C. FC00::/7
D. FF02::1
E. FF02::2

Correct Answer: DE
Explanation:
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipv6/configuration/xe-3s/ipv6-xe-36s-book/ip6-multicast.html

When an interface is configured with IPv6 address, it automatically joins the all nodes (FF02::1) and solicited-node (FF02::1:FFxx:xxxx) multicast groups. The all-node group is used to communicate with all interfaces on the local link, and the solicited-nodes multicast group is required for link-layer address resolution. Routers also join a third multicast group, the all-routers group (FF02::2).

QUESTION 139
What are two improvements provided by automation for network management in an SDN environment? (Choose two)

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

Correct Answer: BE

QUESTION 140
Which MAC address is recognized as a VRRP virtual address?

A. 0000.5E00.010a
B. 0005.3711.0975
C. 0000.0C07.AC99
D. 0007.C070/AB01

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

QUESTION 141
DRAG DROP
Drag and drop the functions of DHCP from the left onto any of the positions on the right Not all functions are used.

provides local control for network segments using a client-server scheme	1
reduces the administrative burden for onboarding end users	2
associates hostnames to IP addresses	3
maintains an address pool	4
assigns IP addresses to local hosts for a configurable lease time	
offers domain name server configuration	
uses authoritative servers for record keeping	

Correct Answer:

provides local control for network segments using a client-server scheme	maintains an address pool
reduces the administrative burden for onboarding end users	provides local control for network segments using a client-server scheme
associates hostnames to IP addresses	reduces the administrative burden for onboarding end users
maintains an address pool	assigns IP addresses to local hosts for a configurable lease time
assigns IP addresses to local hosts for a configurable lease time	
offers domain name server configuration	
uses authoritative servers for record keeping	

QUESTION 142
What is the maximum bandwidth of a T1 point-to-point connection?

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

D. 43.7 Mbps

Correct Answer: A
Explanation:
https://www.bsimplify.com/what-is-point-to-point-
t1/#:~:text=A%20Point%20to%20Point%20T1,data%20speeds%20(1.54Mbps).

Point to Point T1
A Point to Point T1 service is a private data connection securely connecting two or more locations
with T1 data speeds (1.54Mbps).

QUESTION 143
What are two roles of the Dynamic Host Configuration Protocol (DHCP)? (Choose two)

A. The DHCP server offers the ability to exclude specific IP addresses from a pool of IP addresses
B. The DHCP client can request up to four DNS server addresses
C. The DHCP server assigns IP addresses without requiring the client to renew them
D. The DHCP server leases client IP addresses dynamically.
E. The DHCP client maintains a pool of IP addresses it can assign.

Correct Answer: AD

QUESTION 144
Which statement identifies the functionality of virtual machines?

A. Virtualized servers run most efficiently when they are physically connected to a switch that is
    separate from the hypervisor
B. The hypervisor can virtualize physical components including CPU. memory, and storage
C. Each hypervisor can support a single virtual machine and a single software switch
D. The hypervisor communicates on Layer 3 without the need for additional resources

Correct Answer: B

QUESTION 145
Which technology is appropriate for communication between an SDN controller and applications
running over the network?

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

Correct Answer: B

QUESTION 146
Refer to the exhibit. Which two commands, when configured on router R1, fulfill these
requirements? (Choose two.)

▪ Packets towards the entire network 2001:db8:2::/64 must be forwarded through router R2.
▪ Packets toward host 2001:db8:23::14 preferably must be forwarded through R3.
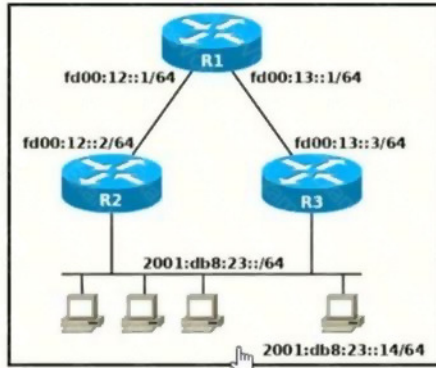
A. Ipv6 route 2001:db8:23::/128 fd00:12::2
B. Ipv6 route 2001:db8:23::14/128 fd00:13::3
C. Ipv6 route 2001:db8:23::14/64 fd00:12::2
D. Ipv6 route 2001:db8:23::/64 fd00:12::2
E. Ipv6 route 2001:db8:23::14/64 fd00:12::2 200

Correct Answer: DE

QUESTION 147
An organization has decided to start using cloud-provided services. Which cloud service allows the organization to install its own operating system on a virtual machine?

A. platform-as-a-service
B. software-as-a-service
C. network-as-a-service
D. infrastructure-as-a-service

Correct Answer: B
Explanation:
Below are the 3 cloud supporting services cloud providers provide to customer:

▪ SaaS (Software as a Service): SaaS uses the web to deliver applications that are managed by a thirdparty vendor and whose interface is accessed on the clients' side. Most SaaS applications can be run directly from a web browser without any downloads or installations required, although some require plugins.
▪ PaaS (Platform as a Service): are used for applications, and other development, while providing cloud components to software. What developers gain with PaaS is a framework they can build upon to develop or customize applications. PaaS makes the development, testing, and deployment of applications quick, simple, and cost-effective. With this technology, enterprise operations, or a thirdparty provider, can manage OSes, virtualization, servers, storage, networking, and the PaaS software itself. Developers, however, manage the applications.
▪ IaaS (Infrastructure as a Service): self-service models for accessing, monitoring, and managing remote datacenter infrastructures, such as compute (virtualized or bare metal), storage, networking, and networking services (e.g. firewalls). Instead of having to purchase hardware outright, users can purchase IaaS based on consumption, similar to electricity or other utility billing.

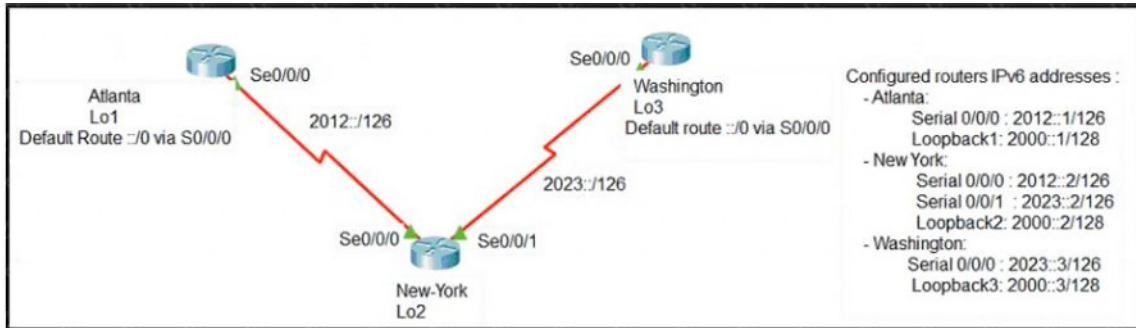In general, IaaS provides hardware so that an organization can install their own operating system.

QUESTION 148
Refer to Exhibit. The loopback1 interface of the Atlanta router must reach the loopback3 interface

of the Washington router. Which two static host routes must be configured on the NEW York router? (Choose two)

A. ipv6 route 2000::1/128 2012::1
B. ipv6 route 2000::3/128 2023::3
C. ipv6 route 2000::3/128 s0/0/0
D. ipv6 route 2000::1/128 2012::2
E. ipv6 route 2000::1/128 s0/0/1
Correct Answer: AB

QUESTION 149
Refer to the exhibit. What is the result if Gig1/11 receives an STP BPDU?

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

Correct Answer: D

QUESTION 150
DRAG DROP
Drag and drop the statement about networking from the left into the Corresponding networking types on the right. Not all statements are used.