QUESTION 456
What are two characteristics of the distribution layer in a three-tier network architecture? (Choose two.)

A. *serves as the network aggregation point*
B. *provides a boundary between Layer 2 and Layer 3 communications*
C. *designed to meet continuous, redundant uptime requirements*
D. *is the backbone for the network topology*
E. *physical connection point for a LAN printer*

Answer: BC

QUESTION 457
What is the purpose of using First Hop Redundancy Protocol in a specific subnet?

A. Filter traffic based on destination IP addressing
B. Sends the default route to the hosts on a network
C. ensures a loop-free physical topology
D. forwards multicast hello messages between routers

Answer: C

QUESTION 458
Which access layer threat-mitigation technique provides security based on identity?

A. Dynamic ARP Inspection
B. using a non-default native VLAN
C. 802.1x
D. DHCP snooping

Answer: C

QUESTION 459
What must be considered when using 802:11 ta?

A. It is compatible with 802 lib- and 802 11-compliant wireless devices
B. It is used in place of 802 11b/g when many nonoverlapping channels are required
C. It is susceptible to interference from 2 4 GHz devices such as microwave ovens.
D. It is chosen over 802 11b/g when a lower-cost solution is necessary

Answer: A

QUESTION 460
When a site-to-site VPN is configured, which IPsec mode provides encapsulation and encryption of the entire original P packet?

A. IPsec tunnel mode with AH
B. IPsec transport mode with AH
C. IPsec tunnel mode with ESP
D. IPsec transport mode with ESP

Answer: C

QUESTION 461
What does physical access control regulate?

A. access to spec fie networks based on business function
B. access to servers to prevent malicious activity
C. access :o computer networks and file systems
D. access to networking equipment and facilities

Answer: D

QUESTION 462
On workstations running Microsoft Windows, which protocol provides the default gateway for the device?

A. DHCP
B. STP
C. SNMP
D. DNS

Answer: A

QUESTION 463
How are VLAN hopping attacks mitigated?

A. enable dynamic ARP inspection
B. manually implement trunk ports and disable DTP
C. activate all ports and place in the default VLAN
D. configure extended VLANs

Answer: B

QUESTION 464
What is the role of a firewall in an enterprise network?

A. Forwards packets based on stateless packet inspection
B. Processes unauthorized packets and allows passage to less secure segments of the network
C. determines which packets are allowed to cross from unsecured to secured networks
D. explicitly denies all packets from entering an administrative domain

Answer: C

QUESTION 465
Which two primary drivers support the need for network automation? (Choose two.)

A. Eliminating training needs
B. Increasing reliance on self-diagnostic and self-healing
C. Policy-derived provisioning of resources
D. Providing a ship entry point for resource provisioning
E. Reducing hardware footprint

Answer: CD

QUESTION 466
What is a function of the Cisco DNA Center Overall Health Dashboard?

A. It provides a summary of the top 10 global issues.
B. It provides detailed activity logging for the 10 devices and users on the network.
C. It summarizes the operational status of each wireless devise on the network.
D. It summarizes daily and weekly CPU usage for servers and workstations in the network.

Answer: A

QUESTION 467
Which protocol requires authentication to transfer a backup configuration file from a router to a remote server?

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

Answer: B

QUESTION 468
After installing a new Cisco ISE server, which task must the engineer perform on the Cisco WLC to connect wireless clients on a specific VLAN based on their credentials?

A. Enable the allow AAA Override
B. Enable the Even: Driven RRM.
C. Disable the LAG Mode or Next Reboot.
D. Enable the Authorized MIC APs against auth-list or AAA.

Answer: A

QUESTION 469
Which QoS tool is used to optimize voice traffic on a network that is primarily intended for data traffic?

A. FIFO
B. WFQ
C. PQ
D. WRED

Answer: C

QUESTION 470
Which action does the router take as rt forwards a packet through the network?

A. The router replaces the source and desinaoon labels wth the sending router uterface label as a source and the next hop router label as a desbnabon
B. The router encapsulates the source and destination IP addresses with the sending router P

address as the source and the neighbor IP address as the destination
C. The router replaces the original source and destination MAC addresses with the sending router
MAC address as the source and neighbor MAC address as the destination
D. The router encapsulates the original packet and then includes a tag that identifies the source
router MAC address and transmit transparently to the destination

Answer: C

QUESTION 471
Where is the interface between the control plane and data plane within the software-defined architecture?

A. control layer and the infrastructure layer
B. application layer and the infrastructure layer
C. application layer and the management layer
D. control layer and the application layer

Answer: C

QUESTION 472
An implementer is preparing hardware for virtualization to create virtual machines on a host. What is needed to provide communication between hardware and virtual machines?

A. hypervisor
B. router
C. straight cable
D. switch

Answer: A

QUESTION 473
A network analyst is tasked with configured the date and time on a router using EXEC mode. The date must be set to 12:00am. Which command should be used?

A. Clock timezone
B. Clock summer-time-recurring
C. Clock summer-time date
D. Clock set

Answer: D

QUESTION 474
Refer to the exhibit. If R1 receives a packet destined to 172.161.1, to which IP address does it send the packet?

```
R1#show ip route
#output suppressed

Gateway of last resort is 192.168.14.4 to network 0.0.0.0

C       172.16.1.128/25 is directly connected, GigabitEthernet1/1/0
C       192.168.12.0/24 is directly connected, FastEthernet0/0
C       192.168.13.0/24 is directly connected, FastEthernet0/1
C       192.168.14.0/24 is directly connected, FastEthernet1/0
C       172.16.16.1 is directly connected, Loopback1
    192.168.10.0/24 is variably subnetted, 3 subnets, 3 masks
O       192.168.10.0.24 [110/2] via 192.168.14.4, 00:02:01, FastEthernet1/0
O       192.168.10.32/27 [110/11] via 192.168.13.3, 00:00:52, FastEthernet0/1
O       192.168.0.0/16 [110/2] via 192.168.15.5, 00:05:01, FastEthernet1/1
D       192.168.10.1/32 [90/52778] via 192.168.12.2, 00:03:44, FastEthernet0/0
O*E2    0.0.0.0/0 [110/1] via 192.168.14.4, 00:00:10, FastEthernet1/0
```

A. 192.168.12.2
B. 192.168.13.3
C. 192.168.14.4
D. 192.168.15.5

**Answer:** C

QUESTION 475
A network administrator is asked to configure VLANS 2, 3 and 4 for a new implementation. Some ports must be assigned to the new VLANS with unused remaining. Which action should be taken for the unused ports?

A. configure port in the native VLAN
B. configure ports in a black hole VLAN
C. configure in a nondefault native VLAN
D. configure ports as access ports

Answer: B

QUESTION 476
Refer to the exhibit. Router R4 is dynamically learning the path to the server. If R4 is connected to R1 via OSPF Area 20, to R2 via R2 BGP, and to R3 via EIGRP 777, which path is installed in the routing table of R4?
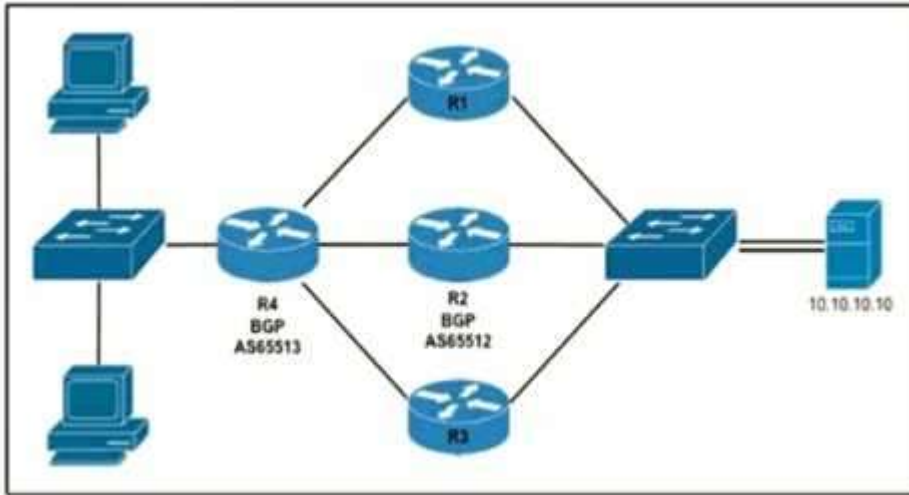
A. the path through R1, because the OSPF administrative distance is 110
B. the path through R2. because the IBGP administrative distance is 200
C. the path through R2 because the EBGP administrative distance is 20
D. the path through R3. because the EIGRP administrative distance is lower than OSPF and BGP

Answer: C

QUESTION 477
Why was the RFC 1918 address space defined?

A. conserve public IPv4 addressing
B. preserve public IPv6 address space
C. reduce instances of overlapping IP addresses
D. support the NAT protocol

Answer: A

QUESTION 478
Which HTTP status code is returned after a successful REST API request?

A. 200
B. 301
C. 404
D. 500

Answer: A