How was spanning-tree configured on this interface?

A. By entering the command spanning-tree portfast trunk in the interface configuration mode.

- B. By entering the command spanning-tree portfast in the interface configuration mode
- C. By entering the command spanning-tree mst1 vlan 10,20,30,40 in the global configuration mode
- D. By entering the command spanning-tree vlan 10,20,30,40 root primary in the interface configuration mode

Answer: A

Question 25

An engineer is troubleshooting the AP join process using DNS. Which FQDN must be resolvable on the network for the access points to successfully register to the WLC?

- A. cisco-capwap-controller.domain.com
- B. wlchostname.domain.com
- C. ap-manager.domain.com
- D. primary-wlc.domain.com

Answer: A

Question 26

How is Layer 3 roaming accomplished in a unified wireless deployment?

- A. An EoIP tunnel is created between the client and the anchor controller to provide seamless connectivity as the client is associated with the new AP
- B. The client entry on the original controller is passed to the database on the new controller
- C. The new controller assigns an IP address from the new subnet to the client
- D. The client database on the original controller is updated the anchor entry, and the new controller database is updated with the foreign entry.

Answer: B

Question 27

A network administrator has designed a network with two multilayer switches on the distribution layer, which act as default gateways for the end hosts. Which two technologies allow every end host in a VLAN to use both gateways? (Choose two)

- A. HSRP
- B. GLBP
- C. MHSRP
- D. VRRP
- E. VSS

Answer: B E

Question 28

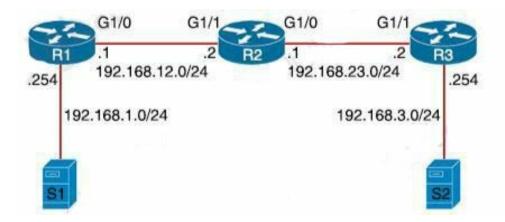
Which measurement is used from a post wireless survey to depict the cell edge of the access points?

- A. CCI
- B. Noise
- C. SNR
- D. RSSI

Answer: D

Question 29

Refer to the exhibit.



— missing a screenshot of Wireshark capture of a ping from S1 to S2, maybe with TTL of 2

While troubleshooting a routing issue, an engineer issues a ping from S1 to S2. Which two actions from the initial value of the TTL? (Choose two)

- A. The packet reaches R3, and the TTL expires
- B. R2 replies with a TTL exceeded message
- C. R1 replies with a TTL exceeded message
- D. The packet reaches R2 and the TTL expires
- E. R3 replies with a TTL exceeded message
- F. The packet reaches R1 and the TTL expires

Answer: A E

Question 30

Refer to the exhibit.

Router#show access-list Extended IP access list 100 10 permit ip 192.168.0.0 0.0.255.255 any 20 permit ip 172.16.0.0 0.0.15.255 any

Which command set must be added to permit and log all traffic that comes from 172.20.10.1 in interface GigabitEthernet0/1 without impacting the functionality of the access list?

Option A

Router(config)#ip access-list extended 100 Router(config-ext-nacl)#5 permit ip 172.20.10.0 0.0.0.255 any log
Router(config)#interface GigabitEthernet0/1 Router(config-if)#access-group 100 in

Option B

Router(config)#no access-list 100 permit ip 172.16.0.0 0.0.15.255 any Router(config)#access-list 100 permit ip 172.16.0.0 0.0.15.255 any log Router(config)#interface Gigabit Ether net0/1 Router(config-if)#access-group 100 in

Option C

Router(config)#access-list 100 permit ip host 172.20.10.1 any log Router(config)#interface GigabitEthernet0/1 Router(configif)#access-group 100 in

Option D

Router(config)#access-list 100 seq 5 permit ip host 172.20.10.1 any log Router(config)#interface GigabitEthernet0/1 Router(config-if)#access-group 100 in

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

Answer: C

Question 31

What is the function of a fabric border node in a Cisco SD-Access

environment?

- A. To connect the Cisco SD-Access fabric to another fabric or external Layer 3 networks
- B. To collect traffic flow information toward external networks
- C. To attach and register clients to the fabric
- D. To handle an ordered list of IP addresses and locations for endpoints in the fabric.

Answer: A

Question 32

How are the different versions of IGMP compatible?

- A. IGMPv2 is compatible only with IGMPv1
- B. IGMPv2 is compatible only with IGMPv2
- C. IGMPv3 is compatible only with IGMPv3
- D. IGMPv3 is compatible only with IGMPv1

Answer: A

Question 33

What is one benefit of implementing a VSS architecture?

- A. It provides multiple points of management for redundancy and improved support.
- B. It provides a single point of management for improved efficiency
- C. It uses GLBP to balance traffic between gateways
- D. It uses a single database to manage configuration for multiple switches

Answer: B

Question 34

Which entity is a Type 1 hypervisor?

- A. Oracle VM VirtualBox
- B. VMware server
- C. Citrix XenServer
- D. Microsoft Virtual PC

Answer: C

Question 35

An engineer runs the code against an API of Cisco DNA Center, and the platform returns this output.

```
import requests
import sys
import urllib3
urllib3.disable_warnings(urllib3.exceptions.insecureRequestWarning)
def main():
 device_uri = "https://192.168.1.1/dna/system/api/v1/auth/token"
 http_result = requests.get(device_uri, auth=("root", "test39383746!"))
 print(http_result)
 if http_result.status_code != requests.codes.ok:
   print("Call failed! Review get_token().")
   sys.exit()
 print(http_result.json()["Token"])
if _name_ == "_main_":
 sys.exit(main())
Output
$ python get_token.py
<Response [405]>
Call failed! Review get token().
```

What does the response indicate?

- A. The authentication credentials are incorrect
- B. The URI string is incorrect
- C. The Cisco DNA Center API port is incorrect
- D. The HTTP method is incorrect

Answer: D

Question 36

What is a consideration when designing a Cisco SD-Access underlay network?

- A. End user subnets and endpoints are part of the underlay network
- B. The underlay switches provide endpoint physical connectivity for users
- C. Static routing is a requirement
- D. It must support IPv4 and IPv6 underlay networks

Answer: D

Question 37

What is a characteristic of a virtual machine?

- A. It relies on hypervisors to allocate computing resources for it
- B. It is deployable without a hypervisor to host it
- C. It must run the same operating system as its host
- D. It must be aware of other virtual machines, in order to allocate physical resources for them

Answer: A

Question 38

What is one difference between Saltstack and Ansible?

- A. SaltStack uses an API proxy agent to program Cisco boxes on agent mode, whereas Ansible uses a Telnet connection
- B. SaltStack uses the Ansible agent on the box, whereas Ansible uses a Telnet server on the box
- C. SaltStack is constructed with minion, whereas Ansible is constructed with YAML.
- D. SaltStack uses SSH to interact with Cisco devices, whereas Ansible uses an event bus

Answer: A

Question 39

What is the centralized control policy in a Cisco SD-WAN deployment?

- A. list of ordered statements that define user access policies
- B. list of enabled services for all nodes within the cloud
- C. set of rules that governs nodes authentication within the cloud
- D. set of statements that defines how routing is performed

Answer: D

Question 40

Which command set configures RSPAN to capture outgoing traffic from VLAN 3 on interface GigabitEthernet 0/3 while ignoring other VLAN traffic on the same interface?

Option A

monitor session 2 source interface gigabitethernet0/3 rx monitor session 2 filter vlan 3

Option B

monitor session 2 source interface gigabitethernet0/3 tx monitor session 2 filter vlan 3

Option C

monitor session 2 source interface gigabitethernet0/3 rx

monitor session 2 fitter vlan 1-2,4 – 4094

Option D

monitor session 2 source interface gigabitethernet0/3 tx monitor session 2 filter vlan 1-2, 4 - 4094

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

Answer: B

Question 41

Refer to the exhibit.

```
R1#show crypto isakmp sa
IPv4 Crypto ISAKMP SA
dst src state conn- status
209.165.201.6 209.165.201.1 QM_IDLE id 101 ACTIVE
```

After configurating an IPsec VPN, an engineer enters the show command to verify the ISAKMP SA status. What does the status show?

- A. Peers have exchanged keys, but ISAKMP SA remains unauthenticated.
- B. ISAKMP SA is authenticated and can be used for Quick Mode.
- C. VPN peers agreed on parameters for the ISAKMP SA
- D. ISAKMP SA has been created, but it has not continued to form.

Answer: B

Question 42

Refer to the exhibit.

```
ip vrf BLUE
rd 1:1
!
interface Vlan100
description GLOBAL_INTERFACE
ip address 10.10.1.254 255.255.255.0
!
access-list 101 permit ip 10.10.5.0 0.0.0.255 10.10.1.0 255.255.255.0
!
route-map VRF_TO_GLOBAL permit 10
match ip address 101
set global
!
interface Vlan500
description VRF_BLUE
ip vrf forwarding BLUE
ip address 10.10.5.254 255.255.255.0
ip policy route-map VRF_TO_GLOBAL
```

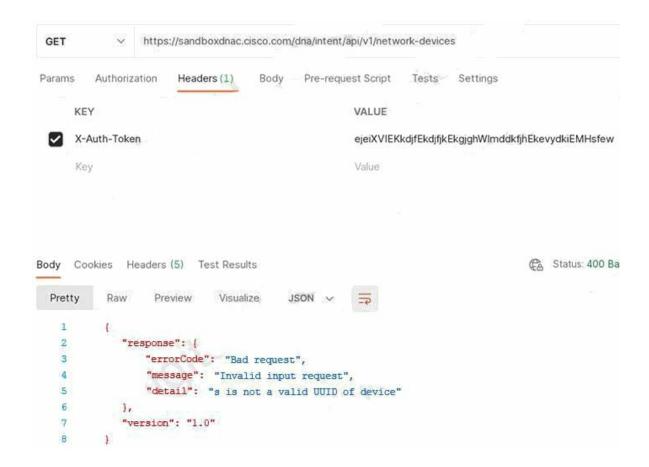
An engineer attempts to create a configuration to allow the Blue VRF to leak into the global routing table, but the configuration does not function as expected. Which action resolves this issue?

- A. Change the access-list number in the route map
- B. Change the source network that is specified in access-list 101
- C. Change the route-map configuration to VRF_BLUE
- D. Change the access-list destination mask to a wildcard

Answer: D

Question 43

Refer to the exhibit.



POSTMAN is showing an attempt to retrieve network device information from Cisco DNA Center API. What is the issue?

- A. The token has expired
- B. The URI string is incorrect
- C. Authentication has failed
- D. The JSON payload contains the incorrect UUID

Answer: B

Question 44

Running the script causes the output in the exhibit. Which change to the first line of the script resolves the error?

import ncclient

```
with ncclient.manager.connect(
host = '192.168.1.1',
port=830,
username = 'root',
password = 'test398345152!',
allow_agent = False) as m:
print(m.get_config('running').data_xml)
```

Output

\$ python get_config.py
Traceback (most recent call last):
File "get_config.py", line 3, in <module>
 with ncclient.manager.connect(host = '192.168.1.1, port = 830, username = 'root',
 AttributeError: 'module' object has no attribute 'manager'

- A. from ncclient import *
- B. import manager
- C. from ncclient import
- D. import ncclient.manager

Answer: D

Question 45

An engineer configures HSRP group 37. The configuration does not modify the default virtual MAC address. Which virtual MAC address does the group use?

A. 00:00:0c:07:ac:25

B. 00:00:0c:07:ac:37

C. C0:39:83:25:258:5

D. C0.00:00:25:00:00

Answer: A

Question 46

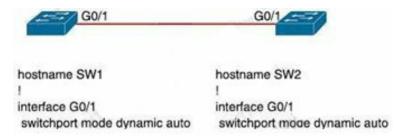
Which Cisco DNA center application is responsible for group-based access control permissions?

- A. Design
- B. Provision
- C. Assurance
- D. Policy

Answer: D

Question 47

Refer to the exhibit.



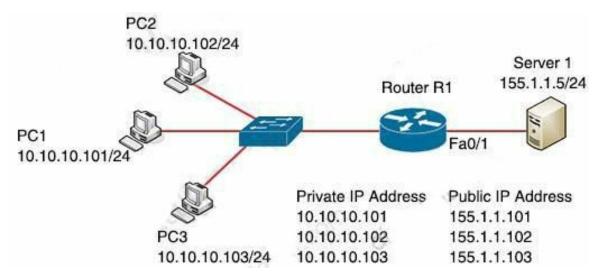
An engineer attempts to configure a trunk between switch SW1 and switch SW2 using DTP, but the trunk does not form. Which command should the engineer apply to switch SW2 to resolve this issue?

- A. switchport mode access
- B. switchport nonegotiate
- C. no switchport
- D. switchport mode dynamic desirable

Answer: D

Question 48

Refer to the exhibit.



Which set of commands on router R1 allow deterministic translation of private hosts PC1, PC2, and PC3 to addresses in the public space?

Option A

RouterR1(config)#int f0/0

RouterR1(config)#ip nat inside

RouterR1(config-if)#exit

RouterR1(config)#int f0/1

RouterR1(config)#ip nat outside

RouterR1(config-if)#exit

RouterR1(config-if)#access-list 1 10.10.10.0 0.0.0.255

RouterR1(config)#ip nat pool POOL 155.1.1.101 155.1.1.103 netmask 255.255.255.0

RouterR1(config)#ip nat inside source list 1 pool POOL

Option B

RouterR1(config)#int f0/0

RouterR1(config)#ip nat outside

RouterR1(config-if)#exit

RouterR1(config)#int f0/1

RouterR1(config)#ip nat inside

RouterR1(config-if)#exit

RouterR1(config)#ip nat inside source static 10.10.10.101

155.1.1.101

RouterR1(config)#ip nat inside source static 10.10.10.102

155.1.1.102

RouterR1(config)#ip nat inside source static 10.10.10.103 155.1.1.103

Option C

RouterR1(config)#int f0/0

RouterR1(config)#ip nat inside

RouterR1(config-if)#exit

RouterR1(config)#int f0/1

RouterR1(config)#ip nat outside

RouterR1(config-if)#exit

RouterR1(config)#ip nat inside source static 10.10.10.101

155.1.1.101

RouterR1(config)#ip nat inside source static 10.10.10.102

155.1.1.102

RouterR1(config)#ip nat inside source static 10.10.10.103

155.1.1.103

Option D

RouterR1(config)#int f0/0

RouterR1(config)#ip nat inside

RouterR1(config-if)#exit

RouterR1(config)#int f0/1

RouterR1(config)#ip nat outside

RouterR1(config-if)#exit

RouterR1(config-if)#access-list 1 10.10.10.0 0.0.0.255

RouterR1(config)#ip nat inside source list 1 interface f0/1 overload

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

Answer: C

Question 49

A client device roams between wireless LAN controllers that are mobility peers. Both controllers have dynamic interface on the same client VLAN. Which type of roam is described?

- A. intra-VLAN
- B. intra-controller
- C. inter-controller
- D. inter-subnet

Answer: C

Question 50

Which line must be added in the Python function to return the JSON object {—cat_9k || : || FXS193202SE ||)?

```
import json

def get_data():

test_json = """

{
    "response": [{
        "managementipAddress": "10.10.2.253",
        "memorySize": "3398345152",
        "serialNumber": "FXS1932Q2SE",
        "softwareVersion": "16.3.2",
        "hostname": "cat_9k"
    }],
    "version": "1.0"
}

""".
```

- A. return (json.dumps({d[_hostname']: d[_serialNumber'] for d in json.loads(test_json)[_response']}))
- B. return (json.loads({for d in json.dumps(test_json)[_response']: d[_hostname']: d[_serialNumber']}))
- C. return (json.loads({d[_hostname']: d[_serialNumber'] for d in json.dumps(test_json)[_response']}))
- D. return (json.dumps({for d in json.loads(test_json)[_response']:

d[_hostname']: d[_serialNumber']}))

Answer: D

Question 51

Which two operational models enable an AP to scan one or more wireless channels for rouge access points and at the same time provide wireless services to clients? (Choose two)

- A. Sniffer
- B. Rouge detector
- C. Local
- D. FlexConnect
- E. Monitor

Answer: C D

Question 52

Refer to the exhibit.

R2#show standby FastEthernet1/0 - Group 50 State is Active 2 state changes. last state change 00:00:58 Virtual IP address is 10.10.1.1 Active virtual MAC address is 0000.0c07.ac32 (MAC In Use) Local virtual MAC address is 0000.0c07.ac32 (v1 default) Hello time 3 sec, hold time 10 sec Next hello sent in 0.704 secs Preemption enabled, delay reload 90 secs Active router is local Standby router is unknown Priority 200 (configured 200) Track interface FastEthernet0/0 state Up decrement 20 Group name is "hsrp-Fa1/0-50" (default) %IP-4-DUPADDR: Duplicate address 10.10.1.1 on FastEthernet1/0, sourced by 0000.0c07.ac28

An engineer configures a new HSRP group. While reviewing the HSRP

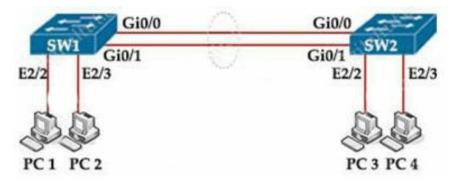
status, the engineer sees the logging message generated on R2. Which is the cause of the message?

- A. A PC is on the network using the IP address 10.10.1.1
- B. The HSRP configuration has caused a spanning-tree loop
- C. The HSRP configuration has caused a routing loop
- D. The same virtual IP address has been configured for two HSRP groups

Answer: D

Question 53

Refer to the exhibit.



- *Aug 12 02:22:23.233: %LINK-3-UPDOWN: Interface Port-channel10, changed state to down
- *Aug 12 02:22:24.236: %LINEPROTO-5-UPDOWN: Line protocol on Interface Port-channel10,changed state to down
- *Aug 12 02:22:27.237: %ETC-5-L3DONTBNDL2: Gi0/1 suspended: LACP currently not enabled on the remote port
- *Aug 12 02:22:29.233: %ETC-5-L3DONTBNDL2: Gi0/0 suspended: LACP currently not enabled on the remote port

A network engineer troubleshoots an issue with the port channel between SW1 and SW2. Which command resolves the issue?

- A. SW1(config-if)#channel-group 10 mode active
- B. SW1(config-if)#channel-group 10 mode desirable
- C. SW2(config-if)#channel-group 10 mode on
- D. SW2(config-if)#switchport mode trunk

Answer: A

Question 54

Which new enhancement was implemented in Wi-Fi 6?

- A. Wi-Fi Protected Access 3
- B. 4096 Quadrature Amplitude Modulation Mode
- C. Uplink and Downlink Orthogonal Frequency Division Multiple Access
- D. Channel bonding

Answer: C

Question 55

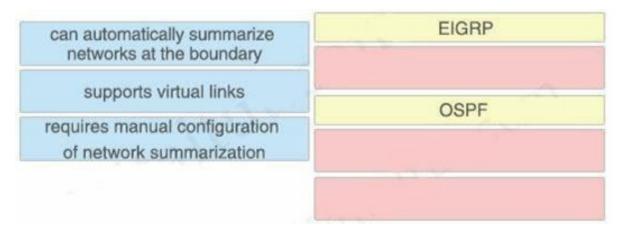
How is MSDP used to interconnect multiple PIM-SM domains?

- A. MSDP depends on BGP or multiprotocol BGP for interdomain operation
- B. MSDP allows a rendezvous point to dynamically discover active sources outside of its domain
- C. MSDP SA request messages are used to request a list of active sources for a specific group
- D. MSDP messages are used to advertise active sources in a domain

Answer: D

Question 56

Drag and drop the characteristics from the left onto the routing protocols they describe on the right.



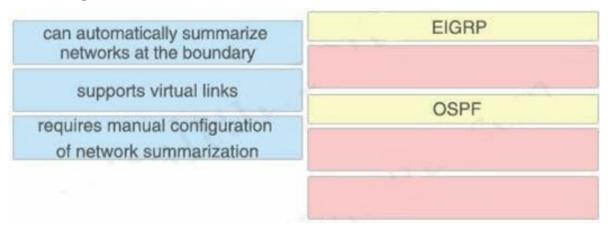
Answer:

EIGRP

- + can automatically summarize networks at the boundary OSPF
- + supports virtual links
- + requires manual configuration of network summarization

Question 57

Drag and drop the characteristics from the left onto the protocols they apply to on the right.



Answer:

OSPF

- + uses Dijkstra's Shortest Path First algorithm
- + uses an election process

EIGRP

- + uses Diffused Update Algorithm
- + uses bandwidth, delay, reliability and load for routing metric

Question 58

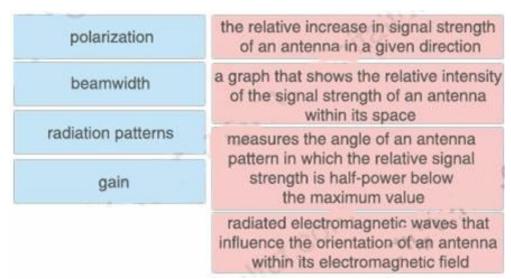
How is 802.11 traffic handled in a fabric-enabled SSID?

- A. converted by the AP into 802.3 and encapsulated into a VLAN
- B. centrally switched back to WLC where the user traffic is mapped to a VXLAN on the WLC
- C. centrally switched back to WLC where the user traffic is mapped to a VLAN on the WLC
- D. converted by the AP into 802.3 and encapsulated into VXLAN

Answer: D

Question 59

Drag and drop the wireless elements on the left to their definitions on the right.



Answer:

+ the relative increase in signal strength of an antenna in a given direction: gain

+ a graph that shows the relative intensity of the signal strength of an antenna within its

space: radiation patterns

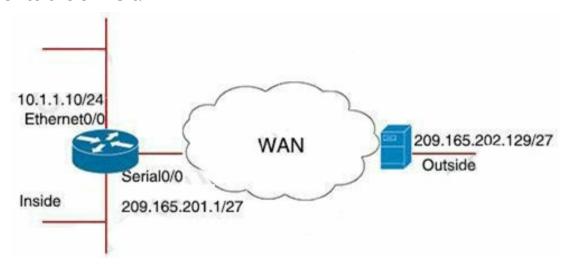
+ measures the angle of an antenna pattern in which the relative signal strength is half-power

below the maximum value: beamwidth

+ radiated electromagnetic waves that influence the orientation of an antenna within its

electromagnetic field: polarization

Question 60



```
R1
Interface Ethernet0/0
Ip address 10.1.1.10 255.255.255.0
Ip nat inside
!
Interface Serial0/0
Ip address 209.165.201.1 255.255.255.224
Ip nat outside
!
Ip nat pool Busi 209.165.201.1 209.165.201.2 netmask 255.255.252
Ip nat inside source list 1 pool Busi
```

```
! access-list permit 10.1.1.0 0.0.0.255 ! R1#show ip nat statistics
Total active translations: 1 (0 static, 1 dynamic, 0 extended)
Outside Interfaces:
Inside Interfaces:
Ethernet0/0
Hits: 119 Misses: 1
Expired translations: 0
Dynamic mappings:
-- Inside Source
access-list 1 pool Busi refcount 1
pool fred: netmask 255.255.255.252
start 209.165.201.1 end 209.165.201.2
type generic, total addresses 2, allocated 1 (50%), misses 0
```

A network engineer configures NAT on R1 and enters the show command to verify the configuration. What does the output confirm?

- A. R1 is configured with NAT overload parameters
- B. The first packet triggered NAT to add on entry to NAT table
- C. A Telnet from 160.1.1.1 to 10.1.1.10 has been initiated
- D. R1 to configured with PAT overload parameters

Answer: B

Question 61

Which congestion queuing method on Cisco IOS based routers uses four static queues?

- A. low latency
- B. custom
- C. weighted fair
- D. Priority

Answer: D

Question 62

What does the Cisco DNA REST response indicate?

```
"response": [
    "family": "Routers",
    "interfaceCount": "12",
    "lineCardCount": "9",
    "platformId": "ASR1001-X",
    "reachabilityFailureReason":"",
    "reachabilityStatus": "Reachable",
    "hostname": "RouterASR-1",
    "macAddress": "00:c8:8b:80:bb:00",
},
    "family": "Switches and Hubs",
    "interfaceCount": "41".
    "lineCardCount": "2",
    "platformld": "C9300-24UX",
    "reachabilityFailureReason": "",
    "reachabilityStatus": "Authentication Failed",
    "hostname": "cat9000-1",
    "macAddress": "f8:7b:20:67:62:80",
    "family": "Switches and Hubs",
    "interfaceCount": "59",
    "lineCardCount: "2".
    "platformid": "WS-C3850-48U-E".
    "reachabilityFailureReason": "",
    "reachabilityStatus": "Unreachable"
    "hostname": "cat3850-1"
    "macAddress": "cc:d8:c1:15:d2:80",
"version": "1.0"
```

- A. Cisco DNA Center has the incorrect credentials for cat9000-1
- B. Cisco DNA Center is unable to communicate with cat9000-1
- C. Cisco DNA Center has the incorrect credentials for RouterASR-1
- D. Cisco DNA Center has the incorrect credentials for cat3850-1

Answer: A

Question 63

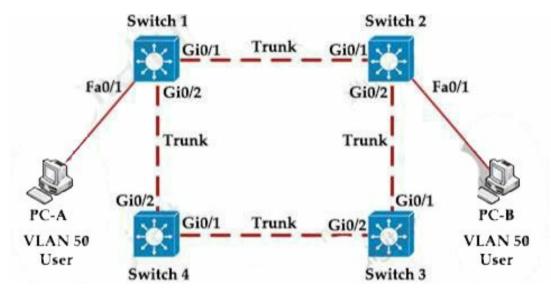
Which AP mode allows an engineer to scan configured channels for rogue access points?

- A. local
- B. sniffer
- C. bridge
- D. monitor

Answer: D

Question 64

Where is radio resource management performed in a Cisco SD-access wireless solution?



- A. control plane node
- B. DNA Center
- C. Cisco CMX
- D. wireless controller

Answer: D

Question 65

Refer to the exhibit.

Rapid PVST+ is enabled on all switches. Which command set must be configured on Switch1 to achieve the following results on port fa0/1?

- + When a device is connected, the port transitions immediately to a forwarding state
- + The interface should not send or receive BPDUs.
- + If a BPDU is received, it continues operating normally.

A.

Switch1(config)# interface f0/1 Switch1(config-if)# spanning-tree portfast Switch1(config-if)# spanning-tree bpduguard enable

В.

Switch1(config)# spanning-tree portfast bpduguard default Switch1(config)# interface f0/1 Switch1(config-if)# spanning-tree portfast

C.

Switch1(config)#interface f0/1 Switch1(config-if)# spanning-tree portfast

D.

Switch1(config)#spanning-tree portfast bpdufilter default Switch1(config)# interface f0/1 Switch1(config-if)# spanning-tree portfast

Answer: D

Question 66

Refer to the exhibit.

import ncclient

```
with ncclient.manager.connect(host='192.168.1.1', port=830, username='root', password='test123!', 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 NETCONF server returns to the NETCONF client, to only the interface's configuration?

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

Answer: A

Question 67

A network engineer configures BGP between R1 and R2. Both routers use BGP peer group CORP and are set up to use MD5 authentication. This message is logged to the console of router R1:

```
*Jun 5 33:34:33.033: %TCP-6-BADAUTH: Invalid MD5 digest from 10.10.10.1 (29832) to 10.120.10.1 (179) tableid -0
```

Which two configurations allow a peering session to form between R1 and R2? (Choose two)

A.

R2(config-router)#neighbor 10.10.10.1 peer-group CORP

R2(config-router)#neighbor CORP password Cisco

В.

R2(config-router)#neighbor 10.10.10.1 peer-group CORP R2(Config-router)#neighbor PEER password Cisco

C.

R1(config-router)#neighbor 10.10.10.1 peer-group CORP R1(config-router)#neighbor CORP password Cisco

D.

R1(config-router)#neighbor 10.120.10.1 peer-group CORP R1(config-router)#neighbor CORP password Cisco

E.

R2(config-router)#neighbor 10.120.10.1 peer-group CORP R2(config-router)#neighbor CORP password Cisco

Answer: C E

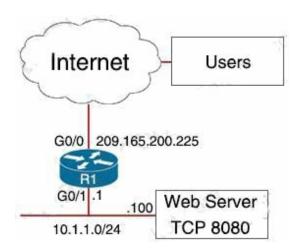
Question 68

Which device makes the decision for a wireless client to roam?

- A. wireless client
- B. access point
- C. wireless LAN controller
- D. WCS location server

Answer: A

Question 69



External users require HTTP connectivity to an internal company web server that is listening on TCP port 8080. Which command set accomplishes this requirement?

Option A	Option B
interface G0/0	interface G0/0
ip address 209.165.200.225	ip address 209.165.200.225
255.255.255.224 ip nat inside	255.256.255.224 ip nat inside
	interface G0/1
	ip address 10.1.1.1
	255.255.255.0 ip nat outside
	ip nat inside source static tep
	209.165.200.225 80 10.1.1.100 8080
Option C	Option D
interface G0/0	interface G0/0
ip address 209.165.200.225	ip address 209.165.200.225
255.255.255.224 ip nat inside	255.255.255.224 ip nat outside
interface G0/1	interface G0/1
ip address 10.1.1.1	ip address 10.1.1.1
255.255.255.0 <u>ip nat</u> outside	255.255.255.0 ip nat inside
ip nat inside source static tep 10.1.1.1 8080	ip nat inside source static tep
209.166.200.225 80	10.1.1.100 8080 interface G0/0 80
Option E	
interface G0/0	
ip address 209.165.200.225	
255.255.255.224 <u>ip nat</u> outside	
interface G0/1	
ip address 10.1.1.1 255.255.255.0	

ip nat inside ip nat inside source static tep 209.165.200.225 8080 10.1.1.100 8080

- A. Option A
- B. Option B
- C. Option C
- D. Option D
- E. Option E

Answer: D

Question 70

Which three elements determine Air Time efficiency? (Choose three)

- A. evert-driven RRM
- B. data rate (modulation density) or QAM
- C. channel bandwidth
- D. number of spatial streams and spatial reuse
- E. RF group leader
- F. dynamic channel assignment

Answer: B C D

Question 71

Which features does Cisco EDR use to provide threat detection and response protection?

- A. containment, threat intelligence, and machine learning
- B. firewalling and intrusion prevention
- C. container-based agents
- D. cloud analysis and endpoint firewall controls

Answer: A

Question 72

Refer to the exhibit.

```
def get_credentials():
    creds={'username':'cisco','password':'c339348dc30e3fbig3kjr93godke333'}
    return(creds.get('username'))
    print(get_credentials())
```

What is the output of this code?

A. username Cisco

- B. get_credentials
- C. username
- D. cisco

Answer: D

Question 73

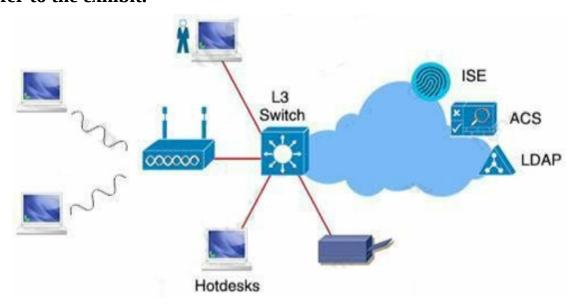
Which two threats does AMP4E have the ability to block? (Choose two)

- A. DDoS
- B. ransomware
- C. SQL injection
- D. Microsoft Word macro attack
- E. email phishing

Answer: B D

Question 74

Refer to the exhibit.



Which single security feature is recommended to provide Network Access

Control in the enterprise?

- A. 802.1X
- B. MAB
- C. WebAuth
- D. port security sticky MAC

Answer: A

Question 75

Refer to the exhibit.

```
%OSPF-5-ADJCHG: Process 1, Nbr 10.0.0.2 on FastEthernet0/0 from FULL to DOWN,
Neighbor Down: Interface down or detached
%OSPF-6-AREACHG: 10.0.0.1/32 changed from area 0 to area 1
%OSPF-4-ERRRCV: Received invalid packet: mismatch area ID,
from backbone area must be virtual-link but not found from
10.0.0.2, FastEthernet0/0
```

What is the cause of the log messages?

- A. OSPF area change
- B. hello packet mismatch
- C. MTU mismatch
- D. IP address mismatch

Answer: A

Question 76

What are two benefits of virtual switching when compared to hardware switching? (Choosetwo)

- A. increased MTU size
- B. hardware independence
- C. VM-level isolation
- D. increased flexibility

E. extended 802.1Q VLAN range

Answer: C D

Question 77

What are two characteristics of VXLAN? (Choose two)

- A. It uses VTEPs to encapsulate and decapsulate frames.
- B. It has a 12-bit network identifier
- C. It extends Layer 2 and Layer 3 overlay networks over a Layer 2 underlay.
- D. It lacks support for host mobility
- E. It allows for up to 16 million VXLAN segments

Answer: A E

Question 78

Refer to the exhibit.

```
Type escape sequence to abort.
Tracing the route to 10.10.10.1
```

Router# traceroute 10.10.10.1

```
1 10.0.0.1 5 msec 5 msec 5 msec 2 10.5.0.1 15 msec 17 msec 17 msec 3 10.10.10.1 * * *
```

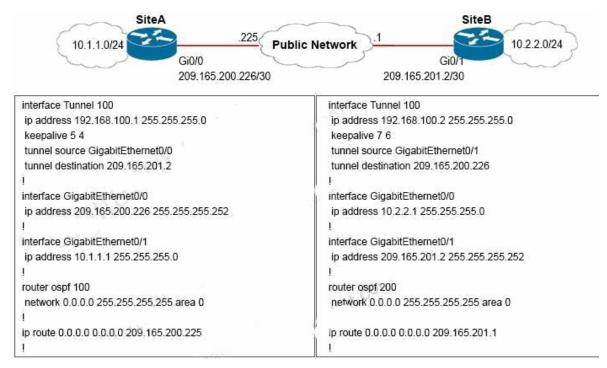
An engineer is troubleshooting a connectivity issue and executes a traceoute. What does the result confirm?

- A. The destination server reported it is too busy
- B. The probe timed out
- C. The destination port is unreachable
- D. The protocol is unreachable

Answer: B

Question 79

Refer to the exhibit.



A network engineer configures a new GRE tunnel and enters the show run command. What does the output verify?

- A. The tunnel keepalive is configured incorrectly because they must match on both sites
- B. The tunnel destination will be known via the tunnel interface
- C. The tunnel will be established and work as expected
- D. The default MTU of the tunnel interface is 1500 byte.

Answer: C

Question 80



An engineer has configured Cisco ISE to assign VLANs to clients based on their method of authentication, but this is not working as expected. Which action will resolve this issue?

- A. require a DHCP address assignment
- B. utilize RADIUS profiling
- C. set a NAC state
- D. enable AAA override

Answer: D

Question 81

What is the function of a VTEP in VXLAN?

- A. provide the routing underlay and overlay for VXLAN headers
- B. dynamically discover the location of end hosts in a VXLAN fabric
- C. encapsulate and de-encapsulate traffic into and out of the VXLAN fabric

D. statically point to end host locations of the VXLAN fabric

Answer: C

Question 82

If the noise floor is -90 dBm and the wireless client is receiving a signal of -75 dBm, what is the SNR?

- A. -165
- B. 83
- C. 15
- D. 1.2

Answer: C

Question 83

Drag and drop the snippets onto the blanks within the code to construct a script that advertises the network prefix 192.168.5.0 session. Not all options are used.

```
<config xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:xc="urn:ietf:params:xml:ns:netconf:base:1.0">
<native xmlns="http://cisco.com/ns/vang/Cisco-IOS-XE-native" xmlns:ios-bgp="http://cisco.com/ns/yang/Cisco-IOS-XE-bgp">
   <ios-bgp:bgp>
       <ios-bgp:address-family>
        <ios-bgp:no-vrf>
            <ios-bgp:ipv4>
                                                                                A 192.168.5.0
             <ios-bgp:af-name>unicast</ios-bgp:af-name>
                                                                                B 255.255.255.0
                <ios-bgp:ipv4-unicast>
                 <ios-bgp:network>
                                                                                       mask
                  <ios-bgp:with-mask>
                                                                                with-mask
                      <ios-bgp: 2 > 3 </ios-bgp:mask>
                                                                                subnet-mask
                     /ios-bgp:with-mask>
                 /ios-bgp:network>
                /ios-bgp:ipv4-unicast>
            </ios-bgp:ipv4>
           /ios-bgp:no-vrf>
       /ios-bgp:address-family>
      <ios-bgp:bgp>
  </router>
 </native>
</config>
```

Answer: 1-A; 2-C;3-B

New ENCOR Questions 2

Question 1

An engineer must create an EEM applet that sends a syslog message in the event a change happens in the network due to trouble with an OSPF process. Which action should the engineer use?

- A. action 1 syslog msg —OSPF ROUTING ERROR |
- B. action 1 syslog send —OSPF ROUTING ERROR |
- C. action 1 syslog pattern —OSPF ROUTING ERROR |
- D. action 1 syslog write —OSPF ROUTING ERROR |

Answer: A

Question 2

Refer to the exhibit.

```
ip nat pool Internet 10.10.10.1 10.10.10.100 netmask 255.255.255.0
ip nat inside source route-map Users pool Internet
!
ip access-list standard Users
   10 permit 192.168.1.0 0.0.0.255
!
route-map Users permit 10
match ip address Users
```

Which action completes the configuration to achieve a dynamic continuous mapped NAT for all users?

- A. Increase the NAT pool size to support 254 usable addresses
- B. Reconfigure the pool to use the 192.168.1.0 address range
- C. Configure a match-host type NAT pool
- D. Configure a one-to-one type NAT pool

Answer: A

Question 3

A customer has 20 stores located throughout a city. Each store has a single Cisco AP managed by a central WLC. The customer wants to gather analytics for users in each store. Which technique supports these requirements?

- A. hyperlocation
- B. angle of arrival
- C. presence
- D. trilateration

Answer: C

Question 4

What is a characteristic of a WLC that is in master controller mode?

- A. The master controller is responsible for load balancing all connecting clients to other controllers.
- B. Configuration on the master controller is executed on all wireless LAN controllers.
- C. All wireless LAN controllers are managed by the master controller.
- D. All new APs that join the WLAN are assigned to the master controller.

Answer: D

Question 5

A customer has a pair of Cisco 5520 WLCs set up in an SSO cluster to manage all APs. Guest traffic is anchored to a Cisco 3504 WLC located in a DM2. Which action is needed to ensure that the EoIP tunnel remains in an UP state in the event of failover on the SSO cluster?

- A. Configure back-to-back connectivity on the RP ports
- B. Use the mobility MAC when the mobility peer is configured
- C. Enable default gateway reachability check
- D. Use the same mobility domain on all WLCs

Answer: B

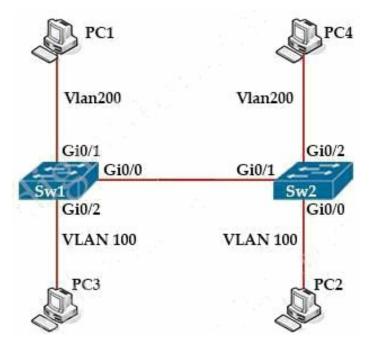
Question 6

In a Cisco DNA Center Plug and Play environment, why would a device be labeled unclaimed?

- A. The device has not been assigned a workflow.
- B. The device could not be added to the fabric.
- C. The device had an error and could not be provisioned.
- D. The device is from a third-party vendor.

Answer: A

Question 7



SW1#show interfaces gigabitethernet0/0 switchport

Name:Gi0/0

Switchport: Enabled

Administrative Mode: dynamic auto

Operational Mode: trunk

Administrative Trunking Encapsulation: dot1q Operational Trunking Encapsulation: dot1q

Negotiation of Trunking: Off Access Mode VLAN: 1 (default)

Trunking Native Mode VLAN: 99 (NATIVE)

Administrtive Native VLAN tagging: enabled

Voice VLAN: none ---output omitted---

SW2#show interfaces gigabitethernet0/1 switchport

Name:Gi0/1

Switchport: Enabled

Administrative Mode: dynamic auto

Operational Mode: trunk

Administrative Trunking Encapsulation: negotiate

Operational Trunking Encapsulation: dot1q

Negotiation of Trunking: On Access Mode VLAN: 1 (default)

Trunking Native Mode VLAN: 99 (NATIVE)

Administrtive Native VLAN tagging: enabled

Voice VLAN: none ---output omitted---

The connection between SW1 and SW2 is not operational. Which two actions resolve the issue? (Choose two)

- A. configure switchport mode access on SW2
- B. configure switchport nonegotiate on SW2
- C. configure switchport mode trunk on SW2
- D. configure switchport mode dynamic desirable on SW2
- E. configure no switchport nonegotiate on SW1

Answer: D E

Question 8

Refer to the exhibit.

```
R1#show access-list 100
Extended IP access list 100
10 deny ip any any
20 permit ip 192.168.0.0 0.0.255.255 any
30 permit ip any 192.168.0.0 0.0.255.255
```

Option A	Option B
R1(config)#no access-list 100 deny	R1(config)#ip access-list extended 100
ip any any	R1(config-ext-nacl)#5 permit ip any any
Option C	Option D
R1(config)#ip access-list extended	R1(config)#no access-list 100 seq 10 R1(config-
100 R1(config-ext-nacl)#no 10	ext-nacl)#access-list 100 seq 40 deny ip any any

Extended access-list 100 is configured on interface GigabitEthernet0/0 in an inbound direction, but it does not have the expected behavior of allowing only packets to or from 192.168.0.0/16. Which command set properly configures the access list?

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

Answer: C

Question 9

How do cloud deployments differ from on-prem deployments?

- A. Cloud deployments require longer implementation times than onpremises deployments
- B. Cloud deployments are more customizable than on-premises deployments.
- C. Cloud deployments have lower upfront costs than on-premises deployments.
- D. Cloud deployments require less frequent upgrades than on-premises

deployments.

Answer: C

Question 10

Refer to the exhibit.

```
#!/usr/bin/env python
import ison
import sys
test_json="""
 "type: "Cisco ASR 1001-x Router",
 "lastUpdateTime": 144393848493,
  "macAddress": "00:c8:8b:e3:24:22",
 "serialNumber": "FXS1932Q1SE"
}
print(json.load(test_json))
Output
$ python printjson.py
Traceback (most recent call last):
File "question_3.py", line 15, in <module>
Print(json.load(test_json))
File
"/System/Library/Framework/Python.framework/Versions/2.7/lib/python2.7/json/_init_ py",
line 286 in load return loads (fp.read(),
AttributeError: str' object has no attribute 'read'
```

An engineer runs the sample code, and the terminal returns this output. Which change to the sample code corrects this issue?

- A. Change the JSON method from load() to loads().
- B. Enclose null in the test_json string in double quotes
- C. Use a single set of double quotes and condense test_json to a single line
- D. Call the read() method explicitly on the test_json string

Answer: A

Question 11

Refer to the exhibit.

```
Switch2#
02:23:22: %PM-4-ERR DISABLE: channel-misconfig error
detected on Fa0/23, putting Fa0/23 in err-disable state
02:23:22: %PM-4-ERR DISABLE: channel-misconfig error
detected on Fa0/24, putting Fa0/24 in err-disable state
Switch2#
Switch1# show etherchannel summary
--output omitted--
Group Port-channel Protocol Ports
-----
    Po2 (SD)
                 LACP Fa1/0/23(D)
Switch2# show etherchannel summary
--output omitted--
Group Port-channel Protocol Ports
-----
 Pol(SD)

    Fa0/23(D) Fa0/24(D)
```

An engineer is configuring an EtherChannel between Switch1 and Switch2 and notices the console message on Switch2. Based on the output, which action resolves this issue?

- A. Configure the same port channel interface number on both switches
- B. Configure less member ports on Switch2
- C. Configure more member ports on Switch1
- D. Configure the same EtherChannel protocol on both switches

Answer: D

Question 12

An engineer is concerned with the deployment of a new application that is sensitive to interpacket delay variance. Which command configures the router to be the destination of jitter measurements?

- A. Router(config)# ip sla responder udp-connect 172.29.139.134 5000
- B. Router(config)# ip sla responder tcp-connect 172.29.139.134 5000
- C. Router(config)# ip sla responder udp-echo 172.29.139.134 5000
- D. Router(config)# ip sla responder tcp-echo 172.29.139.134 5000

Answer: C

Question 13

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

- A. VM configuration file
- B. operating system
- C. disk
- D. applications

Answer: C

Question 14

Which function is handled by vManage in the Cisco SD-WAN fabric?

- A. Establishes IPsec tunnels with nodes
- B. Distributes policies that govern data forwarding
- C. Performs remote software upgrades for WAN Edge, vSmart and vBond
- D. Establishes BFD sessions to test liveliness of links and nodes

Answer: C

Question 15

```
switch1(config)# interface GigabitEthernet 1/1
switch1(config-if)# switchport mode trunk
switch1(config-if)# switchport trunk allowed vlan 10,20,30,40,50,60,70-90
switch1(config)# exit
switch1(config)# monitor session 1 source vlan 10
switch1(config)# monitor session 1 destination remote vlan 70

switch2(config)# interface GigabitEthernet 1/1
switch2(config-if)# switchport mode trunk
switch2(config-if)# switchport trunk allowed vlan 10,20,30,40,50,60,80-90
switch2(config)# exit
switch2(config)# monitor session 2 source remote vlan 70 switch2(config)#
monitor session 2 destination interface GigabitEthernet1/1
```

A network administrator configured RSPAN to troubleshoot an issue between switch1 and switch2. The switches are connected using interface GigabitEthernet 1/1. An external packet capture device is connected to switch2 interface GigabitEthernet1/2. Which two commands must be added to complete this configuration? (Choose two)

Option A	Option B
switch1(config)# interface GigabitEthernet 1/1 switch1(config-if)# switchport mode access switch1(config-if)# switchport access vlan 10	switch2(config-if)# switchport trunk allowed vlan 10,20,30,40,50,60,70-80
switch2(config)# interface GigabitEthernet 1/1 switch2(config-if)# switchport mode access switch2(config-if)# switchport access vlan 10	
Option C	Option D
switch2(config)# monitor session 1 source remote vlan 70 switch2(config)# monitor session 1 destination interface GigabitEthernet1/1	switch2(config)# monitor session 2 destination vlan 10
Option E	
switch2(config)# monitor session 1 source remote vlan 70 switch2(config)# monitor session 1 destination interface GigabitEthernet1/2	

- A. Option A
- B. Option B
- C. Option C
- D. Option D
- E. Option E

Answer: B E

Question 16

```
event snmp oid 1.3.6.1.4.1.9.9.109.1.1.1.1.3 get-type next entry-op gt entry-val 80 poll-interval 5
!
action 1.0 cli command —enable|
action 2.0 syslog msg —high cpul
action 3.0 cli command —term length 0|
```

An engineer must create a script that appends the output of the show process cpu sorted

command to a file. Which action completes the configuration?

- A. action 4.0 syslog command —show process cpu sorted | append flash:high-cpu-file ${\mathbb I}$
- B. action 4.0 publish-event —show process cpu sorted | append flash:high-cpu-file ||
- C. action 4.0 ens-event —show process cpu sorted | append flash:high-cpu-file $\|$
- D. action 4.0 cli command —show process cpu sorted | append flash:high-cpu-file ||

Answer: D

Question 17

Refer to the exhibit.

```
>>> netconf_data["GigabitEthernet"][0]["enabled"]
u'false'
>>> netconf_data["GigabitEthernet"][1]["enabled"]
u'true'
>>> netconf_data["GigabitEthernet"][2]["enabled"]
u'false'
>>> netconf_data["GigabitEthernet"][2]["description"]
u'my description'
```

Which Python code snippet prints the descriptions of disabled interfaces only?

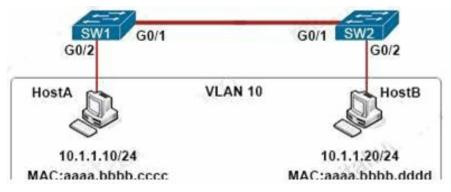
Option A	Option B
<pre>for interface in netconf_data["GigabitEthe print(interface["enabled"]) print(interface["description"])</pre>	<pre>for interface in netconf_data["GigabitEth if interface["disabled"] != 'true': print(interface["description"])</pre>
Option C	Option D
<pre>for interface in netconf_data["GigabitEth if interface["enabled"] != 'true': print(interface["description"])</pre>	<pre>for interface in netconf_data["GigabitEth if interface["enabled"] != 'false': print(interface["description"])</pre>

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

Answer: C

Question 18

Refer to the exhibit.



An engineer must deny HTTP traffic from host A to host B while allowing all other communication between the hosts. Which command set accomplishes this task?

Option A

SW1(config)# ip access-list extended DENY- 10.1.1.10 host 10.1.1.20 eq www HTTP

SW1(config-ext-nacl)#deny tcp host 10.1.1.10 host 10.1.1.20 eq www SW1(config)# ip access-list extended MATCH ALL

SW1(config-ext-nacl)#permit ip any any

SW1(config)# vlan access-map HOST-A-B 10

SW1(config-access-map)# match ip address DENY-HTTP

SW1(config-access-map)# action drop

Option B

SW1(config)# ip access-list extended DENY-

SW1(config-ext-nacl)#permit tcp host

SW1(config)# ip access-list extended MATCH ALL

SW1(config-ext-nacl)# permit ip any any

SW1(config)# vlan access-map HOST-A-B 10 SW1(config-access-map)# match ip address DENY-HTTP

SW1(config-access-map)# action drop SW1(config)# vlan access-map HOST-A-B 20 SW1(config-access-map)# match ip address MATCH ALL

SW1(config-access-map)# action forward

SW1(config)# vlan filter HOST-A-B vlan 10

Option C

SW1(config)# mac access-list extended HOST-A-B

SW1(config-ext-mac)# permit host aaaa.bbbb.cccc aaaa.bbbb.dddd

SW1(config)# ip access-list extended DENY- SW1(config)# ip access-list extended DENY-HTTP

SW1(config-ext-nacl)#permit tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)# vlan access-map DROP-MAC

SW1(config-access-map)# match mac

Option D

SW1(config)# mac access-list extended HOST-A-B

SW1(config-ext-nacl)# permit host aaaa.bbbb.cccc aaaa.bbbb.dddd

HTTP

SW1(config-ext-nacl)#deny tcp host 10.1.1.10 host 10.1.1.20 eq www

SW1(config)#vlan access-map DROP-

MAC 10

SW1(config-access-map)# match mac address

address HOST-A-B

SW1(config-access-map)# action forward SW1(config)# vlan access-map HOST-A-B

SW1(config-access-map)# match ip address DENY-HTTP

SW1(config-access-map)# action drop

SW1(config)# vlan filter HOST-A-B vlan 10

HOST-A-B

SW1(config-access-map)# action drop SW1(config)# vlan access-map HOST-A-B 20 SW1(config-access-map)# match ip address DENY-HTTP

SW1(config-access-map)# action drop

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

Answer: B

Question 19

Which of the following statements regarding BFD are correct? (Choose two)

- A. BFD is supported by OSPF, EIGRP, BGP, and IS-IS.
- B. BFD detects link failures in less than one second.
- C. BFD can bypass a failed peer without relying on a routing protocol.
- D. BFD creates one session per routing protocol per interface.
- E. BFD is supported only on physical interfaces.
- F. BFD consumes more CPU resources than routing protocol timers do.

Answer: A B

Question 20

What is an advantage of using BFD?

- A. It local link failure at layer 1 and updates routing table
- B. It detects local link failure at layer 3 and updates routing protocols
- C. It has sub-second failure detection for layer 1 and layer 3 problems.
- D. It has sub-second failure detection for layer 1 and layer 2 problems.

Answer: C

Question 21

An engineer measures the W1-F1 coverage at a customer site. The RSSI values are recorded as follows:

Location A: -72 dBm Location B: -75 dBm Location C: -85 dBm Location D: -80 dBm

Which two statements does the engineer use to explain these values to the customer? (Choose two)

- A. The signal strength at location C is too weak to support web surfing
- B. Location D has the strongest RF signal strength
- C. The RF signal strength at location B is 50% weaker than location A
- D. The signal strength at location B is 10 dB better than location C
- E. The RF signal strength at location C is 10 times stronger than location B

Answer: C D

Question 22

Which three resources must the hypervisor make available to the virtual machines? (Choose three)

- A. memory
- B. IP address
- C. processor
- D. bandwidth
- E. secure access
- F. storage

Answer: A C F

Question 23

Which unit is used to express the signal-to-noise ratio?

- A. dBm
- B. dB
- C. amp
- D. mW

Answer: B

Question 24

Refer to the exhibit.



An engineer is investigating why guest users are able to access other guest devices when the users are connected to the customer guest WLAN. What action resolves this issue?

- A. implement P2P blocking
- B. implement MFP client protection
- C. implement split tunneling

D. implement Wi-Fi direct policy

Answer: A

Question 25

Which function does a fabric AP perform in a Cisco SD-Access deployment?

- A. It manages wireless clients' membership information in the fabric
- B. It connects wireless clients to the fabric.
- C. It updates wireless clients' locations in the fabric
- D. It configures security policies down to wireless clients in the fabric

Answer: B

Question 26

Which design principle should be followed in a Cisco SD-Access wireless network deployment?

- A. The WLC is part of the fabric overlay
- B. The WLC is part of the fabric underlay
- C. The WLC is connected outside of the fabric
- D. The access point is connected outside of the fabric

Answer: A

Question 27

Option A login = dnac_login(dnac["host"], dnac["username"], dnac["password"]) network_device_list(dnac, login) for item in dnac_devices: print(dnac_devices.item) Option B login = dnac_login(dnac["host"], dnac["username"], dnac["password"]) network_device_list(dnac, login) print(dnac_devices) Option C network_device_list(dnac["host"], dnac["username"], dnac["password"]) login = dnac_login(dnac) print(dnac_devices) Option D login = dnac_login(dnac["host"], dnac["username"], dnac["password"]) network_device_list(dnac, login) for item in dnac_devices: print(dnac_devices.item)

Which code results in the working python script displaying a list of network devices from the Cisco DNA center?

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

Answer: B

Question 28

An engineer is configuring a GRE tunnel interface in the default mode. The engineer has assigned an IPv4 address on the tunnel and sourced the tunnel from an Ethernet interface. Which option also is required on the tunnel interface before it is operational?

- A. (config-if)#tunnel destination {ip address}
- B. (config-if)#keepalive {seconds retries}
- C. (config-if)#ip mtu {value}
- D. (config-if)#ip tcp adjust-mss {value}

Answer: A

New ENCOR Questions 3

Question 1

Drag and drop the solutions that comprise Cisco Cyber Threat Defense from the left onto the objectives they accomplish on the right.

StealthWatch	detects suspicious web activity
Web Security Appliance	analyzes network behavior and detects anomalies
Identity Services Engine	uses pxGrid to remediate security threats

Answer:

- + detects suspicious web activity: Web Security Appliance
- + analyzes network behavior and detects anomalies: StealthWatch
- + uses pxGrid to remediate security threats: Identity Services Engine

Question 2

What are two characteristics of Cisco SD-Access elements? (Choose two)

- A. Fabric endpoints are connected directly to the border node
- B. The border node is required for communication between fabric and nonfabric devices
- C. The control plane node has the full RLOC-to-EID mapping database
- D. Traffic within the fabric always goes through the control plane node
- E. The border node has the full RLOC-to-EID mapping database

Answer: B C

Question 3

```
Current configuration: 142 bytes 
vrf definition STAFF ! ! ! interface GigabitEthernet1 
vrf forwarding STAFF 
no ip address 
negotiation auto 
no mop enabled 
no mop sysid 
end
```

An engineer must assign an IP address of 192.168.1.1/24 to the GigabitEthemet1 interface. Which two commands must be added to the existing configuration to accomplish this task? (Choose two)

- A. Router(config-vrf)#address-family ipv6
- B. Router(config-if)#ip address 192.168.1.1 255.255.255.0
- C. Router(config-vrf)#ip address 192.168.1.1 255.255.255.0
- D. Router(config-if)#address-family ipv4
- E. Router(config-vrf)#address-family ipv4

Answer: B E

Question 4

What is the data policy in a Cisco SD-WAN deployment?

- A. list of ordered statements that define node configurations and authentication used within the SD-WAN overlay
- B. Set of statements that defines how data is forwarded based on IP packet information and specific VPNs
- C. detailed database mapping several kinds of addresses with their corresponding location
- D. group of services tested to guarantee devices and links liveliness within the SD-WAN overlay

Answer: B

Question 5

Refer to the exhibit.

```
SW2# show etherchannel summary
Flags: D - down P - bundled in port-channel
      I - stand-alone s - suspended
      H - Hot-standby (LACP only)
      R - Layer3 S - Layer2
      U - in use f - failed to allocate aggregator
      M - not in use, minimum links not met
      u - unsuitable for bundling
      w - waiting to be aggregated
      d - default port
Number of channel-groups in use: 1
Number of aggregators: 1
Group Port-channel Protocol Ports
------
1 Pol(SD) PAgP Gi0/0(I) Gi0/1(I)
SW3# show etherchannel summary
Flags: D - down P - bundled in port-channel
      I - stand-alone s - suspended
      H - Hot-standby (LACP only)
      R - Layer3 S - Layer2
      U - in use f - failed to allocate aggregator
      M - not in use, minimum links not met
      u - unsuitable for bundling
      w - waiting to be aggregated
      d - default port
Number of channel-groups in use: 1
Number of aggregators: 1
Group Port-channel Protocol Ports
-----
                  LACP Gi0/0(I) Gi0/1(I)
    Pol(SD)
```

Which action resolves the EtherChannel issue between SW2 and SW3?

- A. Configure switchport mode trunk on SW2
- B. Configure switchport nonegotiate on SW3
- C. Configure channel-group 1 mode desirable on both interfaces
- D. Configure channel-group 5 mode active on both interfaces

Answer: C

Question 6

Refer to the exhibit.

```
No Hellos (Passive interface)
 Supports Link-local Signaling (LLS)
  ! lines omitted for brevity
GigabitEthernet0/1 is up, line protocol is up
  Internet Address 72.16.30.1/24, Area 0, Attached via Network Statement
 Process ID 1, Router ID 72.16.11.29, Network Type BROADCAST, Cost: 1
 Topology-MTID Cost Disabled Shutdown Topology Name
 Transmit Delay is 1 sec, State DR, Priority 1
 Designated Router (ID) 172.16.11.29, Interface address 172.16.30.1
 No backup designated router on this network
 Timer intervals contigured, Hello 10, Dead 40, Wait 40, Retransmit 5
   oob-resync timeout 40
   No Hellos (Passive interface)
 Supports Link-local Signaling (LLS)
  ! lines omitted for brevity
GigabitEthernet0/0 is up, line protocol is up
 Internet Address 72.16.11.29/24, Area 0, Attached via Network Statement
 Process ID 1, Router ID 72.16.11.29, Network Type BROADCAST, Cost: 1
 Topology-MTID Cost Disabled Shutdown
                                                 Topology Name
                   1
                            no
 Transmit Delay is 1 sec, State DROTHER, Priority 1
 Designated Router (ID) 172.16.11.27, Interface address 172.16.11.27
 Backup Designated router (ID) 172.16.11.30, Interface address 172.16.11.30
 Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
   oob-resync timeout 40
   Hello due in 00:00:07
 Supports Link-local Signaling (LLS)
  ! lines omitted for brevity
```

A network engineer configures OSPF and reviews the router configuration. Which interface or interfaces are able to establish OSPF adjacency?

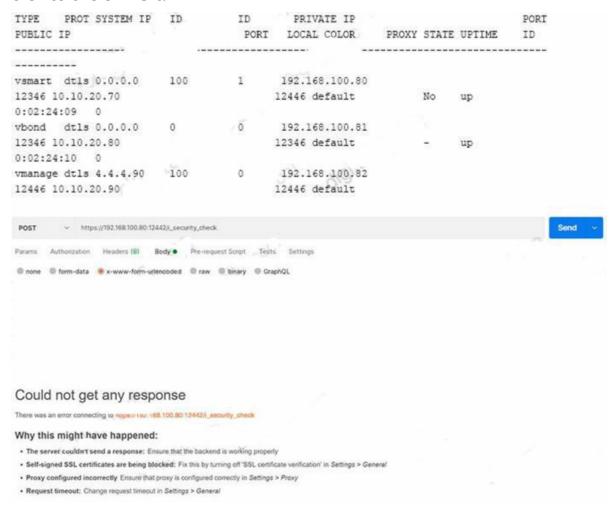
- A. GigabitEthemet0/1 and GigabitEthernet0/1.40
- B. Gigabit Ethernet0/0 and GigabitEthemet0/1
- C. only GigabitEthernet0/0

D. only GigabitEthernet0/1

Answer: C

Question 7

Refer to the exhibit.



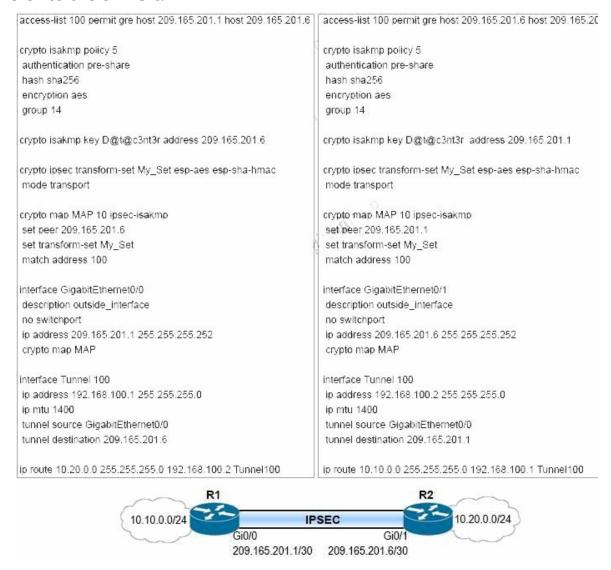
What step resolves the authentication issue?

- A. restart the vsmart host
- B. target 192.168.100.82 in the URI
- C. change the port to 12446
- D. use basic authentication

Answer: B

Question 8

Refer to the exhibit.



A network engineer must simplify the IPsec configuration by enabling IPsec over GRE using IPsec profiles. Which two configuration changes accomplish this? (Choose two)

A. Apply the crypto map to the tunnel interface and change the tunnel mode to tunnel mode ipsec ipv4

- B. Remove all configuration related to crypto map from R1 and R2 and eliminate the ACL 100
- C. Remove the crypto map and modify the ACL to allow traffic between 10.10.0.0/24 to 10.20.0.0/24
- D. Create an IPsec profile, associate the transform-set, and apply the profile to the tunnel interface

Answer: A D

Question 9

Which encryption hashing algorithm does NTP use for authentication?

- A. SSL
- B. AES256
- C. AES128
- D. MD5

Answer: D

Question 10

What is a VPN in a Cisco SD-WAN deployment?

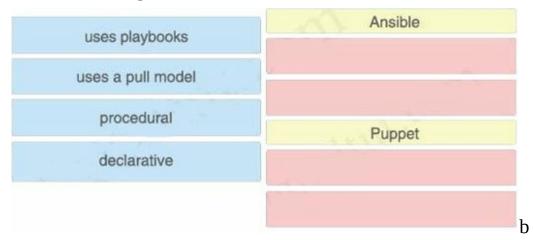
- A. virtual channel used to carry control plane information
- B. attribute to identify a set of services offered in specific places in the SD-WAN fabric
- C. common exchange point between two different services
- D. virtualized environment that provides traffic isolation and segmentation in the SD-WAN fabric

Answer: D

Question 11

Drag and drop the characteristic from the left onto the orchestration tools that

they describe on the right.



Answer:

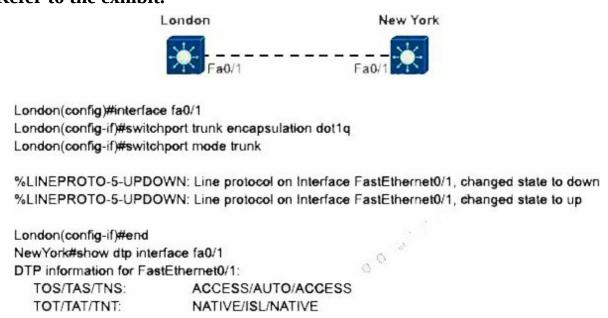
Ansible:

- + uses playbooks
- + prodedural

Puppet:

- + uses a pull model
- + declarative

Question 12



Communication between London and New York is down. Which command set must be applied to resolve this issue?

Option A NewYork(config)#int f0/1 NewYork(config)#switchport nonegotiate NewYork(config)#end NewYork#	Option B NewYork(config)#int f0/1 NewYork(config)#switchport trunk encap dot1q NewYork(config)#end NewYork#
Option C NewYork(config)#int f0/1 NewYork(config)#switchport mode dynamic desirable NewYork(config)#end NewYork#	Option D NewYork(config)#int f0/1 NewYork(config)#switchport mode trunk NewYork(config)#end NewYork#

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

Answer: B

Question 13

What is an emulated machine that has dedicated compute, memory, and storage resources and a fully installed operating system?

- A. host
- B. virtual machine
- C. container
- D. mainframe

Answer: B

Question 14

Which two methods are used to reduce the AP coverage area? (Choose two)

- A. Reduce AP transmit power
- B. Increase minimum mandatory data rate
- C. Reduce channel width from 40 MHz to 20 MHz
- D. Enable Fastlane
- E. Disable 2.4 GHz and use only 5 GHz

Answer: A B

Question 15

Which data is properly formatted with JSON?

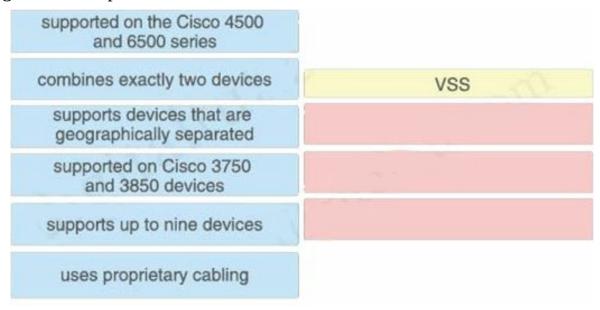
```
Option A
                                            Option B
  "name": "Peter"
                                              "name": Peter,
  "age": "25"
                                             "age": 25,
                                             "likesJson": true,
  "likesJson": true
  "characteristics": ["small", "strong", 18]
                                             "characteristics": ["small", "strong", "18"],
Option C
                              Option D
 "name": "Peter",
                                             "name": "Peter",
 "age": "25",
                                              "age": "25",
 "likesJson": true,
                                             "likesJson": true,
 "characteristics": ["small", "strong", 18],
                                              "characteristics": ["small", "strong", 18]
```

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

Answer: D

Question 16

Drag and drop the descriptions of the VSS technology from the left to the right. Not all options are used.

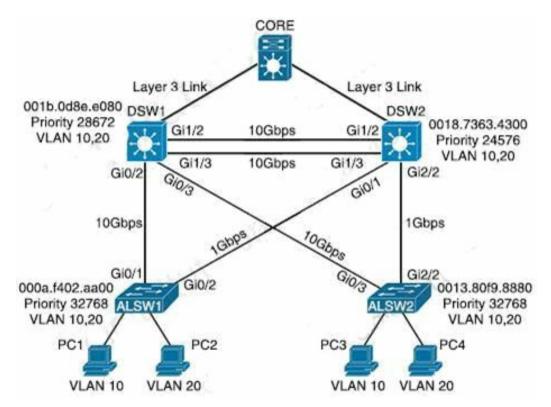


Answer:

VSS:

- + supported on the Cisco 4500 and 6500 series
- + combines exactly two devices
- + supports devices that are geographically separated

Question 17



All switches are configured with the default port priority value. Which two commands ensure that traffic from PC1 is forwarded over Gi1/3 trunk port between DWS1 and DSW2? (Choose two)

- A. DWS1(config-if)#spanning-tree port-priority 0
- B. DSW2(config-if)#spanning-tree port-priority 16
- C. DSW1(config-if)#interface gi1/3
- D. DSW2(config-if)#interface gi1/3
- E. DSW2(config-if)#spanning-tree port-priority 128

Answer: B D

Question 18

In a three-tier hierarchical campus network design, which action is a design best-practice for the core layer?

A. provide QoS prioritization services such as marking, queueing, and classification for critical network traffic

- B. provide advanced network security features such as 802. IX, DHCP snooping, VACLs, and port security
- C. provide redundant Layer 3 point-to-point links between the core devices for more predictable and faster convergence
- D. provide redundant aggregation for access layer devices and first-hop redundancy protocols such as VRRP

Answer: C

Question 19

Which two network problems indicate a need to implement QoS in a campus network? (Choose two)

- A. port flapping
- B. misrouted network packets
- C. excess jitter
- D. bandwidth-related packet loss
- E. duplicate IP addresses

Answer: C D

Question 20

In a Cisco SD-Access solution, what is the role of the Identity Services Engine?

- A. It provides GUI management and abstraction via apps that share context.
- B. It is leveraged for dynamic endpoint to group mapping and policy definition.
- C. It is used to analyze endpoint to app flows and monitor fabric status.
- D. It manages the LISP EID database.

Answer: B

Question 21

A customer has completed the installation of a Wi-Fi 6 greenfield deployment at their new campus. They want to leverage Wi-Fi 6 enhanced speeds on the trusted employee WLAN. To configure the employee WLAN, which two Layer 2 security policies should be used? (Choose two)

- A. WPA (AES)
- B. WPA2 (AES) + WEP
- C. 802.1X
- D. OPEN

Answer: C D

Question 22

Which outcome is achieved with this Python code?

client.connect (ip, port=22,username=usr,password=pswd)
stdin,stdout,stderr = client.exec_command('show ip bgp
192.168.10100
bestpath\n')
print(stdout)

- A. displays the output of the show command in a formatted way
- B. connects to a Cisco device using SSH and exports the routing table information
- C. connects to a Cisco device using Telnet and exports the routing table information
- D. connects to a Cisco device using SSH and exports the BGP table for the prefix

Answer: D

Question 23

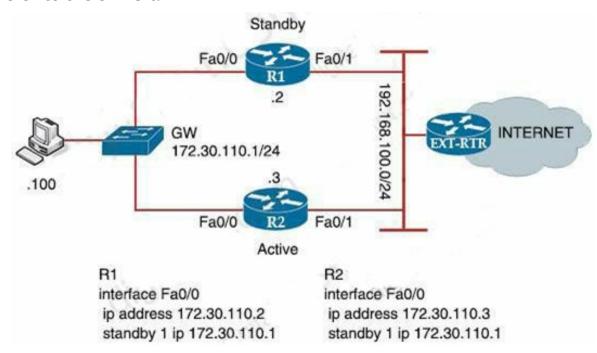
What is YANG used for?

- A. scraping data via CLI
- B. providing a transport for network configuration data between client and server
- C. processing SNMP read-only polls
- D. describing data models

Answer: D

Question 24

Refer to the exhibit.



Which configuration change ensures that R1 is the active gateway whenever it is in a functional state for the 172.30.110.0/24 network?

Option A

R1 standby 1 preempt R2 standby 1 priority 90

Option B

R1

standby 1 preempt

R2

standby 1 priority 100

Option C

R2

standby 1 priority 100 standby 1 preempt

Option D

R2

standby 1 priority 110 standby 1 preempt

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

Answer: A

Question 25

Person#1:
First Name is Johnny
Last Name is Table
Hobbies are:
• Running
• Video games

Person#2
First Name is Billy
Last Name is Smith
Hobbies are:

Napping

Reading

Which JSON syntax is derived from this data?

Option A {_Person': [{_First Name': _Johnny', _Last Name': _Table', _Hobbies': [_Running', _Video games']}, {_First Name': _Billy', _Last Name': _Smith', _Hobbies': [_Napping', _Reading']}]}	Option B {[{_First Name': _Johnny', _Last Name': _Table', _Hobbies': _Running', 'Hobbies': _Video games'}, _{_First Name': _Billy', _Last Name': _Smith', _Hobbies': _Napping', _Hobbies': Reading'}]}
Option C {_Person': [{_First Name':'Johnny', _Last Name': _Table', _Hobbies': _Running', _Video games'}, {_First Name': _Billy',	Option D {[{_First Name': _Johnny', _Last Name': _Table', _Hobbies': [_Running', _Video games']}, {_First Name': _Billy', _Last Name': _Smith', _Hobbies':
_Last Name': _Smith', _Hobbies': _Napping', _Reading'}]}	[_Napping','Reading']}]}

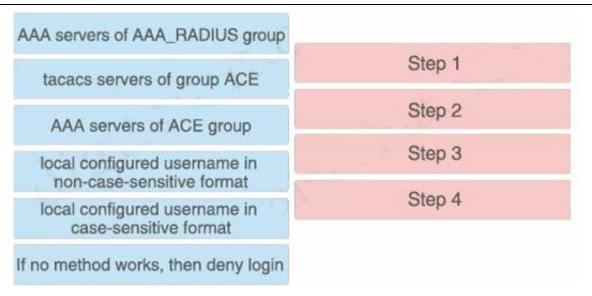
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

Question 26

An engineer creates the configuration below. Drag and drop the authentication methods from the left into the order of priority on the right. Not all options are used.

R1#sh run | 1 aaa aaa new-model aaa authentication login default group ACE group AAA_RADIUS local-case aaa session-id common R1#



Answer:

Step 1: AAA servers of ACE group

Step 2: AAA servers of AAA_RADIUS group

Step 3: local configured username in case-sensitive format

Step 4: If no method works, then deny login

Question 27

Vlan503 - Group 1
State is Active
1 state change, last state change 32w6d
Virtual IP address Is 10.0.3.241
Active virtual MAC address is 0000.0c07 ac01
Local virtual MAC address is 0000.0c07.ac01 (v1 default)
Hello time 3 sec, hold tine 10 sec
Next hello sent in 0.064 secs
Preemption enabled
Active router is local
Standby router is 10.0.3.242, priority 100 (expires in 10.624 sec)
Priority 110 (configured 110)
Group name is "hsrp-VI503-1" (default)

Which two facts does the device output confirm? (Choose two)

- A. The device is using the default HSRP hello timer
- B. The standby device is configured with the default HSRP priority
- C. The device's HSRP group uses the virtual IP address 10.0.3.242.
- D. The device is configured with the default HSRP priority
- E. The device sends unicast messages to its peers

Answer: A B

Question 28

Based on the output below, which Python code shows the value of the —upTime | key?

```
{
—responsel: [{
—familyl: —Routersl,
—typel: —Cisco ASR 1001-X Routerl,
—errorCodel: null,
—locationl: null,
—macAddressl: —00:c8:8b:80:bb:00l,
—hostnamel: —asr1001-x.abc.incl,
—rolel: —BORDER ROUTERI,
—lastUpdateTimel: 1577391299537,
—serialNumberl: —FXS1932Q1SEI,
—softwareVersionl: —16.3.2l,
—locationNamel: null,
—upTimel: —49 days, 13:43:44:13l,
—lastUpdatedl: —2019-12-22 16:35:21l
}]
}
```

```
Option A
json_data = response.json()
print(json_data[response][0][upTime])

Option C
json_data = response.json()
print(json_data = response.json()
print(json_data = response.json()
print(json_data = json.loads(response.text)
print(json_data[_response'][0][_upTime'])
```

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

Answer: C

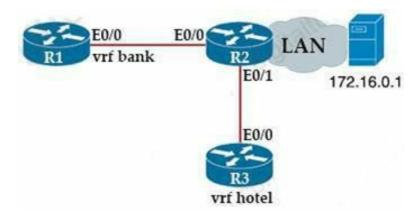
Question 29

Which two actions, when applied in the LAN network segment, will facilitate Layer 3 CAPWAP discovery for lightweight AP? (Choose two)

- A. Utilize DHCP option 17
- B. Utilize DHCP option 43
- C. Configure WLC IP address on LAN switch
- D. Enable port security on the switch port
- E. Configure an ip helper-address on the router interface

Answer: B E

Question 30



```
R2:
 vrf definition hotel
 address-family ipv4
 exit-address-family
vrf definition bank
 address-family ipv4
 exit-address-family
interface Ethernet0/0
 vrf forwarding bank
 ip address 172.16.0.4 255.255.0.0
 interface Ethernet0/1
 vrf forwarding hotel
 ip address 172.1.0.5 255.255.0.0
router ospf 42 vrf bank
 router-id 1.1.1.1
 network 172.16.0.0 0.0.255.255 area 0
router ospf 43 vrf hotel
 router-id 3.3.3.3
 network 172.16.0.0 0.0.255.255 area 0
R1:
vrf definition bank
 address-family ipv4
 exit-address-family
```

Which configuration must be applied to R1 to enable R1 to reach the server at 172.16.0.1?

Option A Option B interface Ethernet0/0 interface Ethernet0/0 ip address 172.16.0.7 255.255.0.0 vrf forwarding bank ip address 172.16.0.7 255.255.0.0 router ospf 44 vrf hotel network 172.16.0.0 0.0.255.255 router ospf 44 vrf bank network 172.16.0.0 0.0.255.255 area 0 Option C Option D interface Ethernet0/0 interface Ethernet0/0 vrf forwarding hotel ip address 172.16.0.7 255.255.0.0 ip address 172.16.0.7 255.255.0.0 router ospf 44 vrf bank network router ospf 44 vrf hotel 172.16.0.0 255.255.0.0 network 172.16.0.0 0.0.255.255 area 0

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

Answer: B

Question 31

The following system log message is presented after a network administrator configures a GRE tunnel:

%TUN-RECURDOWN: Interface Tunnel 0 temporarily disabled due to recursive routing.

Why is Tunnel 0 disabled?

- A. Because the tunnel cannot reach its tunnel destination
- B. Because the best path to the tunnel destination is through the tunnel itself

- C. Because dynamic routing is not enabled
- D. Because the router cannot recursively identify its egress forwarding interface

Answer: B

Question 32

What is provided by the Stealthwatch component of the Cisco Cyber Threat Defense solution?

- A. real-time threat management to stop DDoS attacks to the core and access networks
- B. real-time awareness of users, devices and traffic on the network
- C. malware control
- D. dynamic threat control for web traffic

Answer: B

Question 33

How does Protocol Independent Multicast function?

- A. It uses unicast routing information to perform the multicast forwarding function.
- B. It uses the multicast routing table to perform the multicast forwarding function.
- C. In sparse mode it establishes neighbor adjacencies and sends hello messages at 5-second intervals.
- D. It uses broadcast routing information to perform the multicast forwarding function.

Answer: A

Question 34

Under which network conditions is an outbound QoS policy that is applied on a router WAN interface most beneficial?

- A. under all network conditions
- B. under network convergence conditions
- C. under interface saturation conditions
- D. under traffic classification and marking conditions

Answer: C

Question 35

Which technology does VXLAN use to provide segmentation for Layer 2 and Layer 3 traffic?

- A. bridge domain
- B. VLAN
- C. VRF
- D. VNI

Answer: D

Question 36

A company has an existing Cisco 5520 HA cluster using SSO. An engineer deploys a new single Cisco Catalyst 9800 WLC to test new features. The engineer successfully configures a mobility tunnel between the 5520 cluster and 9800 WLC. Clients connected to the corporate WLAN roam seamlessly between access points on the 5520 and 9800 WLC. After a failure on the primary 5520 WLC, all WLAN services remain functional; however clients cannot roam between the 5520 and 9800 controllers without dropping their connection. Which

feature must be configured to remedy the issue?

- A. mobility MAC on the 5520 cluster
- B. mobility MAC on the 9800 WLC

- C. new mobility on the 5520 cluster
- D. new mobility on the 9800 WLC

Answer: B

Question 37

What are two methods of ensuring that the multicast RPF check passes without changing the unicast routing table? (Choose two)

- A. disabling BGP routing protocol
- B. implementing static mroutes
- C. disabling the interface of the router back to the multicast source
- D. implementing MBGP
- E. implementing OSPF routing protocol

Answer: B D

Question 38

What is the result when an active route processor fails in a design that combines NSF with SSO?

- A. An NSF-aware device immediately updates the standby route processor RIB without churning the network
- B. The standby route processor temporarily forwards packets until route convergence is complete
- C. An NSF-capable device immediately updates the standby route processor RIB without churning the network
- D. The standby route processor immediately takes control and forwards packets along known routes

Answer: B

Question 39

What is a benefit of a virtual machine when compared with a physical server?

- A. Deploying a virtual machine is technically less complex than deploying a physical server.
- B. Virtual machines increase server processing performance.
- C. The CPU and RAM resources on a virtual machine cannot be affected by other virtual machines.
- D. Multiple virtual servers can be deployed on the same physical server without having to buy additional hardware.

Answer: D

Question 40

What is the wireless received signal strength indicator?

- A. The value of how strong the wireless signal is leaving the antenna using transmit power, cable loss, and antenna gain
- B. The value given to the strength of the wireless signal received compared to the noise level
- C. The value of how much wireless signal is lost over a defined amount of distance
- D. The value of how strong a wireless signal is receded, measured in dBm

Answer: D

Question 41

Which controller is capable of acting as a STUN server during the onboarding process of Edge devices?

- A. vManage
- B. vSmart
- C. vBond
- D. PNP server

Answer: C

Question 42

What is the process for moving a virtual machine from one host machine to another with no downtime?

- A. live migration
- B. disaster recovery
- C. high availability
- D. multisite replication

Answer: A

Question 43

What are two features of NetFlow flow monitoring? (Choose two)

- A. Can track ingress and egress information
- B. Include the flow record and the flow importer
- C. Copies all ingress flow information to an interface
- D. Does not required packet sampling on interfaces
- E. Can be used to track multicast, MPLS, or bridged traffic

Answer: A E

Question 44

Which method should an engineer use to deal with a long-standing contention issue between any two VMs on the same host?

- A. Adjust the resource reservation limits
- B. Reset the host
- C. Reset the VM
- D. Live migrate the VM to another host

Answer: A

Question 45

What is the recommended MTU size for a Cisco SD-Access Fabric?

- A. 4464
- B. 9100
- C. 1500
- D. 17914

Answer: B

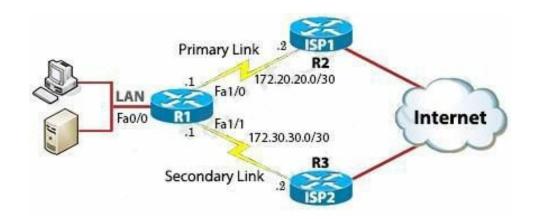
Question 46

What does the number in an NTP stratum level represent?

- A. The number of hops it takes to reach the master time server.
- B. The amount of drift between the device clock and true time.
- C. The amount of offset between the device clock and true time.
- D. The number of hops it takes to reach the authoritative time source.

Answer: D

Question 47



R1(config)#ip sla 1

R1(config-ip-sla)#icmp-echo 172.20.20.2 source-interface

FastEthernet1/0 R1(config-ip-sla-echo)#timeout 5000 R1(config-ip-slaecho)#frequency 10

R1(config-ip-sla-echo)#threshold 500

R1(config)#ip sla schedule 1 start-time now life forever

R1(config)#track 10 ip sla 1 reachability

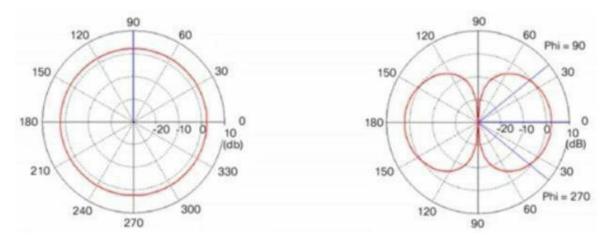
R1(config)#ip route 0.0.0.0 0.0.0.0 172.20.20.2

After implementing the configuration 172.20.20.2 stops replaying to ICMP echoes, but the default route fails to be removed. What is the reason for this behavior?

- A. The source-interface is configured incorrectly.
- B. The destination must be 172.30.30.2 for icmp-echo
- C. The default route is missing the track feature
- D. The threshold value is wrong

Answer: C

Question 48



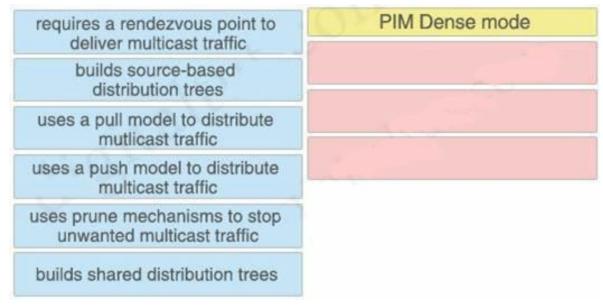
Which type of antenna is show on the radiation patterns?

- A. Dipole
- B. Yagi
- C. Patch
- D. Omnidirectional

Answer: A

Question 49

Drag and drop characteristics of PIM dense mode from the left to the right.



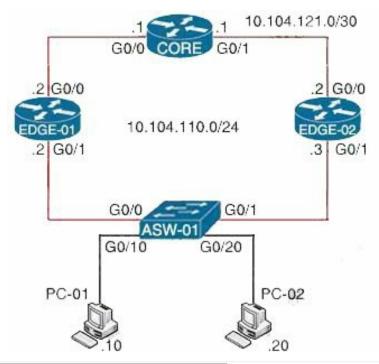
Answer:

PIM Dense Mode:

- + builds source-based distribution trees
- + uses a push model to distribute multicast traffic
- + uses prune mechanisms to stop unwanted multicast traffic

Question 50

Refer to the exhibit.



Edge-01	Edge-02
track 10 interface GigabitEthernet0/0 line-protocol! interface GigabitEthernet0/1 ip address 10.104.110.2 255.255.255.0 vrrp 10 ip 10.104.110.100 vrrp 10 priority 120	interface GigabitEthernet0/1 ip address 10.104.110.3 255.255.255.0 vrrp 10 ip 10.104.110.100

Object tracking has been configured for VRRP enabled routers Edge-01 and Edge-02. Which commands cause Edge-02 to preempt Edge-01 in the event that interface G0/0 goes down on Edge-01?

Option A	Option B
Edge-01(config)#interface G0/1	Edge-02(config)#interface G0/1
Edge-01(config-if)#vrrp 10 track	Edge-02(config-if)#vrrp 10 track
10 decrement 10	10 decrement 30
Option C	Option D
Edge-02(config)#interface G0/1	Edge-01(config)#interface G0/1
Edge-02(config-if)#vrrp 10 track	Edge-01(config-if)#vrrp 10 track
10 decrement 10	10 decrement 30

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

Answer: D

Question 51

Which protocol is implemented to establish secure control plane adjacencies between Cisco SD-WAN nodes?

- A. IKE
- B. DTLS
- C. IPsec
- D. ESP

Answer: B

Question 52

```
flow monitor FLOW-MONITOR-1
  record netflow ipv6 original-input
  exit
!
sampler SAMPLER-1
  mode deterministic 1 out-of 2
  exit
!
ip cef
ipv6 cef
!
interface GigabitEthernet0/0/0
  ipv6 address 2001:DB8:2:ABCD::2/48
  ipv6 flow monitor FLOW-MONITOR-1 sampler SAMPLER-1 input
```

What is the effect of introducing the sampler feature into the Flexible NetFlow configuration on the router?

- A. NetFlow updates to the collector are sent 50% less frequently.
- B. Every second IPv4 packet is forwarded to the collector for inspection.
- C. CPU and memory utilization are reduced when compared with what is required for full NetFlow.
- D. The resolution of sampling data increases, but it requires more performance from the router.

Answer: A

Question 53

When does a stack master lose its role?

- A. When the priority value of a stack member is changed to a higher value
- B. When a switch with a higher priority is added to the stack
- C. When the stack master is reset
- D. When a stack member fails

Answer: C

Question 54

What is the calculation that is used to measure the radiated power of a signal after it has gone through the radio, antenna cable, and antenna?

- A. dBi
- B. mW
- C. dBm
- D. EIRP

Answer: D

New ENCOR Questions 4

Question 1

After a redundant route processor failure occurs on a Layer 3 device, which mechanism allows for packets to be forwarded from a neighboring router based on the most recent tables?

- A. RPVST+
- B. RP failover
- C. BFD
- D. NSF

Answer: D

Question 2

What is the differences between TCAM and the MAC address table?

- A. Router prefix lookups happens in CAM. MAC address table lookups happen in TCAM
- B. The MAC address table supports partial matches. TCAM requires an exact match
- C. The MAC address table is contained in CAM. ACL and QoS information is stored in TCAM
- D. TCAM is used to make Layer 2 forwarding decisions. CAM is used to build routing tables

Answer: C

Question 3

Which two southbound interfaces originate from Cisco DNA Center and terminate at fabric underlay switches? (Choose two)

A. UDP 67: DHCP

B. ICMP: Discovery

C. TCP 23: Telnet

D. UDP 162: SNMP

E. UDP 6007: NetFlow

Answer: B C

Question 4

What is the function of a control-plane node in a Cisco SD-Access solution?

- A. to connect APs and wireless endpoints to the SD-Access fabric
- B. to connect external Layer 3 networks to the SD Access fabric
- C. to implement policies and communicate with networks outside the fabric
- D. to run a mapping system that manages endpoint to network device relationships

Answer: D

Question 5

Refer to the exhibit.

DSW2#sh spanning-tree vlan 10

VLAN0010

Spanning tree enabled protocol rstp

Root ID Priority 4106

Address 0018.7363.4300 This bridge is the root

Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID Priority 4106 (priority 4096 sys-id-ext 20)

Address 0018.7363.4300

Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Aging Time 300 sec

Interface	Role Sts	Cost	Prio.Nbr	Type
Fa1/0/7	Desg FWD	2	128.9	P2p Peer(STP)
Fa1/0/10	Desg FWD	4	128.12	P2p Peer(STP)
Fa1/0/11	Desg FWD	2	128.13	P2p Peer(STP)
Fa1/0/12	Desg FWD	2	128.14	P2p Peer(STP)

What is the result when a switch that is running PVST+ is added to this network?

- A. Spanning tree is disabled automatically on the network
- B. DSW2 operates in Rapid PVST+ and the new switch operates in PVST+
- C. Both switches operate in the PVST+ mode
- D. Both switches operate in the Rapid PVST+ mode

Answer: B

Question 6

What is a characteristic of a next-generation firewall?

- A. required in each layer of the network
- B. filters traffic using Layer 3 and Layer 4 information only
- C. only required at the network perimeter
- D. provides intrusion prevention

Answer: D

Question 7

Which measure is used by an NTP server to indicate its closeness to the authoritative time source?

- A. stratum
- B. hop count
- C. time zone
- D. latency

Answer: A

Question 8

Which two results occur if Cisco DNA Center loses connectivity to devices in the SDAccess fabric? (Choose two)

- A. All devices reload after detecting loss of connection to Cisco DNA Center
- B. Already connected users are unaffected, but new users cannot connect
- C. Users lose connectivity
- D. Cisco DNA Center is unable to collect monitoring data in Assurance
- E. User connectivity is unaffected

Answer: D E

Question 9

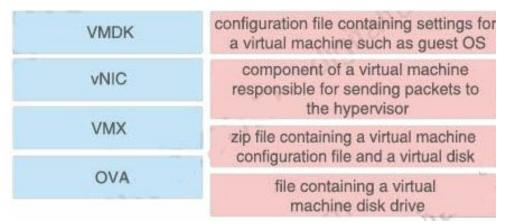
Which two components are supported by LISP? (Choose two)

- A. proxy ETR
- B. HMAC algorithm
- C. route reflector
- D. egress tunnel router
- E. spoke

Answer: A D

Question 10

Drag and drop the virtual component from the left onto their descriptions on the right.



Answer:

- + configuration file containing settings for a virtual machine such as guest OS: VMX
- + component of a virtual machine responsible for sending packets to the hypervisor: vNIC
- + zip file containing a virtual machine configuration file and a virtual disk: OVA
- + file containing a virtual machine disk drive: VMDK

Question 11

How does EIGRP differ from OSPF?

- A. EIGRP is more prone to routing loops than OSPF
- B. EIGRP supports equal or unequal path cost, and OSPF supports only equal path cost.
- C. EIGRP has a full map of the topology, and OSPF only knows directly connected neighbors
- D. EIGRP uses more CPU and memory than OSPF

Answer: B

Question 12

Refer to the exhibit.

```
DSW2#sh spanning-tree vlan 20
VLAN0020
   Spanning tree enabled protocol ieee
   Root ID Priority 24596
        Address 0018.7363.4300
         Cost
        Port 13 (FastEthernet1/0/11)
        Hello Time 2 sec Max Age 20 sec
                       Forward Delay 15 sec
  Bridge ID Priority 28692 (priority 28672 sys-id-ext 20)
         Address 001b.0d8e.e080
         Hello Time 2 sec Max Age 20 sec
                       Forward Delay 15 sec
         Aging Time 300 sec
Interface Role Sts Cost Prio. Nbr Type
            -- ---- ---- -----
Fa1/0/7 Desg FWD 2 128.9 P2p
Fa1/0/10 Desg FWD 2 128.12 P2p
Fa1/0/11 Root FWD 2 128.13 P2p
Fa1/0/12 Altn BLK 2 128.14 P2p
```

What does the output confirm about the switch's spanning tree configuration?

- A. The spanning-tree mode stp ieee command was entered on this switch
- B. The spanning-tree operation mode for this switch is PVST
- C. The spanning-tree operation mode for this switch is IEEE
- D. The spanning-tree operation mode for this switch is PVST+

Answer: D

Question 13

A customer has recently implemented a new wireless infrastructure using WLC-5520S at a site directly next to a large commercial airport Users report that they intermittently lose Wi-Fi connectivity, and troubleshooting reveals it is due to frequent channel changes. Which two actions fix this issue? (Choose two)

- A. Remove UNII-2 and Extended UNII-2 channels from the 5 GHz channel list
- B. Restore the DCA default settings because this automatically avoids channel interference
- C. Disable DFS channels to prevent interference with Doppler radar
- D. Enable DFS channels because they are immune to radar interference
- E. Configure channels on the UNII-2 and the Extended UNII-2 subbands of the 5 GHz band only

Answer: A C

Question 14

What is a characteristic of para-virtualization?

- A. Para-virtualization guest servers are unaware of one another
- B. Para-virtualization allows direct access between the guest OS and the hypervisor
- C. Para-virtualization lacks support for containers
- D. Para-virtualization allows the host hardware to be directly accessed

Answer: B

Question 15

Drag and drop the characteristics from the left onto the QoS components they describe on the right.

applied on traffic to convey information to a downstream device	marking	
permits traffic to pass through the device while retaining DSCP/COS value	shaping	
process used to buffer traffic that exceeds a predefined rate	classification	
distinguishes traffic types	trust	

Answer:

- + marking: applied on traffic to convey information to a downstream device
- + shaping: process used to buffer traffic that exceeds a predefined rate
- + classification: distinguishes traffic types
- + trust: permits traffic to pass through the device while retaining DSCP/COS value

Question 16

A customer requests a network design that supports these requirements:

- * FHRP redundancy
- * multivendor router environment
- * IPv4 and IPv6 hosts

Which protocol does the design include?

- A. GLBP
- B. VRRP version 2
- C. VRRP version 3
- D. HSRP version 2

Answer: C

Question 17

Refer to the exhibit.

```
vlan 222
  remote-span
!
vlan 223
  remote-span
!
monitor session 1 source interface FastEthernet0/1 tx
monitor session 1 source interface FastEthernet0/2 rx
monitor session 1 source interface port-channel 5
monitor session 1 destination remote vlan 222
```

What happens to access interfaces where VLAN 222 is assigned?

- A. They are placed into an inactive state
- B. A description —RSPAN ▮ is added
- C. STP BPDU guard is enabled
- D. They cannot provide PoE

Answer: A

Question 18

Which solution do IaaS service providers use to extend a Layer 2 segment across a Layer 3 network?

- A. VXLAN
- B. VTEP
- C. VLAN
- D. VRF

Answer: A

Question 19

What is a characteristic of MACsec?

- A. 802.1AE provides encryption and authentication services
- B. 802.1AE is built between the host and switch using the MKA protocol, which negotiates encryption keys based on the master session key from a successful 802.1X session
- C. 802.1AE is built between the host and switch using the MKA protocol using keys generated via the Diffie-Hellman algorithm (anonymous encryption mode)
- D. 802.1AE is negotiated using Cisco AnyConnect NAM and the SAP protocol

Answer: B

Question 20

Which unit measures the power of a radio signal with reference to 1 milliwatt?

- A. dBw
- B. dBi
- C. mW
- D. dBm

Answer: D

Architecture Questions

Question 1

A company plans to implement intent-based networking in its campus infrastructure. Which design facilities a migrate from a traditional campus design to a programmer fabric designer?

- A. Layer 2 access
- B. three-tier
- C. two-tier
- D. routed access

Answer: C

Question 2

Which benefit is offered by a cloud infrastructure deployment but is lacking in an onpremises deployment?

- A. efficient scalability
- B. virtualization
- C. storage capacity
- D. supported systems

Answer: A

Question 3

What is a benefit of deploying an on-premises infrastructure versus a cloud infrastructure deployment?

A. faster deployment times because additional infrastructure does not need to be purchased

- B. lower latency between systems that are physically located near each other
- C. less power and cooling resources needed to run infrastructure onpremises
- D. ability to quickly increase compute power without the need to install additional hardware

Answer: B

Question 4

What are two reasons a company would choose a cloud deployment over an on-prem deployment? (Choose two)

- A. Cloud deployments require long implementation times due to capital expenditure processes. OnPrem deployments can be accomplished quickly using operational expenditure processes
- B. Cloud costs adjust up or down depending on the amount of resources consumed. On- Prem costs for hardware, power, and space are ongoing regardless of usage
- C. In a cloud environment, the company controls technical issues. Onprem environments rely on the service provider to resolve technical issue
- D. Cloud resources scale automatically to an increase in demand. Onprem requires additional capital expenditure
- E. In a cloud environment, the company is in full control of access to their data. On-prem risks access to data due to service provider outages

Answer: B D

Question 5

In a Cisco Catalyst switch equipped with two supervisor modules an administrator must temporally remove the active supervisor from the chassis to perform hardware maintenance on it. Which mechanism ensure that the

active supervisor removal is not disruptive to the network operation?

- A. NSF/NSR
- B. SSO
- C. HSRP
- D. VRRP

Answer: B

Etherchannel Questions

Question 1

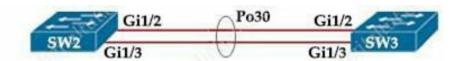
Which PAgP mode combination prevents an Etherchannel from forming?

- A. auto/auto
- B. desirable/desirable
- C. auto/desirable
- D. desirable

Answer: A

Question 2

Refer to the exhibit.



A port channel is configured between SW2 and SW3. SW2 is not running Cisco operating system. When all physical connections are made, the port channel does not establish. Based on the configuration excerpt of SW3, what is the cause of the problem?

interface gi1/2
channel-group 30 mode desirable
port-channel load-balance src-ip

interface gi1/3
channel-group 30 mode desirable
port-channel load-balance src-ip

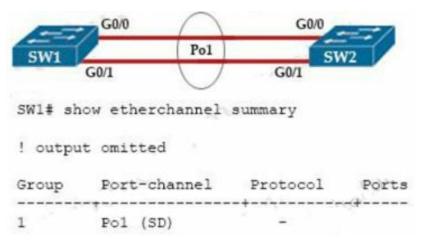
interface PortChannel 30
switchport mode trunk
switchport encapsulation dot1q
switchport trunk allowed vlan 10-100

- A. The port channel on SW2 is using an incompatible protocol
- B. The port-channel trunk is not allowing the native VLAN
- C. The port-channel should be set to auto
- D. The port-channel interface load balance should be set to src-mac

Answer: A

Question 3

Refer to the exhibit.



SW2#

08:33:23: %PM-4-ERR_DISABLE: channel-misconfig error detection on Gi0/0, putting Gi0/0 in err-disable state

08:33:23: %PM-4-ERR_DISABLE: channel-misconfig error detection on Gi0/1, putting Gi0/1 in err-disable state

After an engineer configures an EtherChannel between switch SW1 and switch SW2, this error message is logged on switch SW2. Based on the output from SW1 and the log message received on Switch SW2, what action should the engineer take to resolve this issue?

- A. Configure the same protocol on the EtherChannel on switch SW1 and SW2.
- B. Correct the configuration error on interface Gi0/1 on switch SW1.
- C. Define the correct port members on the EtherChannel on switch SW1.
- D. Correct the configuration error on interface Gi0/0 switch SW1.

Answer: A

Trunking Questions

Question 1

Refer to exhibit. VLANs 50 and 60 exist on the trunk links between all switches. All access ports on SW3 are configured for VLAN 50 and SW1 is the VTP server. Which command ensures that SW3 receives frames only from VLAN 50?



- A. SW1 (config)#vtp pruning
- B. SW3(config)#vtp mode transparent
- C. SW2(config)#vtp pruning
- D. SW1(config)>vtp mode transparent

Answer: A

Question 2

Refer to the exhibit. SwitchC connects HR and Sales to the Core switch. However, business needs require that no traffic from the Finance VLAN traverse this switch. Which command meets this requirement?

```
SwitchC#show vtp status
VTP Version
Configuration Revision
                             : 0
Maximum VLANs supported locally : 255
Number of existing VLANs
VTP Operating Mode
                             : Transparent
VTP Domain Name
                             : MyDomain.com
VTP Pruning Mode
                             : Disabled
VTP V2 Mode
VTP V2 mode
VTP Traps Generation
                             : Disabled
                              : Disabled
                             : 0xCC 0x77 0x02 0x40 0x93 0xB5 0xC1 0xA2
MD5 digest
Configuration last modified by 0.0.0.0 at 3-1-93 00:00:00
```

	C#show vlan brief					
VLAN No	ame	Status	Ports			
1 de	efault	active	Fa0/7, Fa0/	4, Fa0/5, Fa0/6 8, Fa0/9, Fa0/10 1/12, Fa0/13,		
Fa0/14			140/11, 140	,,12, 140,10,		
			Fa0/15, Fa0	/16, Fa0/17,		
Fa0/18			F=0/10 F=0	/20, Fa0/21,		
Fa0/22			rau/15, rau	//20, FaU/21,		
,			Fa0/23, Fa0	/24, Po1		
110 F:		active				
210 H		active				
310 S	ales	active	Fa0/2			
SwitchC	#show int trunk					
Port	Mode	Encapsulation	Status	Native vlan		
Gig1/1	on	802.1q	trunking	1		
Gig1/2	on	802.1q	trunking	1		
Port	Vlans allowed	on trunk				
	1-1005					
_	1-1005					
Port	Vlans allowed	and active in man	agement doma:	in		
Gig1/1	1,110,210,310	1,110,210,310				
	1,110,210,310					
interfa descri	#show run interface ce Port-channel 1 ption Uplink to Cor port mode trunk					

- A. SwitchC(config)#vtp pruning
- B. SwitchC(config)#vtp pruning vlan 110
- C. SwitchC(config)#interface port-channel 1 SwitchC(config-if)#switchport trunk allowed vlan add 210,310
- D. SwitchC(config)#interface port-channel 1 SwitchC(config-if)#switchport trunk allowed vlan remove 110

Answer: D

Question 3

Refer to the exhibit.



Company policy restricts VLAN 10 to be allowed only on SW1 and SW2. All other VLANs can be on all three switches. An administrator has noticed that VLAN 10 has propagated to SW3. Which configuration corrects the issue?

Α.

SW2(config)#interface gi1/2 SW2(config)#switchport trunk allowed vlan 10

В.

SW1(config)#interface gi1/1 SW1(config)#switchport trunk allowed vlan 1-9,11-4094

C.

SW2(config)#interface gi1/1 SW2(config)#switchport trunk allowed vlan 10

D.

SW2(config)#interface gi1/2 SW2(config)#switchport trunk allowed vlan 1-9,11-4094

Answer: D

SD-WAN & SD-Access Solutions

Question 1

Which function does a fabric edge node perform in an SD-Access deployment?

- A. Connects the SD-Access fabric to another fabric or external Layer 3 networks
- B. Connects endpoints to the fabric and forwards their traffic
- C. Provides reachability border nodes in the fabric underlay
- D. Encapsulates end-user data traffic into LISP.

Answer: B

Question 2

Which action is the vSmart controller responsible for in an SD-WAN deployment?

- A. onboard vEdge nodes into the SD-WAN fabric
- B. distribute security information for tunnel establishment between vEdge routers
- C. manage, maintain, and gather configuration and status for nodes within the SD-WAN fabric
- D. gather telemetry data from vEdge routers

Answer: B

Question 3

Which statement about a Cisco APIC controller versus a more traditional SDN controller is true?

A. APIC uses a policy agent to translate policies into instructions

- B. APIC supports OpFlex as a Northbound protocol
- C. APIC does support a Southbound REST API
- D. APIC uses an imperative model

Answer: A

Question 4

What the role of a fusion in an SD-Access solution?

- A. provides connectivity to external networks
- B. acts as a DNS server
- C. performs route leaking between user-defined virtual networks and shared services
- D. provides additional forwarding capacity to the fabric

Answer: C

Question 5

Which statement about a fabric access point is true?

- A. It is in local mode and must be connected directly to the fabric border node
- B. It is in FlexConnect mode and must be connected directly to the fabric border node
- C. It is in local mode an must connected directly to the fabric edge switch
- D. It is in FlexConnect mode and must be connected directly to the fabric edge switch

Answer: C

Question 6

On which protocol or technology is the fabric data plane based in Cisco SD-

Access fabric?

- A. LISP
- B. IS-IS
- C. Cisco TrustSec
- D. VXLAN

Answer: D

Question 7

Which description of an SD-Access wireless network infrastructure deployment is true?

- A. The access point is part of the fabric underlay
- B. The WLC is part of the fabric underlay
- C. The access point is part the fabric overlay
- D. The wireless client is part of the fabric overlay

Answer: C

Question 8

Which controller is the single plane of management for Cisco SD-WAN?

- A. vBond
- B. vEdge
- C. vSmart
- D. vManage

Answer: D

Question 9

When a wired client connects to an edge switch in an SDA fabric, which component decides whether the client has access to the network?

- A. control-plane node
- B. Identity Service Engine
- C. RADIUS server
- D. edge node

Answer: B

Question 10

What are two device roles in Cisco SD-Access fabric? (Choose two)

- A. core switch
- B. vBond controller
- C. edge node
- D. access switch
- E. border node

Answer: C E

SD-WAN & SD-Access Solutions 2

Question 1

Which component handles the orchestration plane of the Cisco SD-WAN?

- A. vBond
- B. vSmart
- C. vManage
- D. vEdge

Answer: A

Question 2

In an SD-Access solution what is the role of a fabric edge node?

- A. to connect external Layer 3- network to the SD-Access fabric
- B. to connect wired endpoint to the SD-Access fabric
- C. to advertise fabric IP address space to external network
- D. to connect the fusion router to the SD-Access fabric

Answer: B

Question 3

What is the role of the vsmart controller in a Cisco SD-WAN environment?

- A. IT performs authentication and authorization
- B. It manages the control plane.
- C. It is the centralized network management system.
- D. It manages the data plane.

Answer: B

Question 4

In a Cisco SD-WAN solution, how is the health of a data plane tunnel monitored?

- A. with IP SLA
- B. ARP probing
- C. using BFD
- D. with OMP

Answer: C

Question 5

Which technology is used to provide Layer 2 and Layer 3 logical networks in the Cisco SDAccess architecture?

- A. underlay network
- B. overlay network
- C. VPN routing/forwarding
- D. easy virtual network

Answer: B

Question 6

In an SD-WAN deployment, which action in the vSmart controller responsible for?

- A. handle, maintain, and gather configuration and status for nodes within the SD-WAN fabric
- B. onboard vEdge nodes into the SD-WAN fabric
- C. gather telemetry data from vEdge routers
- D. distribute policies that govern data forwarding performed within the SD-WAN fabric

Answer: D

Question 7

In a Cisco SD-Access fabric, which control plane protocol is used for mapping and resolving endpoints?

- A. LISP
- B. DHCP
- C. SXP
- D. VXLAN

Answer: A

Question 8

What is one fact about Cisco SD-Access wireless network deployments?

- A. The access point is part of the fabric underlay
- B. The WLC is part of the fabric underlay
- C. The access point is part the fabric overlay
- D. The wireless client is part of the fabric overlay

Answer: C

Question 9

What is the function of the fabric control plane node in a Cisco SD-Access deployment?

- A. It is responsible for policy application and network segmentation in the fabric.
- B. It performs traffic encapsulation and security profiles enforcement in the fabric.
- C. It holds a comprehensive database that tracks endpoints and

networks in the fabric.

D. It provides integration with legacy nonfabric-enabled environments.

Answer: C

Question 10

In a Cisco SD-Access wireless architecture, which device manages endpoint ID to Edge Node bindings?

- A. fabric control plane node
- B. fabric wireless controller
- C. fabric border node
- D. fabric edge node

Answer: A

SD-WAN & SD-Access Solutions 3

Question 1

Which control plane protocol is used between Cisco SD-WAN routers and vSmart controllers?

- A. BGP
- B. OMP
- C. TCP
- D. UDP

Answer: B

Question 2

In a wireless Cisco SD-Access deployment, which roaming method is used when a user moves from one access point to another on a different access switch using a single WLC?

- A. Layer 3
- B. inter-xTR
- C. auto anchor
- D. fast roam

Answer: B

Question 3

Which protocol is responsible for data plane forwarding in a Cisco SD-Access deployment?

- A. VXLAN
- B. IS-IS
- C. OSPF

D. LISP

Answer: A

Question 4

Which tunneling technique is used when designing a Cisco SD-Access fabric data plane?

- A. VXLAN
- B. VRF Lite
- C. VRF
- D. LISP

Answer: A

QoS Questions

Question 1

Which statement about the default QoS configuration on a Cisco switch is true?

- A. All traffic is sent through four egress queues
- B. Port trust is enabled
- C. The Port Cos value is 0
- D. The Cos value of each tagged packet is modified

Answer: C

Question 2

Which QoS mechanism will prevent a decrease in TCP performance?

- A. Shaper
- B. Policer
- C. WRED
- D. Rate-Limit
- E. LLQ
- F. Fair-Queue

Answer: C

Question 3

Which QoS component alters a packet to change the way that traffic is treated in the network?

- A. Marking
- B. Classification
- C. Shaping

D. Policing

Answer: A

Question 4

Which marking field is used only as an internal marking within a router?

- A. QOS Group
- B. Discard Eligiblity
- C. IP Precedence
- D. MPLS Experimental

Answer: A

Question 5

How does QoS traffic shaping alleviate network congestion?

- A. It drops packets when traffic exceeds a certain bitrate.
- B. It buffers and queue packets above the committed rate.
- C. It fragments large packets and queues them for delivery.
- D. It drops packets randomly from lower priority queues.

Answer: B

Question 6

An engineer is describing QoS to a client. Which two facts apply to traffic policing?

(Choose

two)

- A. Policing adapts to network congestion by queuing excess traffic
- B. Policing should be performed as close to the destination as possible
- C. Policing drops traffic that exceeds the defined rate
- D. Policing typically delays the traffic, rather than drops it

E. Policing should be performed as close to the source as possible

Answer: C E

Question 7

During deployment, a network engineer notices that voice traffic is not being tagged correctly as it traverses the network. Which COS to DSCP map must be modified to ensure that voice traffic is treated properly?

- A. COS of 5 to DSCP 46
- B. COS of 7 to DSCP 48
- C. COS of 6 to DSCP 46
- D. COS of 3 to DSCP of 26

Answer: A

Question 8

Which QoS queuing method transmits packets out of the interface in the order the packets arrive?

- A. custom
- B. weighted-fair
- C. FIFO
- D. priority

Answer: C

Switching Mechanism Questions

Question 1

Which statement about Cisco Express Forwarding is true?

- A. It uses a fast cache that is maintained in a router data plane
- B. It maintains two tables in the data plane the FIB and adjacency table
- C. It makes forwarding decisions by a process that is scheduled through the IOS scheduler
- D. The CPU of a router becomes directly involved with packetswitching decisions

Answer: B

Question 2

Which two statements about Cisco Express Forwarding load balancing are true? (Choose two)

- A. Cisco Express Forwarding can load-balance over a maximum of two destinations
- B. It combines the source IP address subnet mask to create a hash for each destination
- C. Each hash maps directly to a single entry in the RIB
- D. Each hash maps directly to a single entry in the adjacency table
- E. It combines the source and destination IP addresses to create a hash for each destination

Answer: D E

Question 3

How are the Cisco Express Forwarding table and the FIB related to each other?

- A. The FIB is used to populate the Cisco Express Forwarding table
- B. The Cisco Express Forwarding table allows route lookups to be forwarded to the route processor for processing before they are sent to the FIB
- C. There can be only one FIB but multiple Cisco Express Forwarding tables on IOS devices
- D. Cisco Express Forwarding uses a FIB to make IP destination prefixbased switching decisions

Answer: D

Question 4

What is the difference between a RIB and a FIB?

- A. The RIB is used to make IP source prefix-based switching decisions
- B. The FIB is where all IP routing information is stored
- C. The RIB maintains a mirror image of the FIB
- D. The FIB is populated based on RIB content

Answer: D

Question 5

How does the RIB differ from the FIB?

- A. The RIB includes many routes to the same destination prefix. The FIB contains only the best route.
- B. The FIB maintains network topologies and routing tables. The RIB is a list of routes to particular network destinations.
- C. The RIB is used to create network topologies and routing tables. The FIB is a list of routes to particular network destinations.
- D. The FIB includes many routes a single destination. The RIB is the best route to a single destination.

Answer: C

Question 6

What is the difference between CEF and process switching?

- A. CEF processes packets that are too complex for process switching to manage.
- B. CEF is more CPU-intensive than process switching.
- C. CEF uses the FIB and the adjacency table to make forwarding decisions, whereas process switching punts each packet.
- D. Process switching is faster than CEF.

Answer: C

Question 7

What are two differences between the RIB and the FIB? (Choose two)

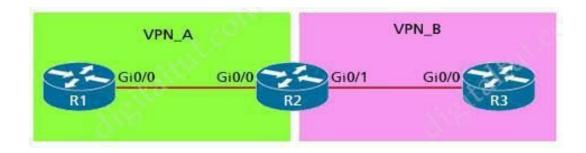
- A. The FIB is derived from the data plane, and the RIB is derived from the FIB.
- B. The RIB is a database of routing prefixes, and the FIB is the information used to choose the egress interface for each packet.
- C. FIB is a database of routing prefixes, and the RIB is the information used to choose the egress interface for each packet.
- D. The FIB is derived from the control plane, and the RIB is derived from the FIB.
- E. The RIB is derived from the control plane, and the FIB is derived from the RIB.

Answer: B E

Virtualization Questions

Question 1

Refer to the exhibit. Assuming that R1 is a CE router, which VRF is assigned to Gi0/0 on R1?



- A. VRF VPN_B
- B. Default VRF
- C. Management VRF
- D. VRF VPN_A

Answer: B

Question 2

Which statement about route targets is true when using VRF-Lite?

- A. When BGP is configured, route targets are transmitted as BGP standard communities
- B. Route targets control the import and export of routes into a customer routing table
- C. Route targets allow customers to be assigned overlapping addresses
- D. Route targets uniquely identify the customer routing table

Answer: B

Question 3

Which two statements about VRF-lite are true? (Choose two)

- A. It can increase the packet switching rate
- B. It supports most routing protocols, including EIGRP, ISIS, and OSPF
- C. It supports MPLS-VRF label exchange and labeled packets
- D. It should be used when a customer's router is connected to an ISP over OSPF
- E. It can support multiple customers on a single switch

Answer: DE

Question 4

Which statement explains why Type 1 hypervisor is considered more efficient than Type 2 hypervisor?

- A. Type 1 hypervisor runs directly on the physical hardware of the host machine without relying on the underlying OS
- B. Type 1 hypervisor enables other operating systems to run on it
- C. Type 1 hypervisor relies on the existing OS of the host machine to access CPU, memory, storage, and network resources
- D. Type 1 hypervisor is the only type of hypervisor that supports hardware acceleration techniques

Answer: A

Question 5

What are two benefits of virtualizing the server with the use of VMs in data center environment? (Choose two)

- A. increased security
- B. reduced rack space, power, and cooling requirements
- C. reduced IP and MAC address requirements
- D. speedy deployment
- E. smaller Layer 2 domain

Answer: B D

Question 6

Which statement describes the IP and MAC allocation requirements for virtual machines on type 1 hypervisors?

- A. Each virtual machine requires a unique IP and MAC addresses to be able to reach to other nodes
- B. Each virtual machine requires a unique IP address but shares the MAC address with the physical server
- C. Each virtual machines requires a unique IP address but shares the MAC address with the address of the physical server
- D. Each virtual machine requires a unique MAC address but shares the IP address with the physical server

Answer: A

Question 7

What is the main function of VRF-lite?

- A. To allow devices to use labels to make Layer 2 Path decisions
- B. To segregate multiple routing tables on a single device
- C. To connect different autonomous systems together to share routes
- D. To route IPv6 traffic across an IPv4 backbone

Answer: B

Question 8

Refer to the exhibit.

```
*Jun19 11:12: BGP(4):10.1.1.2 rcvd UPDATE w/ attr:nexthop 10.1.1.2, origin ?, localpref 100,metric 0,extended community RT:999:999
*Jun19 11:12: BGP(4):10.1.1.2 rcvd 999:999:192.168.1.99/32,label 29—DENIED due to:extended community not supported
```

You have just created a new VRF on PE3. You have enabled debug ip gp vpnv4 unicast updates on PE1, and you can see the route in the debug, but not in the BGP VPNv4 table. Which two statements are true? (Choose two)

- A. VPNv4 is not configured between PE1 and PE3
- B. address-family ipv4 vrf is not configured on PE3
- C. After you configure route-target import 999:999 for a VRF on PE3, the route will be accepted
- D. PE1 will reject the route due to automatic route filtering

E. After you configure route-target import 999:999 for a VRF on PE1, the route will be accepted

Answer: DE

Question 9

What are two reasons why broadcast radiation is caused in the virtual machine environment? (Choose two)

- A. vSwitch must interrupt the server CPU to process the broadcast packet
- B. The Layer 2 domain can be large in virtual machine environments
- C. Virtual machines communicate primarily through broadcast mode
- D. Communication between vSwitch and network switch is broadcast based
- E. Communication between vSwitch and network switch is multicast based

Answer: A B

Question 10

Which two entities are Type 1 hypervisors? (Choose two)

- A. Oracle VM VirtualBox
- B. Microsoft Hyper-V
- C. VMware server
- D. VMware ESX
- E. Microsoft Virtual PC

Answer: B D

Virtualization Questions 2

Question 1

A server running Linux is providing support for virtual machines along with DNS and DHCP services for a small business. Which technology does this represent?

- A. container
- B. Type 1 hypervisor
- C. hardware pass-through
- D. Type 2 hypervisor

Answer: D

Question 2

Which two actions provide controlled Layer 2 network connectivity between virtual machines running on the same hypervisor? (Choose two)

- A. Use a single trunk link to an external Layer2 switch
- B. Use a virtual switch provided by the hypervisor
- C. Use VXLAN fabric after installing VXLAN tunnelling drivers on the virtual machines
- D. Use a single routed link to an external router on stick
- E. Use a virtual switch running as a separate virtual machine

Answer: B E

Question 3

What is a Type 1 hypervisor?

A. runs directly on a physical server and depends on a previously installed operating system

- B. runs directly on a physical server and includes its own operating system
- C. runs on a virtual server and depends on an already installed operating system
- D. run on a virtual server and includes its own operating system

Answer: B

Question 4

Which element enables communication between guest VMs within a virtualized environment?

- A. vSwitch
- B. virtual router
- C. hypervisor
- D. pNIC

Answer: A

Question 5

What is a benefit of using a Type 2 hypervisor instead of a Type 1 hypervisor?

- A. ability to operate on hardware that is running other OSs
- B. improved security because the underlying OS is eliminated
- C. improved density and scalability
- D. better application performance

Answer: A

Question 6

Refer to the exhibit.

```
interface Vlan10
  ip vrf forwarding Customer1
  ip address 192.168.1.1 255.255.255.0
!
interface Vlan20
  ip vrf forwarding Customer2
  ip address 172.16.1.1 255.255.255.0
!
interface Vlan30
  ip vrf forwarding Customer3
  ip address 10.1.1.1 255.255.255.0
```

Which configuration allows Customer2 hosts to access the FTP server of Customer1 that has the IP address of 192.168.1.200?

Α.

ip route vrf Customer1 172.16.1.0 255.255.255.0 172.16.1.1 global
ip route vrf Customer2 192.168.1.200 255.255.255.255 192.168.1.1 global
ip route 192.168.1.0 255.255.255.0 Vlan10
ip route 172.16.1.0 255.255.255.0 Vlan20

В.

ip route vrf Customer1 172.16.1.0 255.255.255.0 172.16.1.1 Customer2ip route vrf Customer2 192.168.1.200 255.255.255.255 192.168.1.1Customer1

C.

ip route vrf Customer1 172.16.1.0 255.255.255.0 172.16.1.1 Customer1ip route vrf Customer2 192.168.1.200 255.255.255.255 192.168.1.1Customer2

D.

```
ip route vrf Customer1 172.16.1.1 255.255.255.255 172.16.1.1 global
ip route vrf Customer2 192.168.1.200 255.255.255.0 192.168.1.1 global
ip route 192.168.1.0 255.255.255.0 Vlan10
ip route 172.16.1.0 255.255.255.0 Vlan20
```

Answer: A

Question 7

A customer has deployed an environment with shared storage to allow for the migration of virtual machines between servers with dedicated operating systems that provide the virtualization platform. What is this operating system described as?

- A. hosted virtualization
- B. type 1 hypervisor
- C. container oriented
- D. decoupled

Answer: A

LISP & VXLAN Questions

Question 1

Which LISP device is responsible for publishing EID-to-RLOC mappings for a site?

- A. ETR
- B. MS
- C. ITR
- D. MR

Answer: A

Question 2

Which LISP infrastructure device provides connectivity between non-LISP sites and LISP sites by receiving non-LISP traffic with a LISP site destination?

- A. PETR
- B. PITR
- C. map resolver
- D. map server

Answer: B

Question 3

Into which two pieces of information does the LISP protocol split the device identity? (Choose two)

- A. Routing Locator
- B. Endpoint Identifier
- C. Resource Location

- D. Enterprise Identifier
- E. LISP ID
- F. Device ID

Answer: A B

Question 4

Refer to the exhibit.



Which LISP component do routers in the public IP network use to forward traffic between the two networks?

- A. EID
- B. RLOC
- C. map server
- D. map resolver

Answer: B

Question 5

Which statement about VXLAN is true?

- A. VXLAN uses TCP 35 the transport protocol over the physical data center network
- B. VXLAN extends the Layer 2 Segment ID field to 24-bits, which allows up to 4094 unique Layer 2 segments over the same network
- C. VXLAN encapsulates a Layer 2 frame in an IP-UDP header, which allows Layer 2 adjacency across router boundaries
- D. VXLAN uses the Spanning Tree Protocol for loop prevention

Answer: C

Question 6

Which two namespaces does the LISP network architecture and protocol use? (Choose two)

- A. TLOC
- B. RLOC
- C. DNS
- D. VTEP
- E. EID

Answer: B E

Question 7

Which action is a function of VTEP in VXLAN?

- A. tunneling traffic from IPv6 to IPv4 VXLANs
- B. allowing encrypted communication on the local VXLAN Ethernet segment
- C. encapsulating and de-encapsulating VXLAN Ethernet frames
- D. tunneling traffic from IPv4 to IPv6 VXLANs

Answer: C

Question 8

What function does VXLAN perform in an SD-Access deployment?

- A. policy plane forwarding
- B. control plane forwarding
- C. data plane forwarding
- D. systems management and orchestration

Answer: C

Question 9

Which two LISP infrastructure elements are needed to support LISP to non - LISP internetworking? (Choose two)

- A. PETR
- B. PITR
- C. MR
- D. MS
- E. ALT

Answer: A C

Question 10

What is the purpose of the LISP routing and addressing architecture?

- A. It creates head-end replication used to deliver broadcast and multicast frames to the entire network.
- B. It allows LISP to be applied as a network visualization overlay though encapsulation.
- C. It allows multiple instances of a routing table to co-exist within the same router.
- D. It creates two entries for each network node, one for its identity and another for its location on the network.

Answer: D

Question 11

Which entity is responsible for maintaining Layer 2 isolation between segments in a VXLAN environment?

- A. switch fabric
- B. host switch
- C. VTEP
- D. VNID

Answer: D

EIGRP & OSPF Questions

Question 1

Which OSPF network types are compatible and allow communication through the two peering devices?

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

Answer: A

Question 2

Based on this interface configuration, what is the expected state of OSPF adjacency?

R1
Interface GigabitEthernet0/1
Ip address 192.0.2.1 255.255.255.252
Ip ospf 1 area 0
Ip ospf hello-interval 2
Ip ospf cost 1
R2
Interface GigabitEthernet0/1
Ip address 192.0.2.2 255.255.252
Ip ospf 1 area 0
Ip ospf cost 500

- A. Full on both routers
- B. not established
- C. 2WAY/DROTHER on both routers
- D. FULL/BDR on R1 and FULL/BDR on R2

Answer: B

Question 3

Refer to the exhibit. Which statement about the OPSF debug output is true?

R1#debug ip ospf hello R1#debug condition interface fa0/1 Condition 1 set

- A. The output displays all OSPF messages which router R1 has sent or received on interface Fa0/1
- B. The output displays all OSPF messages which router R1 has sent or received on all interfaces
- C. The output displays OSPF hello messages which router R1 has sent or received on interface Fa0/1
- D. The output displays OSPF hello and LSACK messages which router R1 has sent or received

Answer: C

Question 4

Which EIGRP feature allows the use of leak maps?

- A. offset-list
- B. neighbor
- C. address-family
- D. stub

Answer: D

Question 5

Which two statements about EIGRP load balancing are true? (Choose two)

- A. EIGRP supports 6 unequal-cost paths
- B. A path can be used for load balancing only if it is a feasible successor
- C. EIGRP supports unequal-cost paths by default
- D. Any path in the EIGRP topology table can be used for unequal-cost load balancing
- E. Cisco Express Forwarding is required to load-balance across interfaces

Answer: A B

Question 6

Which statement about LISP encapsulation in an EIGRP OTP implementation is true?

- A. OTP uses LISP encapsulation for dynamic multipoint tunneling
- B. OTP maintains the LISP control plane
- C. OTP uses LISP encapsulation to obtain routes from neighbors
- D. LISP learns the next hop

Answer: A

Question 7

Which reason could cause an OSPF neighborship to be in the EXSTART/EXCHANGE state?

- A. Mismatched OSPF network type
- B. Mismatched areas
- C. Mismatched MTU size
- D. Mismatched OSPF link costs

Answer: C

Question 8

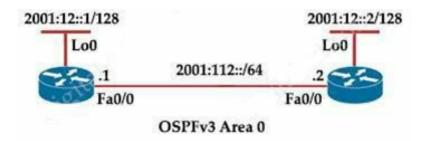
Which feature is supported by EIGRP but is not supported by OSPF?

- A. route summarization
- B. equal-cost load balancing
- C. unequal-cost load balancing
- D. route filtering

Answer: C

Question 9

Refer to the exhibit. Which IPv6 OSPF network type is applied to interface Fa0/0 of R2 by default?



- A. broadcast
- B. Ethernet
- C. multipoint
- D. point-to-point

Answer: A

Question 10

In OSPF, which LSA type is responsible for pointing to the ASBR router?

- A. type 1
- B. type 2

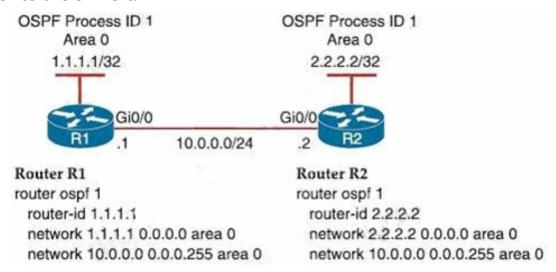
C. type 3 D. type 4

Answer: D

EIGRP & OSPF Questions 2

Question 1

Refer to the exhibit.



A network engineer is configuring OSPF between router R1 and router R2. The engineer must ensure that a DR/BDR election does not occur on the Gigabit Ethernet interfaces in area 0. Which configuration set accomplishes this goal?

Α.

R1(config-if)#interface Gi0/0 R1(config-if)#ip ospf network point-to-point R2(config-if)#interface Gi0/0 R2(config-if)#ip ospf network point-to-point

В.

R1(config-if)#interface Gi0/0 R1(config-if)#ip ospf network broadcast R2(config-if)#interface Gi0/0 R2(config-if)#ip ospf network broadcast

C.

R1(config-if)#interface Gi0/0

R1(config-if)#ip ospf database-filter all out R2(config-if)#interface Gi0/0 R2(config-if)#ip ospf database-filter all out

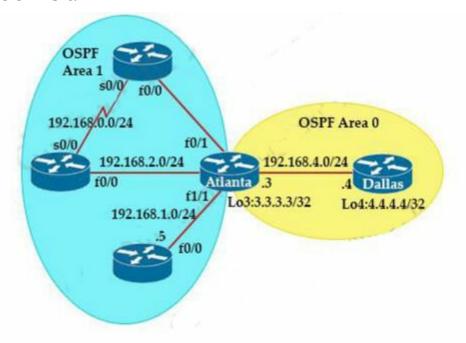
D.

R1(config-if)#interface Gi0/0 R1(config-if)#ip ospf priority 1 R2(config-if)#interface Gi0/0 R2(config-if)#ip ospf priority 1

Answer: A

Question 2

Refer to the exhibit.



Dallas#show ip route ospf

3.0.0.0/32 i subnetted, 1 subnets

- O 3.3.3.3 [110/40001] via 192.168.4.3, 00:33:32, FastEthernet0/0
- O IA 192.168.0.0/24 [110/145535] via 192.168.4.3, 00:33:32, FastEthernet0/0
- O IA 192.168.1.0/24 [110/80000] via 192.168.4.3, 00:33:32, FastEthernet0/0
- O IA 192.168.2.0/24 [110/80000] via 192.168.4.3, 00:33:32, FastEthernet0/0
- O IA 192.168.3.0/24 [110/44000] via 192.168.4.3. D0:33:32, FastEthernet0/0

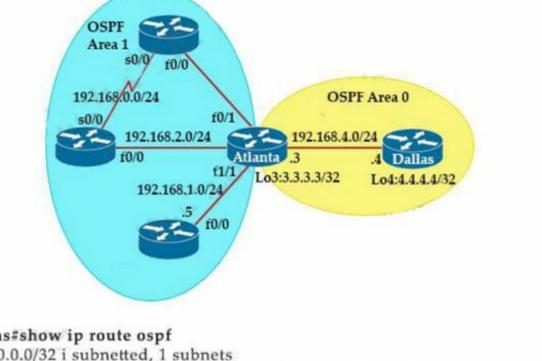
Which command when applied to the Atlanta router reduces type 3 LSA flooding into the backbone area and summarizes the inter-area routes on the Dallas router?

- A. Atlanta(config-route)#area 0 range 192.168.0.0 255.255.252.0
- B. Atlanta(config-route)#area 1 range 192.168.0.0 255.255.252.0
- C. Atlanta(config-route)#area 0 range 192.168.0.0 255.255.248.0
- D. Atlanta(config-route)#area 1 range 192.168.0.0 255.255.248.0

Answer: B

Question 3

Refer the exhibit.



Dallas#show ip route ospf

3.0.0.0/32 i subnetted, 1 subnets

- 3.3.3.3 [110/40001] via 192.168.4.3, 00:33:32, FastEthernet0/0
- O IA 192.168.0.0/24 [110/145535] via 192.168.4.3, 00:33:32, FastEthernet0/0
- O IA 192.168.1.0/24 [110/80000] via 192.168.4.3, 00:33:32, FastEthernet0/0
- O IA 192.168.2.0/24 [110/80000] via 192.168.4.3, 00:33:32, FastEthernet0/0
- O IA 192.168.3.0/24 [110/44000] via 192.168.4.3. 00:33:32, FastEthernet0/0

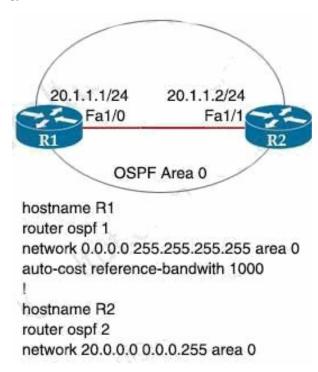
Which router is the designated router on the segment 192.168.0.0/24?

- A. Router Chicago because it has a lower router ID
- B. Router NewYork because it has a higher router ID
- C. This segment has no designated router because it is a nonbroadcast network type.
- D. This segment has no designated router because it is a p2p network type.

Answer: D

Question 4

Refer to the exhibit.



Which command must be applied to R2 for an OSPF neighborship to form?

- A. network 20.1.1.2 0.0.255.255 area 0
- B. network 20.1.1.2 255.255.255.255 area 0
- C. network 20.1.1.2 0.0.0.0 area 0
- D. network 20.1.1.2 255.255.0.0. area 0

Answer: C

Question 5

Which feature of EIGRP is not supported in OSPF?

- A. load balancing of unequal-cost paths
- B. load balance over four equal-costs paths
- C. uses interface bandwidth to determine best path
- D. per-packet load balancing over multiple paths

Answer: A

Question 6

Refer to the exhibit.

```
interface Vlan10
ip vrf forwarding Clients
ip address 192.168.1.1 255.255.255.0
!
interface Vlan20
ip vrf forwarding Servers
ip address 172.16.1.1 255.255.255.0
!
interface Vlan30
ip vrf forwarding Printers
ip address 10.1.1.1 255.255.255.0
<output omitted>
router eigrp 1
network 10.0.0.0
network 172.16.0.0
network 192.168.1.0
```

An engineer attempts to configure a router on a stick to route packets between Clients, Servers, and Printers; however, initial tests show that this configuration is not working. Which command set resolves this issue?

Option A router eigrp 1 network 10.0.0.0 255.0.0.0 network 172.16.0.0 255.255.0.0 network 192.168.1.0 255.255.0.0

Option C

interface Vlan10
no ip vrf forwarding Clients
!
interface Vlan20
no ip vrf forwarding Servers
!
interface Vlan30
no ip vrf forwarding Printers

Option B

router eigrp 1 network 10.0.0.0 255.255.255.0 network 172.16.0.0 255.255.255.0 network 192.168.1.0 255.255.255.0

Option D

interface Vlan10
no ip vrf forwarding Clients
ip address 192.168.1.2 255.255.255.0
!
interface Vlan20
no ip vrf forwarding Servers
ip address 172.16.1.2 255.255.255.0
!
interface Vlan30
no ip vrf forwarding Printers
ip address 10.1.1.2 255.255.255.0

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

Answer: D

Question 7

How does the EIGRP metric differ from the OSPF metric?

- A. The EIGRP metric is calculated based on bandwidth only. The OSPF metric is calculated on delay only.
- B. The EIGRP metric is calculated based on delay only. The OSPF metric is calculated on bandwidth and delay.
- C. The EIGRP metric is calculated based on hop count and bandwidth. The OSPF metric is calculated on bandwidth and delay.

D. The EIGRP metric is calculated based on bandwidth and delay. The OSPF metric is calculated on bandwidth only.

Answer: D

BGP Questions

Question 1

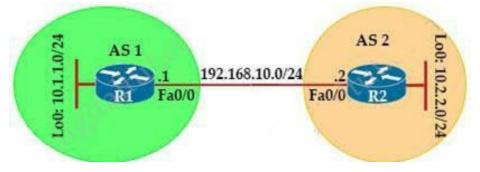
A local router shows an EBGP neighbor in the Active state. Which statement is true about the local router?

- A. The local router has active prefix in the forwarding table firom the neighboring router
- B. The local router has BGP passive mode configured for the neighboring router
- C. The local router is attempting to open a TCP session with the neighboring router.
- D. The local router is receiving prefixes from the neighboring router and adding them in RIBIN

Answer: C

Question 2

Refer to the exhibit. Which configuration establishes EBGP neighborship between these two directly connected neighbors and exchanges the loopback network of the two routers through BGP?



A. R1(config)#router bgp 1

R1(config-router)#neighbor 192.168.10.2 remote-as 2

R1(config-router)#network 10.1.1.0 mask 255.255.255.0

R2(config)#router bgp 2

R2(config-router)#neighbor 192.168.10.1 remote-as 1

R2(config-router)#network 10.2.2.0 mask 255.255.255.0

B. R1(config)#router bgp 1

R1(config-router)#neighbor 10.2.2.2 remote-as 2

R1(config-router)#network 10.1.1.0 mask 255.255.255.0

R2(config)#router bgp 2

R2(config-router)#neighbor 10.1.1.1 remote-as 1

R2(config-router)#network 10.2.2.0 mask 255.255.255.0

C. R1(config)#router bgp 1

R1(config-router)#neighbor 192.168.10.2 remote-as 2

R1(config-router)#network 10.0.0.0 mask 255.0.0.0

R2(config)#router bgp 2

R2(config-router)#neighbor 192.168.10.1 remote-as 1

R2(config-router)#network 10.0.0.0 mask 255.0.0.0

D. R1(config)#router bgp 1

R1(config-router)#neighbor 10.2.2.2 remote-as 2

R1(config-router)#neighbor 10.2.2.2 update-source lo0

R1(config-router)#network 10.1.1.0 mask 255.255.255.0

R2(config)#router bgp 2

R2(config-router)#neighbor 10.1.1.1 remote-as 1

R2(config-router)#neighbor 10.1.1.1 update-source lo0

R2(config-router)#network 10.2.2.0 mask 255.255.255.0

Answer: A

Question 3

Refer to the exhibit. Which IP address becomes the next active next hop for 192.168.102.0/24 when 192.168.101.2 fails?

```
Ri#show ip bgp
BGP table version is 32, local router ID is 192.168.101.5
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,

r RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete

Network
Next Hop
Metric LocPrf Weight Path
* 192.168.102.0
* 192.168.101.18
* 192.168.101.14
* 80
* 0 64517 i
* 192.168.101.10
* 0 64515 64515 i
* 192.168.101.10
* 0 64513 i
* 192.168.101.6
* 80
* 0 64514 64514 i

A. 192.168.101.16

C. 192.168.101.10

D. 192.168.101.14
```

Answer: A

Question 4

What is the correct EBGP path attribute list, ordered from most preferred to the least preferred, that the BGP best-path algorithm uses?

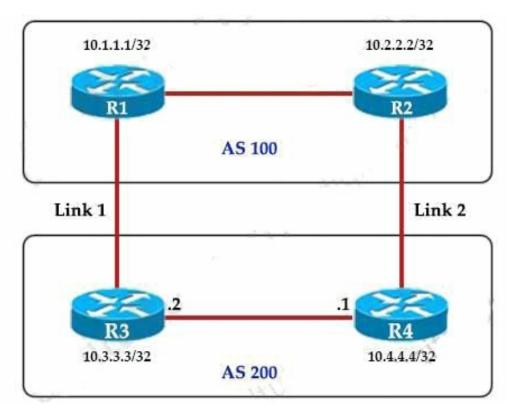
- A. weight, AS path, local preference, MED
- B. weight, local preference, AS path, MED
- C. local preference, weight, AS path, MED
- D. local preference, weight, MED, AS path

Answer: B

Question 5

Refer to the exhibit.

An engineer must ensure that all traffic leaving AS 200 will choose Link 2 as the exit point. Assuming that all BGP neighbor relationships have been formed and that the attributes have not been changed on any of the routers, which configuration accomplish task?

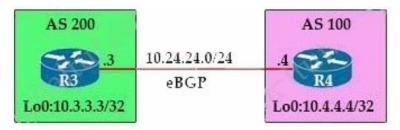


- A. R4(config-router)#bgp default local-preference 200
- B. R3(config-router)#neighbor 10.1.1.1 weight 200
- C. R3(config-router)#bgp default local-preference 200
- D. R4(config-router)#neighbor 10.2.2.2 weight 200

Answer: A

Question 6

Refer to the exhibit.



An engineer must establish eBGP peering between router R3 and router R4. Both routers should use their loopback interfaces as the BGP router ID. Which configuration set accomplishes this task?

A.

R3(config)#router bgp 200

R3(config-router)#neighbor 10.24.24.4 remote-as 100

R3(config-router)#bgp router-id 10.3.3.3

R4(config)#router bgp 100

R4(config-router)#neighbor 10.24.24.3 remote-as 200

R4(config-router)#bgp router-id 10.4.4.4

В.

R3(config)#router bgp 200

R3(config-router)#neighbor 10.4.4.4 remote-as 100

R3(config-router)#neighbor 10.4.4.4 update-source loopback0

R4(config)#router bgp 100

R4(config-router)#neighbor 10.3.3.3 remote-as 200

R4(config-router)#neighbor 10.3.3.3 update-source loopback0

C.

R3(config)#router bgp 200

R3(config-router)#neighbor 10.24.24.4 remote-as 100

R3(config-router)#neighbor 10.24.24.4 update-source loopback0

R4(config)#router bgp 100

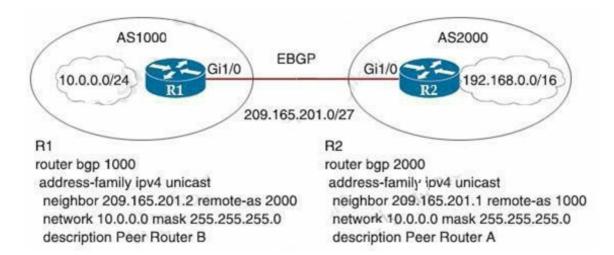
R4(config-router)#neighbor 10.24.24.3 remote-as 200

R4(config-router)#neighbor 10.24.24.3 update-source loopback0

Answer: A

Question 7

Refer to the exhibit. Which two commands are needed to allow for full reachability between AS 1000 and AS 2000? (Choose two)

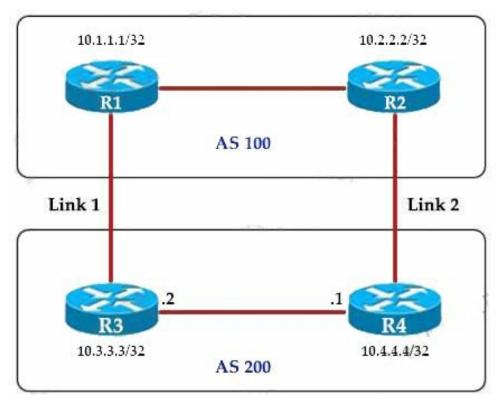


- A. R2#no network 10.0.0.0 255.255.255.0
- B. R1#network 19.168.0.0 mask 255.255.0.0
- C. R1#no network 10.0.0.0 255.255.255.0
- D. R2#network 209.165.201.0 mask 255.255.192.0
- E. R2#network 192.168.0.0 mask 255.255.0.0

Answer: A E

Question 8

Refer to the exhibit.



An engineer must ensure that all traffic entering AS 200 will choose Link 2 as an entry point. Assuming that all BGP neighbor relationships have been formed and that the attributes have not been changed on any of the routers, which configuration accomplish task?

Option A R3(config)#route-map PREPEND permit 10 R3(config-route-map)#set as-path prepend 200 200 200	Option B R3(config)#route-map PREPEND permit 10 R3(config-route-map)#set as-path prepend 100 100 100 R3(config)# router bgp 200 R3(config- router)#neighbor 10.2.2.2 route-map PREPEND in	
R3(config)# router bgp 200 R3(config- router)#neighbor 10.1.1.1 route-map PREPEND out		
Option C R3(config)#route-map PREPEND permit 10 R3(config-route-map)#set as-path prepend 100 100 100	Option D R3(config)#route-map PREPEND permit 10 R3(config-route-map)#set as-path prepend 200 200 200	
R3(config)# router bgp 200 R3(config- router)#neighbor 10.1.1.1 route-map PREPEND in	R3(config)# router bgp 200 R3(config- router)#neighbor 10.2.2.2 route-map PREPEND out	

- A. Option A
- B. Option BC. Option CD. Option D

Answer: A

Wireless Questions

Question 1

Which DNS lookup does an access point perform when attempting CAPWAP discovery?

- A. CISCO-DNA-CONTROILLER.local
- B. CAPWAP-CONTROLLER.local
- C. CISCO-CONTROLLER.local
- D. CISCO-CAPWAP-CONTROLLER.local

Answer: D

Question 2

Which two pieces of information are necessary to compute SNR? (Choose two)

- A. EIRP
- B. noise floor
- C. antenna gain
- D. RSSI
- E. transmit power

Answer: B D

Question 3

Which statement about Cisco EAP-FAST is true?

- A. It does not require a RADIUS server certificate
- B. It requires a client certificate
- C. It is an IETF standard.
- D. It operates in transparent mode

Answer: A

Question 4

Refer to the exhibit.

Client Properties		AP Properties	
00:09:ee:12:34:d2	AP Address		
192.168,100.199	AP Name	172.22.253.20	
Regular	AP Type	Mobile	
	WLAN Profile		
20	Status	Associated	
00:09:ee:12:34:d2	Association ID	16	
3602	802.11 Authentication	Open System	
Not Supported	Reason Code	1	
E2Ev1	Status Code	0	
Anchor	CF Pollable	Not Implemente	
172.22.253.20	CF Poll Request	Not Implemente	
RUN	Short Preamble	Not Implemente	
No	PBCC	Not Implemente	
944581	Channel Agility	Not Implemente	
OFF	Timeout	0	
48.0	WEP State	WEP Enable	
6.0,9.0,12.0,18.0,24.0,36.0,48.0, 54.0			
	Regular 20 00:09:ee:12:34:d2 3602 Not Supported E2Ev1 Anchor 172.22.253.20 RUN No 944581 OFF 48.0 6.0,9.0,12.0,18.0,24.0,36.0,48.0,	Regular AP Type 20 Status 00:09:ee:12:34:d2 Association ID 3602 802.11 Authentication Not Supported Reason Code E2Ev1 Status Code Anchor CF Pollable 172.22.253.20 CF Poll Request RUN Short Preamble No PBCC 944581 Channel Agility OFF Timeout 48.0 WEP State 6.0,9.0,12.0,18.0,24.0,36.0,48.0, WEP State	

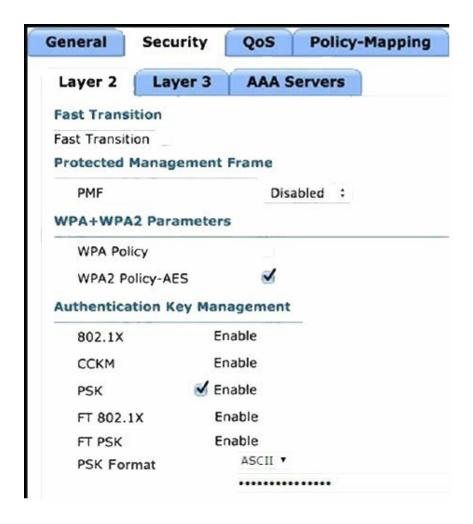
The WLC administrator sees that the controller to which a roaming client associates has Mobility Role Anchor configured under Clients > Detail. Which type of roaming is supported?

- A. Indirect
- B. Layer 3 intercontroller
- C. Layer 2 intercontroller
- D. Intercontroller

Answer: B

Question 5

Refer to the exhibit. Based on the configuration in this WLAN security setting. Which method can a client use to authenticate to the network?



- A. text string
- B. username and password
- C. certificate
- D. RADIUS token

Answer: A

Question 6

What are two common sources of interference for WI-FI networks? (Choose two)

- A. radar
- B. LED lights
- C. rogue AP
- D. conventional oven
- E. fire alarm

Answer: A C

Question 7

An engineer is configuring local web authentication on a WLAN. The engineer chooses the Authentication radio button under the Layer 3 Security options for Web Policy. Which device presents the web authentication for the WLAN?

- A. ISE server
- B. local WLC
- C. RADIUS server
- D. anchor WLC

Answer: B

Question 8

Which two descriptions of FlexConnect mode for Cisco APs are true? (Choose two)

- A. APs that operate in FlexConnect mode cannot detect rogue APs
- B. FlexConnect mode is used when the APs are set up in a mesh environment and used to bridge between each other
- C. FlexConnect mode is a feature that is designed to allow specified CAPWAP-enabled Aps to exclude themselves from managing data traffic between clients and infrastructure

- D. When connected to the controller, FlexConnect APs can tunnel traffic back to the controller
- E. FlexConnect mode is a wireless solution for branch office and remote office deployments

Answer: DE

Question 9

When configuration WPA2 Enterprise on a WLAN, which additional security component configuration is required?

- A. NTP server
- B. PKI server
- C. RADIUS server
- D. TACACS server

Answer: C

Question 10

An engineer configures a WLAN with fast transition enabled. Some legacy clients fail to connect to this WLAN. Which feature allows the legacy clients to connect while still allowing other clients to use fast transition based on their OLTIs?

- A. over the DS
- B. adaptive R
- C. 802.11V
- D. 802.11k

Answer: B

Question 11

To increase total throughput and redundancy on the links between the wireless controller and switch, the customer enabled LAG on the wireless controller. Which EtherChannel mode must be configured on the switch to allow the WLC to connect?

- A. Auto
- B. Active
- C. On
- D. Passive

Answer: C

Question 12

A client device fails to see the enterprise SSID, but other devices are connected to it. What is the cause of this issue?

- A. The hidden SSID was not manually configured on the client.
- B. The broadcast SSID was not manually configured on the client.
- C. The client has incorrect credentials stored for the configured hidden SSID.
- D. The client has incorrect credentials stored for the configured broadcast SSID.

Answer: A

Question 13

A customer has several small branches and wants to deploy a WI-FI solution with local management using CAPWAP. Which deployment model meets this requirement?

- A. Autonomous
- B. Mobility express
- C. SD-Access wireless
- D. Local mode

Answer: B

Question 14

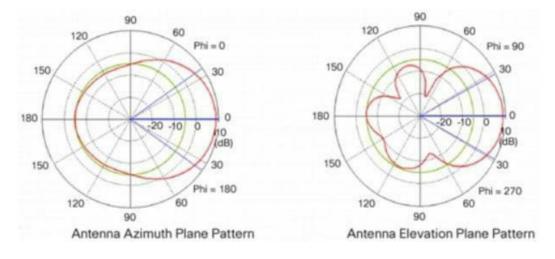
Which two methods are used by an AP that is trying to discover a wireless LAN controller? (Choose two)

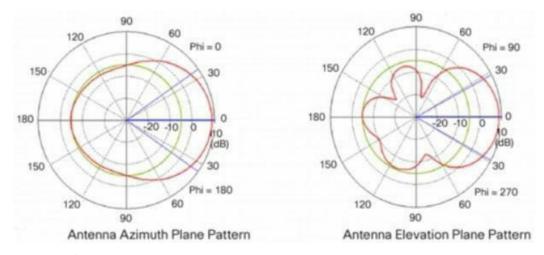
- A. Cisco Discovery Protocol neighbor
- B. broadcasting on the local subnet
- C. DNS lookup cisco-DNA-PRIMARY.local domain
- D. DHCP Option 43
- E. querying other APs

Answer: B D

Question 15

Refer to the exhibit.





Which type of antenna do the radiation patterns present?

- A. Patch
- B. Omnidirectional
- C. Yagi
- D. Dipole

Answer: A

Wireless Questions 2

Question 1

When a wireless client roams between two different wireless controllers, a network connectivity outage is experience for a period of time. Which configuration issue would cause this problem?

- A. Not all of the controllers in the mobility group are using the same mobility group name
- B. Not all of the controllers within the mobility group are using the same virtual interface IP address
- C. All of the controllers within the mobility group are using the same virtual interface IP address
- D. All of the controllers in the mobility group are using the same mobility group name

Answer: B

Question 2

Which access point mode allows a supported AP to function like a WLAN client would, associating and identifying client connectivity issues?

- A. client mode
- B. SE-connect mode
- C. sensor mode
- D. sniffer mode

Answer: C

Question 3

A client device roams between access points located on different floors in an atrium. The access points joined to the same controller and configuration in

local mode. The access points are in different IP addresses, but the client VLAN in the group same. What type of roam occurs?

- A. inter-controller
- B. inter-subnet
- C. intra-VLAN
- D. intra-controller

Answer: D

Question 4

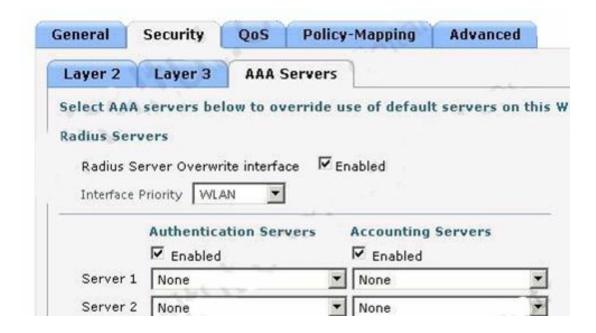
What does the LAP send when multiple WLCs respond to the CISCO_CAPWAPCONTROLLER.localdomain hostname during the CAPWAP discovery and join process?

- A. broadcast discover request
- B. join request to all the WLCs
- C. unicast discovery request to each WLC
- D. Unicast discovery request to the first WLC that resolves the domain name

Answer: C

Question 5

Refer to the exhibit.



Assuming the WLC's interfaces are not in the same subnet as the RADIUS server, which interface would the WLC use as the source for all RADIUS-related traffic?

- A. the interface specified on the WLAN configuration
- B. any interface configured on the WLC
- C. the controller management interface
- D. the controller virtual interface

Answer: A

Question 6

Wireless users report frequent disconnections from the wireless network. While troubleshooting a network engineer finds that after the user a disconnect, the connection eestablishes automatically without any input required. The engineer also notices these message logs.

AP _AP2' is down Reason: Radio channel set. 6:54:04 PM
AP _AP4' is down Reason: Radio channel set. 6:44:49 PM
AP _AP7' is down Reason: Radio channel set. 6:34:32 PM

Which action reduces the user impact?

- A. increase the dynamic channel assignment interval
- B. increase BandSelect
- C. increase the AP heartbeat timeout
- D. enable coverage hole detection

Answer: A

Question 7

Which DHCP option helps lightweight APs find the IP address of a wireless LAN controller?

- A. Option 43
- B. Option 60
- C. Option 67
- D. Option 150

Answer: A

Question 8

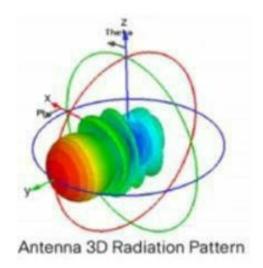
Why is an AP joining a different WLC than the one specified through option 43?

- A. The WLC is running a different software version
- B. The AP is joining a primed WLC
- C. The AP multicast traffic unable to reach the WLC through Layer 3
- D. The APs broadcast traffic is unable to reach the WLC through Layer 2

Answer: B

Question 9

Which type of antenna does the radiation pattern represent?



- A. Yagi
- B. multidirectional
- C. directional patch
- D. omnidirectional

Answer: A

Question 10

What is calculated using the numerical values of the transmitter power level, cable loss and antenna gain?

- A. SNR
- B. RSSI
- C. dBi
- D. EIRP

Answer: D

Wireless Questions 3

Question 1

What is used to measure the total output energy of a Wi-Fi device?

- A. dBi
- B. EIRP
- C. mW
- D. dBm

Answer: C

Question 2

You are configuring a controller that runs Cisco IOS XE by using the CLI. Which three configuration options are used for 802.11w Protected Management Frames? (Choose three)

- A. mandatory
- B. association-comeback
- C. SA teardown protection
- D. saquery-retry-time
- E. enable
- F. comeback-time

Answer: A B D

Question 3

Refer to the exhibit.

```
(WLC) >show interface summary
Interface Name Vlan Id
_____
                      999
deadnet
users1
users2
                      16
users3
(WLC) >show wlan 1
Network Name (SSID) . . . . . . . . . . . . . wlan1
AAA Policy Override . . . . . . . . . . . . . Enabled
Interface . . . . . . . . . . . . . . . . deadnet
FlexConnect Local Switching . . . . . . . . Enabled
FlexConnect Central Association . . . . . . Disabled
flexconnect Central Dhcp Flag . . . . . . . Disabled
flexconnect nat-pat Flag . . . . . . . . . Disabled
flexconnect DNS Override Flag . . . . . . . Disabled
flexconnect PPPoE pass-through . . . . . Disabled
flexconnect local-switching IP-source-guar . . Disabled
FlexConnect Vlan based Central Switching . . Enabled
FlexConnect Local Authentication . . . . . Disabled
FlexConnect Learn IP Address . . . . . . . Enabled
(WLC) >show ap config general FlexAP1
AP Mode . . . . . . . . . . . . . . . . . . FlexConnect
FlexConnect Vlan mode: . . . . . . . . . . . Enabled
         WLAN 1: . . . . . . . . . . . . . . . . . 10 (AP-Specific)
FlexConnect VLAN ACL Mappings
Ingress ACL: . . . . . . . . . . . None
         Egress ACL: . . . . . . . . . . . None
FlexConnect Group . . . . . .
                               . . . . flexgroup1
Group VLAN ACL Mappings
Vlan : . . . . . . . . . . .
                     Ingress ACL . . . . . . . . . . . . None
         Egress ACL . . . . . . . . . . . . . . None
```

A wireless client is connecting to FlexAP1 which is currently working standalone mode. The AAA authentication process is returning the following AVPs:

Tunnel-Private-Group-Id(81): 15

Tunnel-Medium-Type(65): IEEE-802(6)

Which three behaviors will the client experience? (Choose three)

- A. While the AP is in standalone mode, the client will be placed in VLAN 15.
- B. While the AP is in standalone mode, the client will be placed in VLAN 10.
- C. When the AP transitions to connected mode, the client will be deauthenticated.
- D. While the AP is in standalone mode, the client will be placed in VLAN 13.
- E. When the AP is in connected mode, the client will be placed in VLAN 13.
- F. When the AP transitions to connected mode, the client will remain associated.
- G. When the AP is in connected mode, the client will be placed in VLAN 15.
- H. When the AP is in connected mode, the client will be placed in VLAN 10.

Answer: B C G

Question 4

Which antenna type should be used for a site-to-site wireless connection?

- A. Omnidirectional
- B. Yagi
- C. dipole
- D. patch

Answer: B

Question 5

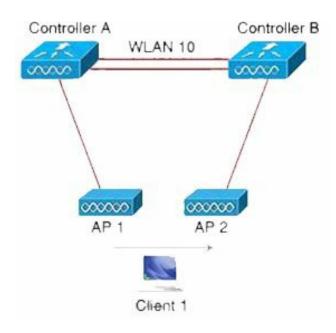
Using the EIRP formula, what parameter is subtracted to determine the EIRP value?

- A. antenna cable loss
- B. antenna gain
- C. transmitter power
- D. signal-to-noise ratio

Answer: A

Question 6

Refer to the exhibit.



Both controllers are in the same mobility group. Which result occurs when Client 1 roams between APs that are registered to different controllers in the same WLAN?

- A. Client 1 contact controller B by using an EoIP tunnel
- B. CAPWAP tunnel is created between controller A and controller B
- C. Client 1 users an EoIP tunnel to contact controller A
- D. The client database entry moves from controller A to controller B

Answer: D

Question 7

Which two sources cause interference for Wi-Fi networks? (Choose two)

- A. mirrored wall
- B. fish tank
- C. 900MHz baby monitor
- D. DECT 6.0 cordless
- E. incandesent lights

Answer: A B

Question 8

What is the responsibility of a secondary WLC?

- A. It shares the traffic load of the LAPs with the primary controller.
- B. It avoids congestion on the primary controller by sharing the registration load on the LAPs.
- C. It registers the LAPs if the primary controller fails.
- D. It enables Layer 2 and Layer 3 roaming between itself and the primary controller.

Answer: C

Question 9

Which DHCP option provides the CAPWAP APs with the address of the wireless controller(s)?

- A. 43
- B. 66
- C. 69
- D. 150

Answer: A

Question 10

A wireless consultant is designing a high-density wireless network for a lecture hall for 1000 students. Which antenna type is recommended for this environment?

- A. sector antenna
- B. dipole antenna
- C. parabolic dish
- D. omnidirectional antenna

Answer: D

Question 11

An engineer has deployed a single Cisco 5520 WLC with a management IP address of 172.16.50.5/24. The engineer must register 50 new Cisco AIR-CAP2802I-E-K9 access points to the WLC using DHCP option 43. The access points are connected to a switch in VLAN 100 that uses the 172.16.100.0/24 subnet. The engineer has configured the DHCP scope on the switch as follows:

Network 172.16.100.0 255.255.255.0 Default Router 172.16.100.1 Option 43 Ascii 172.16.50.5

The access points are failing to join the wireless LAN controller. Which action resolves the issue?

- A. configure option 43 Hex F104.AC10.3205
- B. configure option 43 Hex F104.CA10.3205
- C. configure dns-server 172.16.50.5
- D. configure dns-server 172.16.100.1

Answer: A

Question 12

Refer to the exhibit. Which level message does the WLC send to the syslog server?



- A. syslog level errors and less severity messages
- B. syslog level errors messages
- C. all syslog levels messages
- D. syslog level errors and greater severity messages

Answer: D

HSRP & VRRP Questions

Question 1

Which two statements about HSRP are true? (Choose two)

- A. Its virtual MAC is 0000.0C07.ACxx
- B. Its multicast virtual MAC is 0000.5E00.01xx
- C. Its default configuration allows for pre-emption
- D. It supports tracking
- E. It supports unique virtual MAC addresses

Answer: A D

Question 2

Which behavior can be expected when the HSRP versions is changed from 1 to 2?

- A. Each HSRP group reinitializes because the virtual MAC address has changed
- B. No changes occur because version 1 and 2 use the same virtual MAC OUI
- C. Each HSRP group reinitializes because the multicast address has changed
- D. No changes occur because the standby router is upgraded before the active router

Answer: A

Question 3

If a VRRP master router fails, which router is selected as the new master router?

- A. router with the highest priority
- B. router with the highest loopback address
- C. router with the lowest loopback address
- D. router with the lowest priority

Answer: A

Question 4

Which First Hop Redundancy Protocol maximizes uplink utilization and minimizes the amount of configuration that is necessary?

- A. GLBP
- B. HSRP v2
- C. VRRP
- D. HSRP v1

Answer: A

Question 5

What are three valid HSRP states? (Choose three)

- A. listen
- B. learning
- C. full
- D. established
- E. speak
- F. INIT

Answer: A B E

Question 6

Which two statements about VRRP are true? (Choose two)

- A. It is assigned multicast address 224.0.0.8.
- B. The TTL for VRRP packets must be 255.
- C. It is assigned multicast address 224.0.0.9.
- D. Its IP address number is 115.
- E. Three versions of the VRRP protocol have been defined.
- F. It supports both MD5 and SHA1 authentication.

Answer: B E

Question 7

Which statement about VRRP is true?

- A. It supports load balancing
- B. It can be configured with HSRP on a switch or switch stack
- C. It supports IPv4 and IPv6
- D. It supports encrypted authentication

Answer: B

Question 8

Which First Hop Redundancy Protocol should be used to meet a design requirements for more efficient default bandwidth usage across multiple devices?

- A. GLBP
- B. LCAP
- C. HSRP
- D. VRRP

Answer: A

Question 9

How does SSO work with HSRP to minimize network disruptions?

- A. It enables HSRP to elect another switch in the group as the active HSRP switch
- B. It ensures fast failover in the case of link failure
- C. It enables data forwarding along known routes following a switchover, while the routing
- A. protocol reconverges
- D. It enables HSRP to failover to the standby RP on the same device

Answer: D

Question 10

An engineer must configure interface GigabitEthernet0/0 for VRRP group 10. When the router has the highest priority in the group, it must assume the master role. Which command set must be added to the initial configuration to accomplish this task?

A.

vrrp 10 ip 172.16.13.254 vrrp 10 preempt

B.

standby 10 ip 172.16.13.254 standby 10 priority 120

C.

vrrp group 10 ip 172.16.13.254 255.255.255.0 vrrp group 10 priority 120

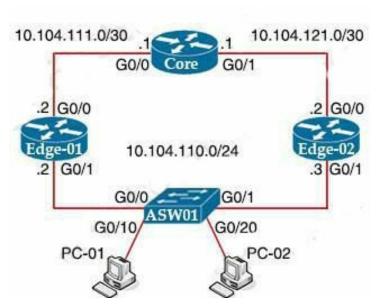
D.

standby 10 ip 172.16.13.254 255.255.255.0 standby 10 preempt

Answer: A

Question 11

Refer to the exhibit.



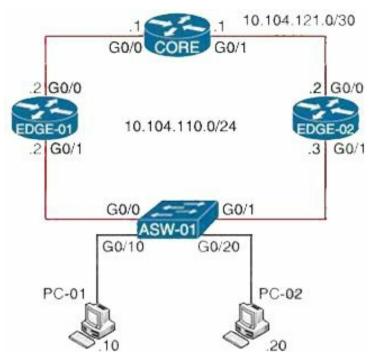
Edge-01 is currently operational as the HSRP primary with priority 110. Which command on Edge-02 causes it to take over the forwarding role when Edge-01 is down?

- A. standby 10 priority
- B. standby 10 timers
- C. standby 10 track
- D. standby 10 preempt

Answer: D

Question 12

Refer to the exhibit.



On which interfaces should VRRP commands be applied to provide first hop redundancy to PC-01 and PC-02?

- A. G0/0 on Edge-01 and G0/0 on Edge-02
- B. G0/1 on Edge-01 and G0/1 on Edge-02
- C. G0/0 and G0/1 on Core
- D. G0/0 and G0/1 on ASW-01

Answer: B

HSRP & VRRP Questions 2

Question 1

Refer to the exhibit.

R1

key chain cisco123

key 1

key-string Cisco123!

Ethernet0/0 - Group 10

State is Active

8 state changes, last state change 00:03:33

Virutal IP address is 192.168.0.1

Active virtual MAC address is 0000.0c07.ac0a

R2

key chain cisco123

key 1

key-string Cisco123!

Ethernet0/0 - Group 10

State is Active

17 state changes, last state change 00:03:33

Virutal IP address is 192.168.0.1

Active virtual MAC address is 0000.0c07.ac0a

An engineer is installing a new pair of routers in a redundant configuration. Which protocol ensures that traffic is not disrupted in the event of a hardware failure?

- A. HSRPv2
- B. VRRP
- C. GLBP
- D. HSRPv1

Answer: D

Question 2

Refer to the exhibit.

```
R1
interface GigabitEthernet0/0
ip address 192.168.250.2 255.255.255.0
standby 20 ip 192.168.250.1
standby 20 priority 120

R2
interface GigabitEthernet0/0
ip address 192.168.250.3 255.255.255.0
standby 20 ip 192.168.250.1
standby 20 priority 110
```

What are two effects of this configuration? (Choose two)

- A. R1 becomes the active router
- B. R1 becomes the standby router
- C. If R2 goes down, R1 becomes active but reverts to standby when R2 comes back online
- D. If R1 goes down, R2 becomes active but reverts to standby when R1 comes back online
- E. If R1 goes down, R2 becomes active and remains the active device when R1 comes back online

Answer: A E

Question 3

Refer to the exhibit.

R1	R2
key chain cisco123	key chain cisco123
key 1	key 1
key-string Cisco123!	key-string cisco123!
Ethernet0/0 - Group 10	Ethernet0/0 - Group 10
State is Active	State is Active
8 state changes, last state change 00:03:33	17 state changes, last state cha
Virutal IP address is 192.168.0.1	Virutal IP address is 192.168.0.1
Active virtual MAC address is 0000.0c07.ac0a	Active virtual MAC address is 00
Local virtual MAC address is 0000.0c07.ac0a (v1 default)	Local virtual MAC address is 00
Hello time 5 sec, hold time 15 sec	Hello time 10 sec, hold time 30 s
Next hello sent in 2.704 secs	Next hello sent in 6.704 secs
Authentication MD5, key-chain "cisco123"	Authentication MD5, key-chain "ci
Preemption enabled	Preemption disabled
Active router is local	Active router is local
Standby router is unknown	Standby router is unknown
Priority 255 (configured 255)	Priority 200 (configured 200)
Group name is "workstation-group" (cfgd)	Group name is "workstation-grou

An engineer is installing a new pair of routers in a redundant configuration. When checking on the standby status of each router the engineer notices that the routers are not functioning as expected. Which action will resolve the configuration error?

- A. configure matching hold and delay timers
- B. configure matching key-strings
- C. configure matching priority values
- D. configure unique virtual IP addresses

Answer: B

Question 4

An engineer must configure HSRP group 300 on a Cisco IOS router. When the router is functional, it must be the active HSRP router. The peer router has been configured using the default priority value. Which three commands are required? (Choose three)

- A. standby 300 timers 1 110
- B. standby 300 priority 90
- C. standby 300 priority 110
- D. standby version 2

E. standby version 1F. standby 300 preempt

Answer: C D F

Network Assurance Questions

Question 1

Refer to this output. What is the logging severity level?

R1#Feb 14 37:15:12:429: %LINEPROTO-5-UPDOWN Line protocol on interface GigabitEthernet0/1. Change state to up

- A. Notification
- B. Alert
- C. Critical
- D. Emergency

Answer: A

Question 2

When using TLS for syslog, which configuration allows for secure and reliable transportation of messages to its default port?

- A. logging host 10.2.3.4 vrf mgmt transport tcp port 6514
- B. logging host 10.2.3.4 vrf mgmt transport udp port 6514
- C. logging host 10.2.3.4 vrf mgmt transport tcp port 514
- D. logging host 10.2.3.4 vrf mgmt transport udp port 514

Answer: A

Question 3

Which component of the Cisco Cyber Threat Defense solution provides user and flow context analysis?

- A. Cisco Firepower and FireSIGHT
- B. Cisco Stealthwatch system

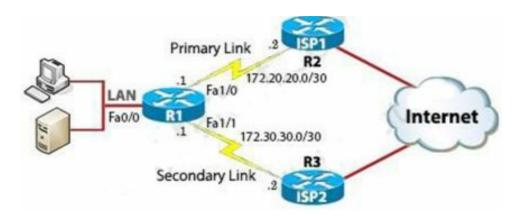
- C. Advanced Malware Protection
- D. Cisco Web Security Appliance

Answer: B

IP SLA Questions

Question 1

Refer to exhibit. What are two reasons for IP SLA tracking failure? (Choose two)



R1(config)#ip sla 1

R1(config-ip-sla)#icmp-echo 172.20.20.2 source-interface

FastEthernet0/0 R1(config-ip-sla-echo)#timeout 5000 R1(config-ip-sla-echo)#frequency 10

R1(config-ip-sla-echo)#threshold 500

R1(config)#ip sla schedule 1 start-time now life forever

R1(config)#track 10 ip sla 1 reachability

R1(config)#ip route 0.0.0.0 0.0.0.0 172.20.20.2 track 10

R1(config)#no ip route 0.0.0.0 0.0.0.0 172.20.20.2

R1(config)#ip route 0.0.0.0 0.0.0.0 172.30.30.2 5

- A. The source-interface is configured incorrectly
- B. The destination must be 172.30.30.2 for icmp-echo
- C. A route back to the R1 LAN network is missing in R2
- D. The default route has wrong next hop IP address
- E. The threshold value is wrong

Answer: C E

Question 2

Refer to the exhibit.

```
ip sla 10
  icmp-echo 192.168.10.20
  timeout 500
  frequency 3
  ip sla schedule 10 life forever start-time
now track 10 ip sla 10 reachability
```

The IP SLA is configured in a router. An engineer must configure an EEM applet to shut down the interface and bring it back up when there is a problem with the IP SLA. Which configuration should the engineer use?

- A. event manager applet EEM_IP_SLA event track 10 state down
- B. event manager applet EEM_IP_SLA event track 10 state unreachable
- C. event manager applet EEM_IP_SLA event sla 10 state unreachable
- D. event manager applet EEM_IP_SLA event sla 10 state down

Answer: A

Question 3

Which two statements about IP SLA are true? (Choose two)

- A. SNMP access is not supported
- B. It uses active traffic monitoring
- C. It is Layer 2 transport-independent
- D. The IP SLA responder is a component in the source Cisco device
- E. It can measure MOS
- F. It uses NetFlow for passive traffic monitoring

Answer: B C

Question 4

Which IP SLA operation requires the IP SLA responder to be configured on the remote end?

- A. ICMP echo
- B. UDP jitter
- C. ICMP jitter
- D. TCP connect

Answer: B