Custom View Settings

Topic 1 - Single Topic

Question #1 *Topic 1*

You are configuring your Nokia 7750SR Service Router from the Command Line Interface (CLI), and after entering a lengthy command, wish to return directly to the ROOT context. Which control command allows you to do this quickly?

A. Ctrl-z

B. Ctrl-c

C. Esc

D. Shift-Page Down

Correct Answer: *A*

Community vote distribution

A (100%)

Question #2 *Topic 1*

Which of the following best describes a repeater?

A. A passive device simply used to connect two or more cables. Does not generate or amplify any signals.

B. A device that receives and retransmits a signal out its ports, but does not do any Layer 2 analysis of the data.

C. A device that receives a signal and based on the Layer 2 destination address, makes a decision on which ports the signal should be retransmitted.

D. A device that receives a signal and based on the Layer 3 destination address, makes a decision on which ports the signal should be retransmitted.

Correct Answer: *B*

Community vote distribution

B (100%)

Question #3 *Topic 1*

How do protocols such as ATM and Frame-Relay support differentiating multiple customers or traffic types on the same physical wire?

A. ATM and Frame-Relay are circuit switched protocols and use Virtual Circuits to create logical separation of traffic.

B. ATM and Frame-Relay are point-to-point protocols and do not support different customers or traffic type on the same physical wire.

C. ATM and Frame-Relay are circuit switched protocols and use VLAN's to create logical separation of traffic.

D. ATM and Frame-Relay are circuit switched protocols and use IP Header information to create logical separation of traffic.

Correct Answer: *A*

Community vote distribution

A (100%)

Question #4 *Topic 1*

Which of the following is a feature of Layer 3?

A. Provides an universal addressing scheme

B. Ensures data is delivered across the Layer 2 network.

C. Provides reliable data transfers.

D. Provides a physical interface to the network.

Correct Answer: *A*

Community vote distribution

A (100%)

Question #5 *Topic 1*

The 201.148.26.0/24 network is subnetted using a /26 mask. How many subnets and host addresses will you obtain with this mask?

A. 4 subnets, 64 hosts

B. 64 subnets, 4 hosts

C. 4 subnets, 62 hosts

D. 64 subnets, 2 hosts

E. 6 subnets, 30 hosts

Correct Answer: *C*

Community vote distribution

C (100%)

Question #6 *Topic 1*

What kind of information can a Dynamic Host Configuration Protocol (DHCP) client receive?

A. Details of the configuration settings of each router on the network.

B. A list of other DHCP clients.

C. IP addresses and their lease times.

D. Server time information

Correct Answer: *C*

Question #7 *Topic 1*

Choose two true statements that characterize Link State Routing

A. Routers send a copy of their routing table to their neighbors periodically.

B. Routers flood link information throughout the entire area.

C. Network converges quickly (within several seconds) after a topology change.

D. Routers do not have precise knowledge of the entire network topology.

Correct Answer: *BC*

Community vote distribution

BC (100%)

Question #8 *Topic 1*

Which statement accurately explains the purpose of the TCP protocol and what it provides?

A. The primary purpose of TCP is to provide reliable communications between application services.

B. The primary purpose of TCP is to provide unreliable communications between application services

C. The primary purpose of TCP is to provide IP routing between application services.

D. The primary purpose of TCP is to define the correct format for the application layer such as JPEG or HTML.

Correct Answer: *A*

Community vote distribution

A (100%)

Question #9 *Topic 1*

Which of the following is the best description of well known ports?

A. Well known ports apply to routers only and are used for communication and control traffic. Well known port numbers are assigned by IANA and can have any value.

B. Well known ports are used by TCP and UDP. Well known port numbers range from 1024 to 65535 and are assigned by IANA.

C. Well known port numbers are used by both TCP and UDP. Well known port numbers range from 1 to 1023 and are assigned by IANA.

D. Well known ports numbers are used by TCP only. Well known port numbers are assigned by IANA and can have any value.

Correct Answer: *C*

Community vote distribution

C (100%)

Question #10 *Topic 1*

Which organization first considered cross-platform networking support to be a necessity?

A. IBM.

B. US Military.

C. Nokia.

D. NASA.

E. Bell Labs

Correct Answer: *B*

Community vote distribution

B (100%)

Question #11 *Topic 1*

Which of the following statements best describes ARPANET?

A. ARPANET was an early packet switched network initially connecting 4 sites (Stanford, UC Santa Barbara, UCLA, and U of Utah).

B. The mission of ARPANET was to connect packet switched networks and other diverse networks, making an international network of networks.

C. ARPANET connected sites spread around the Hawaiian Islands to a central time-sharing computer on the University of Hawaii campus.

D. ARPANET was based on the use of TCP/IP to interconnect diverse systems.

Correct Answer: *A*

Community vote distribution

A (100%)

Question #12 *Topic 1*

Kahn solved the problem of interconnecting different networks using different protocols by pioneering a new protocol called TCP that was capable of:

A. Secure transmission of information.

B. Enforcing a constant packet size to avoid discards.

C. Allowing remote logins.

D. Providing host to host connectivity with global addressing.

Correct Answer: *D*

Community vote distribution

D (100%)

Question #13 *Topic 1*

Which network was created to replace ARPANET?

A. INWG

B. ALOHANET

C. IETF

D. NSFNET

Correct Answer: *D*

Community vote distribution

D (100%)

Question #14 *Topic 1*

Which statement best describes how the internet evolved?

A. The internet emerged in the commercial world in the 1980's following the US military's adoption of TCP/IP in 1983.

B. The internet evolved from a military to a research to a commercial based network.

C. The internet remained primarily a research based network and was only commercially adopted in 2000 when the world wide web was conceived.

D. Internet service providers provided the services necessary for military based networks to evolve into research and education based networks.

Correct Answer: *B*

Question #15 *Topic 1*

Which organization eventually became the standards body for IP and related protocols?

A. IEEE

B. IETF

C. NSFNET

D. ITU-T

E. APNIC

Correct Answer: *B*

Question #16 *Topic 1*

What is the name for an organization that provides Internet services to its customers?

A. A large corporation.

B. An ISP.

C. A home based business.

D. A content provider.

Correct Answer: *B*

Question #17 *Topic 1*

The IANA is responsible for:

A. Intra-city ISP traffic

B. Allocation of the global IP address space

C. Allocating IP addresses for residential customer traffic

D. Allocating North American IP addresses

Correct Answer: *B*

Question #18 *Topic 1*

Which of the following is an important advantage of protocol layering? (Choose two)

A. Controls distribution of IP addresses.

B. Simplifies protocol functionality.

C. Isolates changes in lower layers from upper layers.

D. Increases protocol operational efficiencies.

E. Layering adds to the fragmentation of the data

Correct Answer: *CD*

Question #19 *Topic 1*

To transmit its segments of data across the network TCP uses the services of which layer?

A. Application Layer.

B. Transport Layer.

C. IP Layer.

D. Data Link Layer

Correct Answer: *C*

Question #20 *Topic 1*

Which of the following are protocols belonging to the OSI suite of protocols? (Choose two)

A. OSPF

B. BGP

C. X.500

D. IS-IS

E. Ethernet

Correct Answer: *CD*

Community vote distribution

CD (100%)

Question #21 *Topic 1*

Which of the following statements is TRUE regarding the development of the OSI Reference Model?

A. OSI was developed as an alternative, open standard to IBMs SNA model.

B. OSI protocols were no longer used after TCP/IP was developed.

C. OSI model is much simpler than TCP/IP.

D. OSI model is maintained exclusively by the IETF.

Correct Answer: *A*

Question #22 *Topic 1*

The TCP/IP and OSI models of protocol are similar in that they both have:

A. An application and session layer.

B. A network layer that provides a universal and consistent forwarding service.

C. A transport layer with two protocols.

D. An applications services layer with similar layering and service definitions.

Correct Answer: *C*

Question #23 *Topic 1*

How many of the front access card slots of the Nokia 7750 SR-12 router are dedicated for redundant common equipment?

A. 1

B. 2

C. 7

D. 10

Correct Answer: *B*

Community vote distribution

B (100%)

Question #24 *Topic 1*

Which of the following is not supported on the Nokia 7450 ESS?

A. Support for IPv6.

B. Support for POS.

C. Upgrade path to the Nokia 7750 SR.

D. Support for IS-IS

Correct Answer: *C*

Community vote distribution

C (100%)

Question #25 *Topic 1*

The TiMOS-m.n.Y.Z software image file is software that:

A. Contains all the components required to configure and run protocols on the Nokia 7750 SR/7450 ESS.

B. Loads the router configuration.

C. Transfers the router configuration from the router to the network management system.

D. Loads the router software image.

Correct Answer: *A*

Community vote distribution

A (100%)

Question #26 *Topic 1*

When entering a command on the Nokia 7750 SR from the Command Line Interface (CLI), what would you use to list all the options for the command?

A. ?

B. tab character

C. space character

D. info

Correct Answer: *A*

Community vote distribution

A (100%)

Question #27 *Topic 1*

Which of the following describes the Nokia 7750 SR Input/Output Module (IOM)?

A. Small optical module available in a variety of formats.

B. Contains a CPU for managing the forwarding hardware in each flexible fast path.

C. Converts traffic from an external standard format to an internal format.

D. Contains the CPU that runs the routing protocol software as well as the switch fabric.

Correct Answer: *B*

Community vote distribution

B (100%)

Question #28 *Topic 1*

A typical Nokia 7750 SR Media Dependent Adapter (MDA) interfaces with:

A. A Small Form-Factor Pluggable (SFP) module.

B. The Central Processing Unit (CPU).

C. The Control Plane.

D. The Switch Fabric.

Correct Answer: *A*

Question #29 *Topic 1*

Which of the following best describes the operation of the Media Dependent Adapter (MDA)?

A. The MDA contains the flexible fast path complex used for forwarding data.

B. Excess data is discarded by the MDA and the remaining data forwarded for QoS processing.

C. The MDA buffers data and applies Quality of Service (QoS) to classify and treat the data appropriately.

D. The MDA converts data from its incoming physical format into an internal format and provides some minimal buffering.

Correct Answer: *D*

Question #30 *Topic 1*

What is NOT a function of the IOM?

A. It forwards the data to the switch fabric.

B. It discards excess data packets.

C. It converts the incoming data to an internal format.

D. It performs Quality of Service operations and buffers incoming data.

Correct Answer: *C*

Community vote distribution

C (100%)

Question #31 *Topic 1*

Which compact flash on a Control/Switch processor of a Nokia 7750 router stores the runtime image and running configuration?

A. CF 1

B. CF 2

C. CF 3

D. Both A and B

Correct Answer: *C*

Question #32 *Topic 1*

One of the tasks of the boot options file (BOF) is to:

A. Specify authorization information to control access to the router.

B. Define an IP address for the CPM Ethernet port.

C. Initialize the hardware.

D. Set the date/time for the system.

Correct Answer: *B*

Question #33 *Topic 1*

Which of the following user interface sessions are accessible through Telnet and Secure Shell (SSH) on the Nokia 7750 SR and 7450 ESS?

A. Graphic User Interface (GUI).

B. Node Management Terminal Interface (NMTI).

C. Command Line Interface (CLI).

D. All of the above.

Correct Answer: *C*

Question #34 *Topic 1*

You are working from a particular Command Line Interface (CLI) context, and want to see the commands available from your current context. What command can you issue to view this information?

A. view tree

B. tree

C. info detail

D. info

Correct Answer: *B*

Question #35 *Topic 1*

What is available for auto completion of commands within the CLI on the Nokia 7750 SR Service Router?

A. Type the first letters of the command, then press Ctrl C

B. Type the first letters of the command, then press Esc

C. Type the first letters of the command, then press Tab

D. Type the first letters of the command, then type ?

Correct Answer: *C*

Question #36 *Topic 1*

Which of the following is a File command in the File System context of the Command Line Interface (CLI)?

A. time-display

B. help

C. type

D. terminal

Correct Answer: *C*

Question #37 *Topic 1*

What must occur for a LAG to become operational?

A. There must be multiple ports assigned to the LAG.

B. All ports in the LAG must be configured with the same characteristics.

C. Auto-negotiation must be enabled on all ports in the LAG.

D. All of the above.

Correct Answer: *B*

Question #38 *Topic 1*

If a 4-port LAG is configured with the option of 'port-threshold 2' and 'action down' what will happen if the total operational links in the LAG is 2?

A. If dynamic-cost is enabled it will adjust the cost for routing protocols such as OSPF.

B. If dynamic-cost is not enabled it will adjust the cost for routing protocols such as OSPF by dividing the link bandwidth by 2.

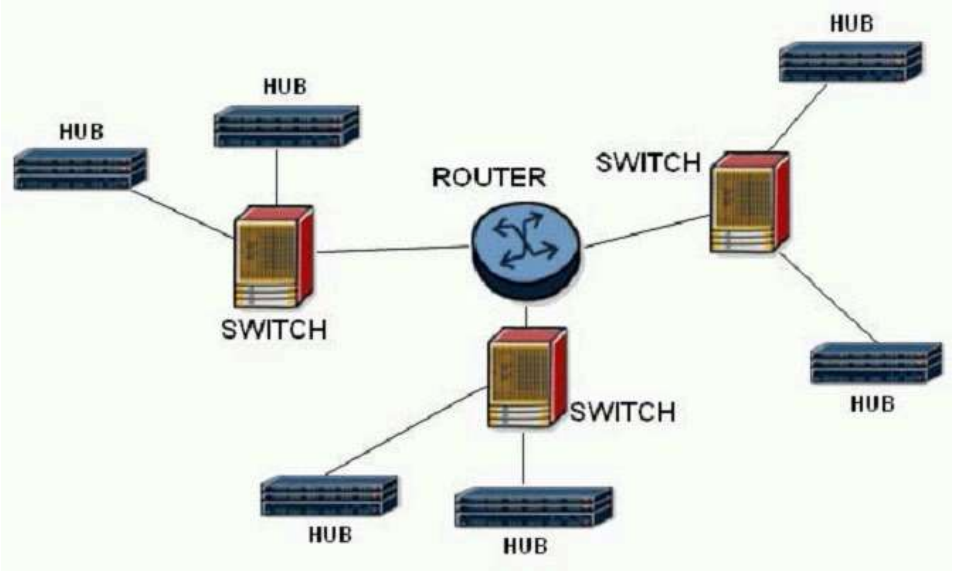
C. The LAG will be changed to an operational state of 'down'.

D. The LAG will function with only 2 ports. There will be no change to the routing metric.

Correct Answer: *C*

Question #39 *Topic 1*

An Ethernet Local Area Network (LAN) consists of the components shown in the diagram.
How many broadcast and collision domains are on this LAN?



A. 9 broadcast domains, 3 collision domains.

B. 3 broadcast domains, 3 collision domains.

C. 3 broadcast domains, 9 collision domains.

D. 1 broadcast domain, 9 collision domains.

Correct Answer: *C*

Question #40 *Topic 1*

As described by the CSMA/CD algorithm, what is the first thing to happen when Host A and Host B begin transmitting data at the same time?

A. Host A and B will generate a jam signal.

B. Listening hosts will request retransmission.

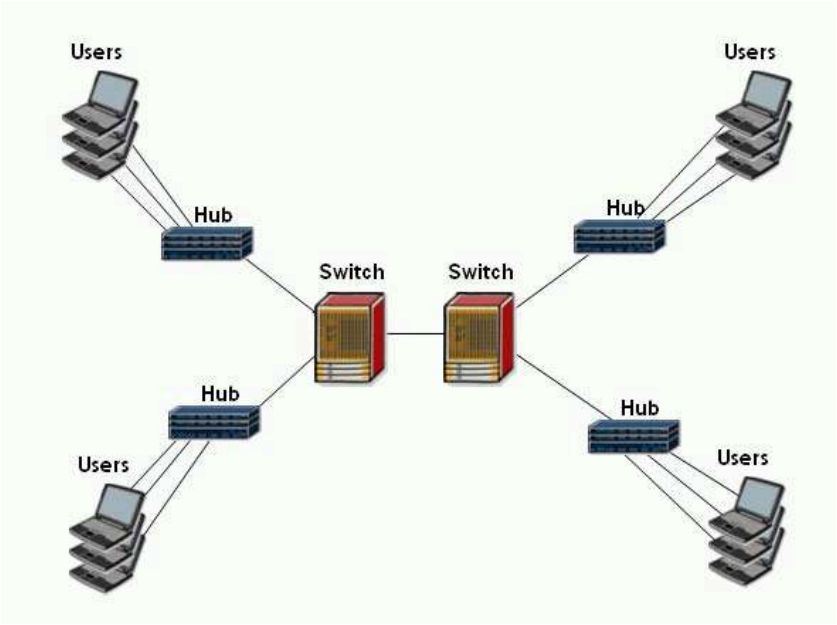
C. Host A or B will retry the transmission.

D. A back-off timer is started by Host A or B.

Correct Answer: *A*

Question #41 *Topic 1*

(Click the Exhibit Button below) An Ethernet Local Area Network (LAN) consists of the following components:
- Four 24-port hubs & Two 16-port switches
How many broadcast domains are on this LAN?



A. 1

B. 2

C. 5

D. 32

Correct Answer: *A*

Question #42 *Topic 1*

Which of the following best describes an Ethernet bridge?

A. A passive device simply used to connect two or more cables. Does not generate or amplify any signals.

B. A device that receives and retransmits a signal out its other ports, but does not do any Layer 2 analysis of the data.

C. A device that receives a signal and based on the Layer 2 destination address, makes a decision on which ports the signal should be retransmitted.

D. A device that receives a signal and based on the Layer 3 destination address, makes a decision on which ports the signal should be retransmitted.

Correct Answer: *C*

Question #43 *Topic 1*

What happens immediately after an Ethernet switch receives an Ethernet frame?

A. It records the destination MAC address and the interface on which it arrived.

B. It records the source MAC address and the interface on which it arrived.

C. It floods the frame out of all its interfaces except the interface on which the frame arrived.

D. It transmits the frame out of the appropriate interface.

Correct Answer: *B*

Question #44 *Topic 1*

What is the behavior of a typical Ethernet switch when it receives a frame with a uncast destination MAC address? (Choose two)

A. The switch floods the frame out of all ports except the port on which it was received.

B. The switch looks in its FDB. If the source address is unknown it discards the frame.

C. The switch looks in its FDB. If the destination address is known it forwards the frame out the appropriate interface.

D. The switch looks in its FDB. If the destination address is unknown it floods the frame out all ports except the port on which it was received.

E. The switch looks in its FDB. If the destination address is unknown it discards the frame.

Correct Answer: *CD*

Question #45 *Topic 1*

Which technologies can be used with Ethernet switches to achieve redundancy? (Choose two)

A. LAG

B. OSPF

C. RIP

D. STP

Correct Answer: *AD*

Question #46 *Topic 1*

In what type of network is a broadcast storm likely to occur?

A. An Ethernet network with redundant paths not running STP.

B. An ATM network.

C. A SONET network.

D. All of the above.

Correct Answer: *A*

Question #47 *Topic 1*

What problems was Spanning Tree Protocol (STP) primarily designed to solve? (Choose two):

A. Providing path redundancy.

B. Preventing loops.

C. Handling collisions.

D. Allowing flooding of multicast traffic.

Correct Answer: *AB*

Question #48 *Topic 1*

Which of the following is a feature of a VLAN?

A. A VLAN allows multiple Ethernet switches to be connected in a single broadcast domain.

B. A VLAN allows multiple Ethernet switches to be connected in a single collision domain.

C. A VLAN can separate ports on the same switch into different broadcast domains.

D. A VLAN can separate ports on the same switch into different collision domains.

Correct Answer: *C*

Question #49 *Topic 1*

What is required if devices on different VLANs wish to communicate with each other?

A. Devices on different VLANs cannot communicate with each other.

B. Devices on different VLANs can communicate with each other as long as they are connected to the same switch.

C. Devices on different VLANs can communicate with each other as long as the switches they are attached to are connected to each other with an Ethernet connection.

D. Devices on different VLANs can communicate with each other if there is an IP router to connect the VLANs.

Correct Answer: *D*

Question #50 *Topic 1*

A 24 port Ethernet switch is configured with VLAN 100 on ports 1 - 8, VLAN 200 on ports 9 - 16 and VLAN 300 on ports 17 - 24. Which of the following describes the behavior of the switch when a broadcast frame is received on port 1?

A. The switch will discard the broadcast frame because there is no specific destination address.

B. The switch will flood the broadcast frame on all ports on which the switch has seen frames from attached devices

C. The switch will flood the broadcast frame on ports 2 to 8.

D. The switch will flood the broadcast frame on all 24 ports.

Correct Answer: *C*

Next Questions →

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Question #51 *Topic 1*

The method by which Ethernet frames are associated to a specific VLAN is referred to as:

A. Segmenting
B. Stacking
C. Routing
D. Tagging

Correct Answer: *D*

Question #52 *Topic 1*

What information is used to separate VLANs on a VLAN trunk that connects multiple VLANs?

A. VLAN tag.
B. IP Header.
C. FCS.
D. Priority Value.

Correct Answer: *A*

Question #53 *Topic 1*

Using Q-in-Q Virtual Local Area Network (VLAN) stacking, how does a carrier differentiate one customers traffic from that of another?

A. The provider edge (PE) switch adds an additional field called a PE tag to the customers Layer 2 data.
B. The PE switch replaces the customers VLAN tag with a carrier-assigned tag.
C. The PE switch adds a second VLAN tag to identify the customers traffic on the carriers network.
D. The PE switch assigns a customer-specific priority label to the customers traffic.

Correct Answer: *C*

Question #54 *Topic 1*

What is the purpose of the Data Link Layer in the OSI model?

A. The Data Link Layer is responsible for encapsulating the packet into a frame for transmission on the transmission media.

B. The Data Link Layer is responsible for encapsulating the packet into an IP header and routing the packet.

C. The Data Link Layer is responsible for formatting the packet for applications such as JPEG format.

D. The Data Link Layer is responsible for timing of the signals on the transmission media

Correct Answer: *A*

Question #55 *Topic 1*

Which of the following is typically a characteristic of Layer 2 framing?

A. Provides a universal addressing scheme to uniquely identify destinations in the network.

B. The size of the Layer 2 frame cannot exceed 1518 bytes.

C. Provides error checking of the frame contents after transmission.

D. All the above.

Correct Answer: *C*

Question #56 *Topic 1*

Which of the following is NOT an example of a Layer 2 protocol?

A. POS

B. IP

C. ATM

D. Frame Relay

E. Ethernet

Correct Answer: *B*

Question #57 *Topic 1*

Why is the address field in a PPP header always set to "11111111"?

A. PPP supports multipoint access networks with many stations. The all 1's acts as a broadcast.

B. PPP supports multipoint access networks with many stations. The all 1's acts as a multicast.

C. PPP supports point-to-point networks only. The address field is fixed.

D. PPP supports point-to-point networks only. The address field can change dynamically since every station is assigned a PPP address.

Correct Answer: *C*

Question #58 *Topic 1*

Which ATM adaptation layer is commonly used for transporting IP datagrams or non-real time data?

A. AAL0

B. AAL1

C. AAL2

D. AAL3/4

E. AAL5

Correct Answer: *E*

Question #59 *Topic 1*

Which of the following is a characteristic of ATM?

A. Application data is transported in 53-byte cells.

B. ATM circuits are identified by a VPI/VCI value.

C. Provides enhanced QoS support with 5 classes of service.

D. Ideal for multiple services on the same physical line.

E. All of the above.

F. None of the above

Correct Answer: *E*

Question #60 *Topic 1*

What is the basic unit of framing in SONET and the bit rate for its transmission?

A. STS-1 with a bit rate of 1.544 Mbit/s

B. STS-1 with a bit rate of 2.048 Mbit/s

C. STS-1 with a bit rate of 51.84 Mbit/s

D. STS-1 with a bit rate of 155.52 Mbit/s

Correct Answer: *C*

Question #61 *Topic 1*

What is the basic unit of framing in SDH and the bit rate for its transmission?

A. STM-1 with a bit rate of 1.544 Mbit/s

B. STM-1 with a bit rate of 2.048 Mbit/s

C. STM-1 with a bit rate of 51.84 Mbit/s

D. STM-1 with a bit rate of 155.52 Mbit/s

Correct Answer: *D*

Question #62 *Topic 1*

Which of the following are examples of Time Division Multiplexing (Choose two)?

A. Ethernet.

B. Token-Ring.

C. SONET/SDH.

D. E1 carrier.

E. PPP

Correct Answer: *CD*

Question #63 *Topic 1*

How many DS-3 frames can be transported in an OC-3 frame?

A. 1

B. 2

C. 3

D. 4

Correct Answer: *C*

Question #64 *Topic 1*

Who was responsible for developing and publishing the original standard that was used for 10 Mbit/s Ethernet?

A. Intel Corporation.

B. Digital Equipment Corporation.

C. DEC-Intel-Xerox.

D. Apple Computer.

E. IBM.

Correct Answer: *C*

Question #65 *Topic 1*

Which Ethernet frame field does the receiver use to verify the integrity of the received bits?

A. Destination address

B. Frame check sequence

C. Preamble

D. Length field

Correct Answer: *B*

Question #66 *Topic 1*

How is Ethernet II different from Ethernet 802.3?

A. Ethernet 802.3 can only be used on point-to-point links, while Ethernet II can be used on broadcast networks.

B. In Ethernet II the 2 bytes after the source MAC address is used as a type indicator. In Ethernet 802.3 these two bytes indicate the length of the frame.

C. In Ethernet 802.3, the 2 bytes after the source MAC address is used as a type indicator. In Ethernet II these two bytes indicate the length of the frame.

D. Ethernet II and Ethernet 802.3 are two different names for the same protocol

Correct Answer: *B*

Question #67 *Topic 1*

In MAC Address 00-20-60-CE-2B-28, which part is the Organizationally Unique Identifier (OUI)?

A. 2B-28

B. 00-20

C. CE-2B-28

D. 00-20-60

Correct Answer: *D*

Question #68 *Topic 1*

Which of the following type of addressing scheme delivers information from one source to all devices who are members of a specific group?

A. Anycast.

B. Multicast.

C. Broadcast.

D. Unicast.

Correct Answer: *B*

Question #69 *Topic 1*

Which of the following is true of Ethernet half-duplex transmission?

A. Half-duplex transmission is less efficient because the frame MTU is smaller.

B. Half-duplex transmission is only 30-40% efficient because of collisions.

C. Ethernet switches support half-duplex transmission only.

D. All of the above.

Correct Answer: *B*

Question #70 *Topic 1*

What is the meaning of carrier sense in the CSMA/CD algorithm?

A. The host will retransmit the frame if it detects a collision during transmission.

B. The host is able to detect the transmission speed of the Ethernet switch port to which the host is connected.

C. The host will only transmit data when it detects that no other devices are transmitting.

D. The host will only transmit upon a timer expiry.

E. The host will only transmit when it receives the token.

Correct Answer: *C*

Question #71 *Topic 1*

What is the effective maximum rate of data transmission on a 10 Mbps full-duplex Ethernet link?

A. 5 Mbps.

B. 10 Mbps.

C. 15 Mbps.

D. 20 Mbps.

Correct Answer: *D*

Question #72 *Topic 1*

Which of the following Ethernet rates requires an optical cable to operate?

A. 10 Mb/s Ethernet.

B. 100 Mb/s Ethernet.

C. 1000 Mb/s Ethernet .

D. There are copper and optical versions possible for all of these Ethernet data rates.

Correct Answer: *D*

Question #73 *Topic 1*

What distance is supported using CAT-5 cabling for 10/100/1000 TX?

A. 100 m.

B. 500 m.

C. 1 Km.

D. 10 Km.

Correct Answer: *A*

Question #74 *Topic 1*

Which of the following statements is TRUE of Layer 3 addressing?

A. Internet devices on the same network can have the same Layer 3 address in different broadcast domains.

B. Every Host device must have a unique Layer 3 address in order to access the Internet.

C. Internet devices need unique Layer 3 addresses to communicate directly with upper layers.

D. A router must have only one address to allow it to be uniquely identified.

Correct Answer: *B*

Question #75 *Topic 1*

Which of the following is a characteristic of the IP layer?

A. Provides an unreliable, connectionless data transmission service.

B. Provides a mechanism for flow control.

C. Verifies the integrity of all received datagrams.

D. Provides services equivalent to the OSI data link layer.

Correct Answer: *A*

Question #76 *Topic 1*

The physical networks connecting two PCs to the internet are DSL and PPP respectively. Which layer will enable the two PCs to communicate?

A. Layer 1

B. Layer 2

C. Layer 3

D. Layer 4

Correct Answer: *C*

Question #77 *Topic 1*

Hosts in the same IP network share which common address feature?

A. Same host numbers.

B. Same IP address.

C. First two bits of the IP address are set to 01.

D. Same network prefix.

Question #78 *Topic 1*

A Class C network is defined by a:

A. 32-bit network prefix.

B. 24-bit network prefix.

C. 16-bit network.

D. 8-bit network.

Correct Answer: *B*

Question #79 *Topic 1*

Public IP address spaces are distributed by which of the following organizations?

A. Network Solutions INC

B. IANA

C. IETF

D. ITU-T

E. IEEE

Correct Answer: *B*

Question #80 *Topic 1*

What characteristic of IP addressing creates a hierarchical network?

A. All hosts on all networks must have unique host numbers.

B. IP addresses identify a host and the network on which it resides.

C. Clients are assigned 32-bit addresses and servers 64-bit addresses.

D. Router, switch and host addresses are drawn from unique address classes.

Correct Answer: *B*

Question #81 *Topic 1*

Which of the following is a private IP network address reserved by the IANA?

A. 172.30.0.0/16

B. 192.100.0.0/24

C. 172.0.0.0/16

D. 169.254.0.0/16

E. 11.0.0.0/8

Correct Answer: *A*

Community vote distribution

D (100%)

Question #82 *Topic 1*

Which type of IP address contains the network number and all 1s for the host address?

A. Unicast address.

B. Broadcast address.

C. Multicast address.

D. Anycast address.

Correct Answer: *B*

Question #83 *Topic 1*

Complete the following sentence: The introduction of the subnet address added another:

A. Layer of hierarchy in the addressing structure.

B. Class to the classful addressing system.

C. 16-bit number to accompany the IP address.

D. 4,294,967,296 addresses to the IP address space.

Correct Answer: *A*

Question #84 *Topic 1*

What bit pattern identifies the network address in the subnet mask?

A. A string of 1s

B. A string of 0s

C. A string of alternating 10s

D. There is no specific bit pattern to identify the network address.

Correct Answer: *A*

Question #85 *Topic 1*

What is the purpose of the broadcast address?

A. Provides an address that refers to all the devices in a given network.

B. Provides an address to refer to a specific group of devices in a given network.

C. Provides an address to refer to a group of devices having the same IP addresses in different Layer 2 networks.

D. Provides an address to refer to a single device on a given network.

Correct Answer: *A*

Question #86 *Topic 1*

Which three of the following are important considerations when designing subnets? (Choose three.)

A. Number of subnetworks currently required.

B. Type of physical connectivity used by each segment.

C. Future network growth requirements.

D. Number of hosts each subnetwork will support.

E. Class of the network address to be used for the network.

Correct Answer: *ACD*

Question #87 *Topic 1*

Network address: 200.12.30.0 -

Network mask: 255.255.255.0 -
Use the information above. You need to create 12 subnetworks supporting 10 host addresses each.
Which extended prefix will meet this requirement?

A. /12

B. /24

C. /26

D. /28

E. /30

Correct Answer: *D*

Question #88 Topic 1

Given the associated prefix value, which of the following is a valid host address?

A. 172.16.224.255/18

B. 255.255.255.255/32

C. 224.1.2.1/8

D. 192.168.24.59/30

Correct Answer: *A*

Question #89 Topic 1

A network administrator is creating a subnet plan for the address 172.16.0.0/16. The network must support 459 hosts on each subnet while providing the maximum number of subnets. What subnet mask should be used?

A. 255.255.0.0

B. 255.255.128.0

C. 255.255.224.0

D. 255.255.254.0

Correct Answer: *D*

Question #90 Topic 1

With a subnet mask of 255.255.255.224, which of the IP addresses below are valid host addresses? (Choose all that apply)

A. 17.23.119.63

B. 87.99.12.159

C. 95.11.22.93

D. 192.11.25.87

Correct Answer: *CD*

Question #91 Topic 1

Given a network address of 116.14.0.0, which of the following is a valid host address when using the subnet mask 255.255.255.240?

A. 116.14.17.16

B. 116.14.17.31

C. 116.14.17.192

D. 116.14.17.189

Correct Answer: *D*

Question #92 *Topic 1*

Given the following (Network address: 208.40.224.0, Network prefix: /28.) What is the address range, including the network and broadcast addresses, for the fourth sub-network?

A. 208.40.224.0 208.40.224.255

B. 208.40.4.0 208.40.4.255

C. 208.40.224.16 208.40.224.31

D. 208.40.224.48 208.40.224.63

E. 208.40.227.0 - 208.40.224.255

Correct Answer: *D*

Question #93 *Topic 1*

Which of the following is a characteristic of a subnet created with a /31 prefix?

A. There is no broadcast address on the network.

B. The address can only be used as a loopback address.

C. This specifies a single host address.

D. A /31 prefix is not supported on the SR and ESS platform.

Correct Answer: *A*

Question #94 *Topic 1*

Which of the following is a characteristic of the system address?

A. A physical interface address.

B. A logical address on the router not corresponding to any specific interface.

C. May have any prefix value.

D. A management IP address.

Correct Answer: *B*

Question #95 *Topic 1*

Address summarization reduces the routing table size by:

A. Allowing a contiguous block of network addresses to be represented by one network prefix.

B. Increasing the number of addresses in the routing table.

C. Summarizing addresses in the network into smaller routing tables.

D. Not advertising directly connected routes.

Correct Answer: *A*

Question #96 *Topic 1*

What is the preference value in the routing table used for?

A. It indicates the preferred egress interface.

B. It differentiates between multiple routes to a destination learned by the same protocol.

C. It differentiates between multiple routes to a destination learned by different routing protocols.

D. It is used to differentiate local routes from remote routes.

Correct Answer: *C*

Question #97 *Topic 1*

At what stage in the packet forwarding process, is the IP packet header examined?

A. When the router first receives a frame from a LAN.

B. After the forwarding table is checked.

C. After the IP datagram is extracted from the L2 frame.

D. Immediately before the IP packet is encapsulated for transmission.

Correct Answer: *C*

Question #98 *Topic 1*

What happens next after an incoming packet is de-encapsulated from the Layer 2 frame in a Nokia 7750 router?

A. The IP datagram is encapsulated in the appropriate Layer 2 frame by the MDA.

B. The IP datagram passes through the switch fabric to reach the egress IOM.

C. The IP datagram is passed to the IOM.

D. A lookup is performed in the FIB to determine the egress interface.

Correct Answer: *C*

Question #99 *Topic 1*

Which of the following IP header fields contains information that indicates whether routers are allowed to fragment a packet?

A. Header checksum.

B. Fragmentation offset.

C. Flags.

D. Identification.

Correct Answer: *C*

Community vote distribution

C (100%)

Question #100 *Topic 1*

What is the main purpose of IP fragmentation?

A. To limit the number of the IP addresses in the network.

B. To improve the efficiency of transmissions over the network.

C. To reduce the number of resources required to send a large frame over the network.

D. To allow IP datagrams to be carried over Layer 2 networks with varying MTU sizes.

Correct Answer: *D*

Community vote distribution

D (100%)

Previous Questions

Next Questions

Custom View Settings

Question #101 *Topic 1*

Which of the following is a characteristic of Port Address Translation?

A. Resolves a MAC address given a specific IP address.

B. Allows a single public IP address to represent multiple private IP addresses simultaneously.

C. Maps a private address to a well known port number.

D. Provides a one-to-one mapping from a private to a public address.

Correct Answer: *B*

Question #102 *Topic 1*

Which of the following describes an IP filter on the Nokia 7750 SR?

A. An IP filter is used to examine an IP packet and its contents.

B. An IP filter is applied to allow or deny IP packets into a network.

C. Multiple ingress and egress filter policies can be applied to a network interface.

D. Once an IP filter is applied it cannot be modified.

Correct Answer: *B*

Question #103 *Topic 1*

Which of the following command lines would be found in a list of commands designed to permit only certain type of traffic from exiting router RTR-A to router RTR-
B?

A. RTR-A>config>router>if>ingress# filter ip 1

B. RTR-B>config>router>if>ingress# filter ip 1

C. RTR-B>config>router>if>egress# filter ip 1

D. RTR-A>config>router>if>egress# filter ip 1

Correct Answer: *D*

Question #104 *Topic 1*

What is the sequence of messages sent by a host when it attempts to ping a destination for which it has no Address Resolution Protocol (ARP) cache entry?

A. ICMP echo request, ARP request, ARP reply, ICMP echo reply.

B. ARP request, ARP reply, ICMP echo request, ICMP echo reply.

C. ICMP echo request, ICMP echo reply, ARP request, ARP reply.

D. ICMP echo request, ARP reply, ARP request, ICMP echo reply.

Correct Answer: *B*

Question #105 *Topic 1*

Which of the following best describes the function of an ARP cache within the same subnet?

A. Used by IP to map an unknown IP address to the known hardware address of the distant host.

B. Adds only an IP address entry for an unknown device on the same subnet.

C. Transmits ICMP messages to multiple hosts with unknown IP addresses.

D. Resolves the MAC address of a host device given its IP address.

Correct Answer: *D*

Question #106 *Topic 1*

What is the sequence of events for a client to receive an IP address from the server in the DHCP?

A. Discover, offer, request, acknowledgement.

B. Request, offer, discover, acknowledgement.

C. Discover, request, offer, acknowledgement.

D. Request, acknowledgement, discover, offer.

Correct Answer: *A*

Question #107 *Topic 1*

Which of the following statements is TRUE about ICMP?

A. An IP datagram is encapsulated within an ICMP header.

B. ICMP messages can only be generated by routers.

C. ICMP messages are encapsulated within an IP datagram.

D. ICMP guarantees delivery of a message.

Correct Answer: *C*

Question #108 *Topic 1*

What protocol is used by ping to verify IP network reachability?

A. DCHP

B. ICMP

C. ARP

D. NAT

Correct Answer: *B*

Question #109 *Topic 1*

When a device in an IP network receives an echo request message that is destined for itself, it then:

A. Estimates the round trip-time.

B. Generates an echo reply.

C. Calculates the data loss statistics.

D. Verifies the data field of the message.

Correct Answer: *B*

Question #110 *Topic 1*

What ICMP message type will a router use to indicate to a host that an IP datagram sourced from that host cannot be delivered?

A. Echo Request.

B. Destination Unreachable.

C. Router redirect.

D. Echo Reply.

Correct Answer: *B*

Question #111 *Topic 1*

A set of tasks that move a packet from its entry into an IP network to its exit from the IP network. This describes:

A. IP routing.

B. IP protocol.

C. IP encapsulation.

D. IP tunneling.

Correct Answer: *A*

Question #112 *Topic 1*

Which field in the IP routing table contains the name or address of the neighbour that advertised the prefix to the router?

A. Preference.

B. Metric.

C. Dest prefix.

D. Next hop.

Correct Answer: *D*

Question #113 *Topic 1*

What is the function of the Routing Table Manager?

A. Based on the metrics of the routing protocol, find the best path to the destination network and install it in the routing table.

B. Provide a CLI interface to allow the operator to configure the dynamic routing protocol on the router.

C. Based on the routing protocol preference values, chose the route with the lowest preference and install it in the routing table.

D. Provide a CLI interface to allow the network operator to install static routes in the routing table.

Correct Answer: *C*

Question #114 *Topic 1*

Which of the following is characteristic of a static route?

A. Responds in real time to network failures.

B. Can only be used for routing within an autonomous system.

C. Uses a hop-count metric to determine the best route to a network.

D. Explicitly defines the next hop based on operator input.

Correct Answer: *D*

Question #115 *Topic 1*

Which of the following describes a static default route?

A. An entry included in the default configuration of the router that is used if no dynamic routing protocols or static routes are configured.

B. A wildcard entry used when the destination network is not specifically defined in the routing table.

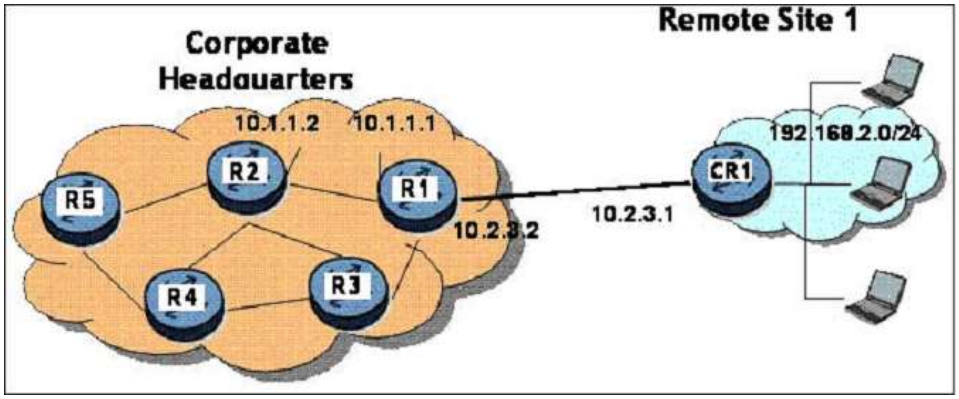
C. An entry selected based on the route that has the least cost to the destination (path with the most physical bandwidth)

D. An entry used by the routing protocol when it is unable to calculate the best route to the destination.

Correct Answer: *B*

Question #116 *Topic 1*

Based on the network diagram (click on the exhibit), what is the command to use on R1 to setup a static route to the network on CR1



A. config router static-route 192.168.2.0/24 next-hop 10.2.3.2

B. config router static-route 10.2.3.1 next-hop 192.168.2.0

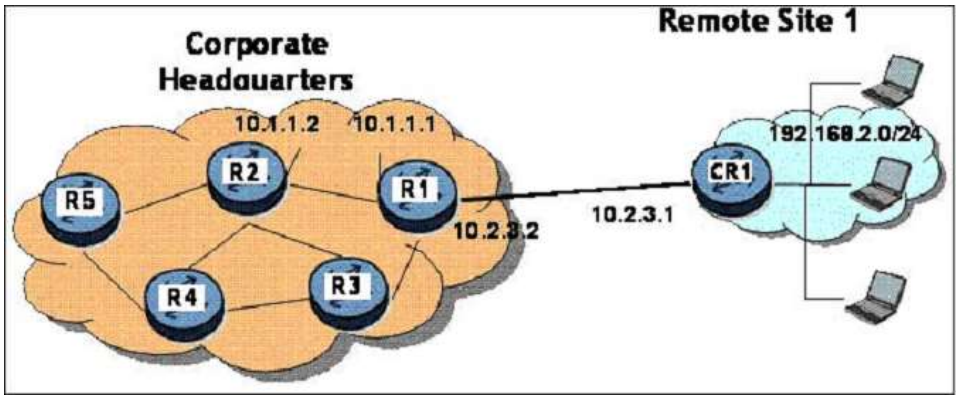
C. config router static-route 192.168.2.0/24 next-hop 10.2.3.1

D. config router static-route 10.2.3.2 next-hop 192.168.2.0

Correct Answer: *C*

Question #117 *Topic 1*

Based on the network diagram, (click on exhibit) what is the command to use on CR1 to setup a default static route to R1?



A. config router static-route 0.0.0.0/0 next-hop 10.2.3.2

B. config router static-route 0.0.0.0 next-hop 10.2.3.2

C. config router static-route 10.2.3.2 next-hop 0.0.0.0/0

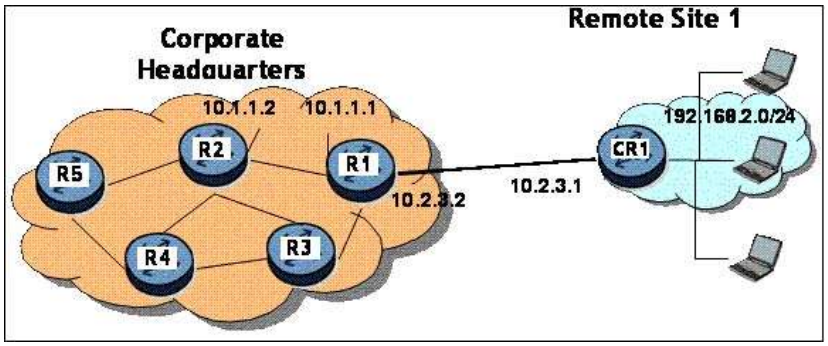
D. config router default-route 10.2.3.2

E. config router static-route 0.0.0.0 next-hop 192.168.2.0

Correct Answer: *A*

Question #118 *Topic 1*

Based on the network diagram (click on exhibit), R2 wants to connect to the networks behind CR1 using a static-route. What is the correct syntax given the choices below? R1 has a valid static-route defined for networks behind CR1.



A. config router static-route 192.168.2.0/24 next-hop 10.2.3.2

B. config router static-route 192.168.2.0/24 next-hop 10.1.1.1

C. config router static-route 192.168.2.0/24 next-hop 10.2.3.1

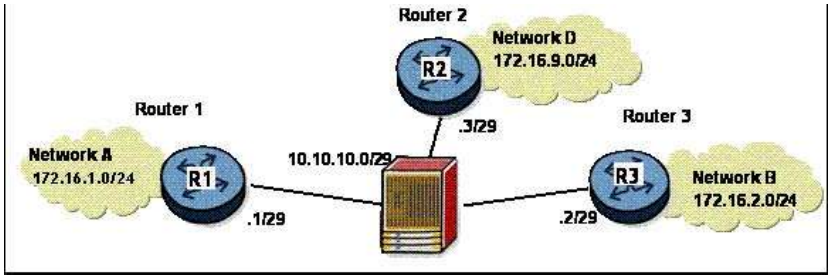
D. config router static-route 192.168.2.0/24 next-hop 10.1.1.2

E. none of the above

Correct Answer: *B*

Question #119 *Topic 1*

Based on the network diagram (click on exhibit), Router 1 installs the network D in its routing table, based on a dynamic routing update from Router 2. Which of the following describes the information that will be installed in the routing table?



A. 172.16.9.0/24 next-hop 10.10.10.1

B. 172.16.9.0/24 next-hop 10.10.10.2

C. 172.16.9.0.24 next-hop 10.10.10.3

D. Any of the above

Correct Answer: *C*

Question #120 *Topic 1*

What are the tasks of the Routing Table Manager (RTM)? Choose two

A. RTM selects the best route from among multiple routing protocols.

B. RTM selects the best route using the metric as criteria

C. RTM sends its best route to all its directly connected neighbors.

D. RTM installs its best route in the routing table.

Correct Answer: *AD*

Question #121 *Topic 1*

Choose two true statements that characterize Distance Vector Routing?

A. Routers send a copy of their routing table to their neighbors periodically.

B. Routers flood link information throughout the entire area.

C. Network converges quickly (within several seconds) after a topology change.

D. Routers do not have precise knowledge of the entire network topology.

Correct Answer: *AD*

Question #122 *Topic 1*

What metric does a link state protocol use to choose the best path to a destination network?

A. Link bandwidth.

B. Round trip time.

C. Hop count.

D. Route preference.

Correct Answer: *A*

Question #123 *Topic 1*

You need to implement an interior gateway routing protocol for your network that supports scalability, fast convergence and VLSM. Which routing protocol would best serve your needs?

A. RIPv1.

B. RIPv2.

C. OSPF.

D. BGP.

E. Static routes.

Correct Answer: *C*

Question #124 *Topic 1*

Which of the parameters in Hello messages exchanged between two OSPF neighbors must be the same to keep the adjacency alive in OSPF? (Choose four.)

A. Interface MTU.

B. Area ID.

C. Authentication password.

D. Hello interval.

E. Dead interval.

F. Router priority.

Correct Answer: *BCDE*

Question #125 *Topic 1*

Which of the following are TRUE statements about the router ID in OSPF? Choose two

A. A router ID is not required by OSPF.

B. The system address is used as the router ID if router-id is not set.

C. The router ID is used to uniquely identify every OSPF router.

D. On the Nokia 7750 SR, the router ID is set to the highest logical IP address if router-id is not explicitly set.

Correct Answer: *BC*

Question #126 *Topic 1*

Which of the following are FALSE statements about the OSPF routing protocol? Choose two.

A. OSPF is a link state protocol with fast convergence.

B. OSPF supports hierarchy with multiple areas.

C. The default metric for OSPF is hop count.

D. OSPF does not support VLSM.

E. OSPF supports neighbor authentication.

Correct Answer: *CD*

Question #127 *Topic 1*

Which of the following describes the normal sequence of events in the forming of an OSPF adjacency?

A. Hello exchange, DB descriptor exchange, Link state requests and updates.

B. DB descriptor exchange, Link state requests and updates, Hello exchange.

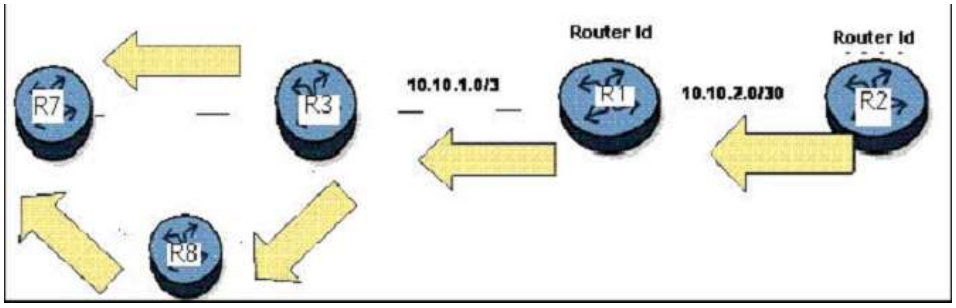
C. Link state requests and updates, Hello exchange, DB descriptor exchange.

D. Hello exchange, Link state requests and updates, DB descriptor exchange.

Correct Answer: *A*

Question #128 *Topic 1*

In the diagram, R7 receives a new LSA from R3 and installs it in its link state database. 10 ms. later it receives another copy of the LSA with the same sequence number from R8. What does R7 do with the LSA received from R8?



A. R7 silently discards the LSA received from R8.

B. R7 installs the LSA received from R8 in its link state database and floods a copy to its neighbors.

C. R7 discards the LSA received from R8 and sends an ACK to R8.

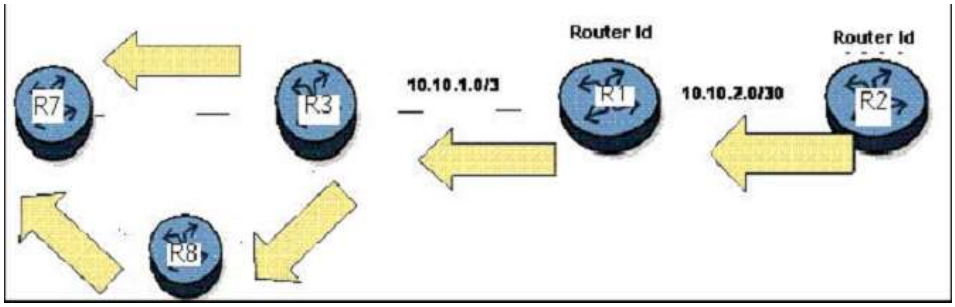
D. R7 installs the LSA received from R8 in its link state database, sends an ACK to R8 and floods a copy to its neighbors.

Correct Answer: *C*

Question #129 *Topic 1*

In the diagram, R3 receives an LSA with the sequence number 111 from R7 and then receives another copy of the LSA with a sequence number 112 from R1.

What does R3 do with the LSA from R1?



A. R3 discards the LSA received from R1 and sends a copy of the LSA from its link state base to R1.

B. R3 installs the LSA received from R1 in its link state database and floods a copy to its neighbors.

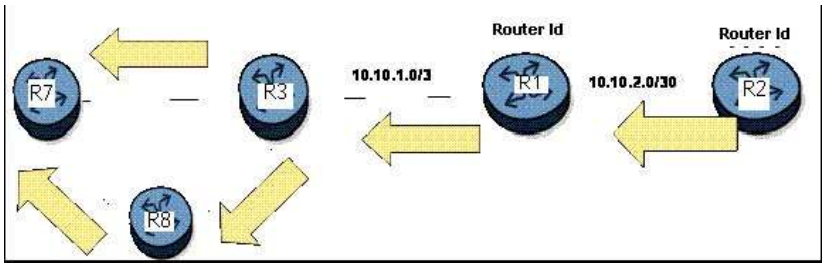
C. R3 discards the LSA received from R1 and sends an ACK to R1.

D. R3 installs the LSA received from R1 in its link state database, sends an ACK to R1 and floods a copy to its neighbors.

Correct Answer: *D*

Question #130 *Topic 1*

In the diagram, R3 receives an LSA with sequence number 112 from R7 and installs it in its link state database. 10 ms. Later it receives a copy of the same LSA with a sequence number of 111 from R1. What does R3 do with the LSA from R1?



A. R3 discards the LSA received from R1 and sends a copy of the LSA from its link state base to R1.

B. R3 installs the LSA received from R1 in its link state database and floods a copy to its neighbors.

C. R3 discards the LSA received from R1 and sends an ACK to R1.

D. R3 installs the LSA received from R1 in its link state database, sends an ACK to R1 and floods a copy to its neighbors.

Correct Answer: *A*

Question #131 *Topic 1*

Which of the following best describes an autonomous system?

A. An autonomous system is a network or group of networks operating under one administrative authority.

B. An autonomous system is another term for the collection of routers that make up the Internet

C. An autonomous system is a network or group of networks from many organizations running different IGP routing protocols, but all running BGP.

D. An autonomous system is a loosely defined term that can refer to any organization that has a connection to the Internet.

Correct Answer: *A*

Question #132 *Topic 1*

Which transport protocol and port number is used by BGP to establish and maintain a peering session with other BGP speakers?

A. TCP port 179.

B. UDP port 179.

C. TCP port 22.

D. UDP port 22.

Correct Answer: *A*

Question #133 *Topic 1*

What are some of the characteristics of BGP? Choose three

A. BGP is an exterior gateway protocol.

B. BGP routing is based on distance vector.

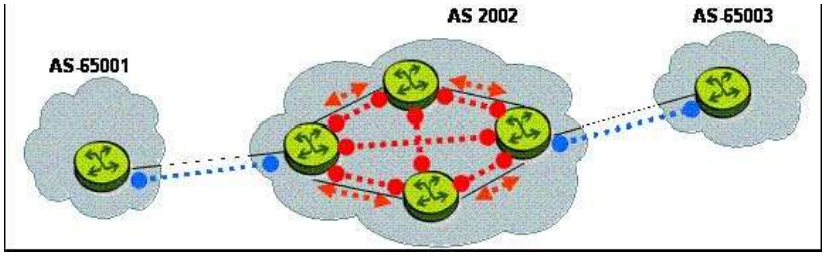
C. BGP sends periodic updates to its neighbors.

D. A router running BGP protocol needs an Autonomous system number

Correct Answer: *ABD*

Question #134 *Topic 1*

Which is the public AS in the diagram?



A. 65001

B. 65003

C. 2002

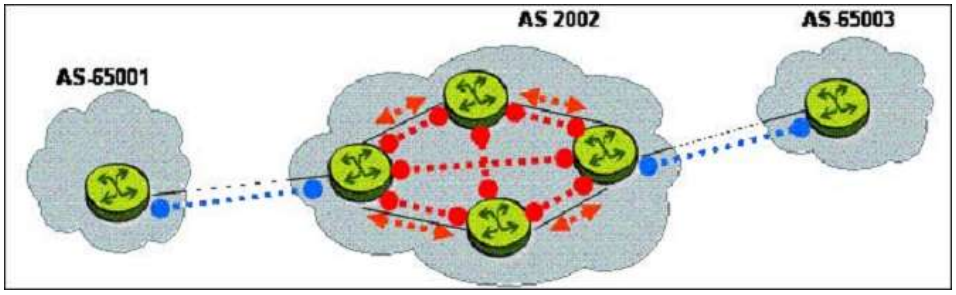
D. All of the above.

E. None of the above.

Correct Answer: *C*

Question #135 *Topic 1*

In the diagram, what type of BGP session is established between the routers of AS 2002?



A. IGP

B. IBGP

C. EBGP

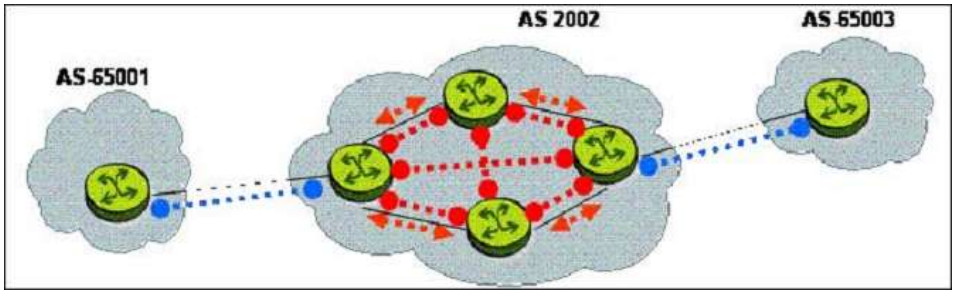
D. EGP

E. BGP cannot be run between routers in the same AS.

Correct Answer: *B*

Question #136 *Topic 1*

In the diagram, what type of BGP session is established between the routers of AS 65001 and AS 2002?



A. IGP

B. IBGP

C. EBGP

D. EGP

E. BGP cannot be run between routers in different ASs.

Correct Answer: *C*

Question #137 *Topic 1*

Which of the following statements describes the purpose of the Transport Layer in the TCP/IP stack?

A. Provides a data transport service to higher protocol layers.

B. Provides a data transport service for routing and control protocols such as OSPF and ICMP.

C. Provides a universal address plan to uniquely identify every device in the network.

D. Defines a standard method for framing data for transmission on the physical network medium.

Correct Answer: *A*

Question #138 *Topic 1*

Which of the following is NOT a function of TCP?

A. Maintaining the ordering of data transmitted across the network.

B. Ensuring the reliable transmission of data across the network.

C. Providing the receiver with a flow control mechanism.

D. Defining the method for routing data across the network.

Correct Answer: *D*

Question #139 *Topic 1*

What must occur before two hosts can exchange data using TCP?

A. Nothing. The two hosts can send data to each other at any time.

B. The two hosts must negotiate a path MTU to be used for the data exchange.

C. The two hosts must perform a 3-way handshake before transmitting data.

D. The two hosts must exchange encryption keys before transmitting data.

Correct Answer: *C*

Question #140 *Topic 1*

Host A is transmitting data to host B on a TCP connection. What is the purpose of the ACK sent by host B?

A. The ACK tells the host A that host B wishes to establish a session.

B. The ACK tells host A the sequence number of the segment that was just received by host B.

C. The ACK tells host A the sequence number of the next segment that host B expects to see.

D. The ACK is flow control from host B and tells host A to reduce its transmission rate.

Correct Answer: *C*

Question #141 *Topic 1*

Host A receives a TCP SYN/ACK segment. What does this signify?

A. Host A has received a request to establish a TCP session.

B. Host A has received a request to close a TCP session

C. A TCP session is now established to host A.

D. The TCP session has been terminated due to a timeout.

Correct Answer: *C*

Question #142 *Topic 1*

What is the purpose of the source and destination ports in the TCP header?

A. These ports identify the physical location of the sender and the receiver on the IP router.

B. These ports are used as addresses to communicate with the IP layer.

C. TCP does not use source or destination ports.

D. These ports are used as an address to identify the upper layer application using the TCP connection.

Correct Answer: *D*

Question #143 *Topic 1*

Which of the following is NOT a field in a TCP header?

A. Source port.

B. MTU.

C. Sequence number.

D. Acknowledgement number.

E. Window size.

Correct Answer: *B*

Question #144 *Topic 1*

Which of the following fields is not a field in the TCP header used for the establishment and termination of a TCP connection?

A. TTL

B. ACK

C. FIN

D. SYN

Correct Answer: *A*

Question #145 *Topic 1*

The sequence numbers are used by TCP to ensure that the data receive is provided to the application in the correct order.

A. TRUE

B. FALSE

Correct Answer: *A*

Question #146 *Topic 1*

What happens in a TCP session if a segment is not acknowledged within a certain time period?

A. The missing segment is retransmitted.

B. The TCP session is terminated.

C. The sender sends the next segment.

D. An ICMP destination unreachable message is sent.

Correct Answer: *A*

Question #147 *Topic 1*

What is the purpose of TCP flow control?

A. It restricts the sender from sending too much data when there is congestion in the network.

B. It allows the receiver to control the rate at which the sender transmits data.

C. It forces the sender to send only one segment at a time.

D. It allows the receiver to drop segments without the sender having to retransmit.

Correct Answer: *B*

Question #148 *Topic 1*

Which field in the TCP header is used by the receiver to indicate how many segments it can receive?

A. Checksum

B. SYN

C. Destination port

D. Window size

E. MTU

Correct Answer: *D*

Question #149 *Topic 1*

What must the sender do when it receives a window size of 0 from the receiver?

A. Stop transmitting.

B. Terminate the TCP session.

C. Send the next segment.

D. Retransmit the previous segment.

Correct Answer: *A*

Question #150 *Topic 1*

Which of the following statements BEST describes the purpose of UDP (Select two)?

A. Provide a connectionless delivery service.

B. Provide a connection oriented delivery service.

C. Provide an unreliable transmission service.

D. Provide a reliable transmission service.

Correct Answer: *AC*

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Question #151 *Topic 1*

Why does UDP have less overhead than TCP?

A. UDP has less overhead because it is only used for transmission of small amounts of data.

B. UDP has less overhead then TCP because there is no checksum field in UDP.

C. UDP overhead is the same as TCP because it uses the same fields in the header.

D. UDP has less overhead because there is no requirement for acknowledgment or retransmission.

Correct Answer: *D*

Question #152 *Topic 1*

Which application below would be likely to use UDP?

A. Real-time audio application such as VoIP.

B. Web browser.

C. Email application.

D. Telnet.

Correct Answer: *A*

Question #153 *Topic 1*

How does the Transport Layer identify which application is to receive the data?

A. Using the IP address of the packet.

B. Using the MAC address of the frame.

C. Using port numbers.

D. Using Connection Identifier Numbers (CIN).

Correct Answer: *C*

Question #154 *Topic 1*

What capability of TCP/IP allows two hosts to have multiple TCP sessions to each other simultaneously?

A. The combination of IP source and destination address and TCP source and destination port uniquely identifies each session.

B. The combination of IP source and destination address and the IP protocol field uniquely identifies each session.

C. The hosts can identify the sessions using each others MAC addresses.

D. Two hosts can not have multiple TCP sessions simultaneously.

Correct Answer: *A*

Question #155 *Topic 1*

What operation is performed by an LSR when it receives an MPLS labeled packet?

A. The LSR refers to its routing table and forwards the packet to the next LSR or LER without altering the MPLS label.

B. The LSR refers to its MPLS label table, swaps the label and forwards the packet to the next LSR or LER.

C. The LSR refers to its MPLS label table forwards the packet to the next LSR or LER without altering the MPLS label.

D. The LSR refers to its MPLS label table, pops the label and forwards the packet to the next IP router.

Correct Answer: *B*

Question #156 *Topic 1*

What is the function of an LSR?

A. Label Switching Routers make switching decisions based on the original MAC Header.

B. Label Switching Routers make routing decisions based on the original IP Header.

C. Label Switching Routers make forwarding decisions based on the MPLS label.

D. Label Switching Routers make decisions based on ATM header information.

Correct Answer: *C*

Question #157 *Topic 1*

In an MPLS network, which device is responsible for taking an unlabeled packet and encapsulating it with an MPLS label?

A. Ingress Label Edge Router

B. Egress Label Edge Router

C. Label Switching Router

D. Next Hop Router

Correct Answer: *A*

Question #158 *Topic 1*

Which of the following are correct statements about MPLS labels (Choose three)?

A. A series of labels from one LER to another LER represent a logical tunnel known as an LSP.

B. Labels used for a LSP may be static but are usually signaled dynamically with an MPLS label signaling protocol.

C. Labels are locally significant to the MPLS router which means its possible for two routers on the LSP path to use the same label.

D. Labels are globally significant to the MPLS network which means all labels on the LSP path must be unique.

E. Labels used for an LSP must be statically assigned by the service provider.

Correct Answer: *ABC*

Question #159 *Topic 1*

Which device is responsible for removing the MPLS label before the packet reaches the CE device?

A. The CE device removes the MPLS label.

B. The last LSR on the LSP removes the MPLS label.

C. MPLS labels are not removed until they reach the final destination.

D. The egress LER removes the MPLS label.

Correct Answer: *D*

Question #160 *Topic 1*

Which two protocols are used for the dynamic signaling of MPLS labels (Choose two)?

A. RSVP-TE

B. CSPF

C. PNNI

D. LDP

Correct Answer: *AD*

Question #161 *Topic 1*

How does LDP select the path used for an LSP?

A. LDP monitors the available bandwidth on all links and signals the LSP based on this information.

B. LDP uses the shortest hop-count between two endpoints for the LSP.

C. LDP must be configured hop-by-hop by the service provider.

D. LDP follows the path chosen by the IGP.

Correct Answer: *D*

Question #162 *Topic 1*

A CE device has a physical connection to which device in the service providers MPLS network?

A. CE always connects to a PE router.

B. CE always connects to a P router.

C. CE always connects to another CE device.

D. The CE does not connect to the service provider network.

Correct Answer: *A*

Question #163 *Topic 1*

Which of the following are accurate statements about the PE device in a service providers MPLS network? (Select three)

A. A PE router only connects to CE devices.

B. A PE router only connects to P routers.

C. A PE router connects to at least one P router.

D. A PE router connects to at least one CE device.

E. PE routers support many different interface types connecting to CE devices.

F. PE routers only support Ethernet interfaces connecting to the CE.

Correct Answer: *CDE*

Question #164 *Topic 1*

Where would you expect to find a P router in a service provider's network?

A. At the edge of the provider's network facing the customer.

B. At the edge of the customer's network facing the provider.

C. In the core of the provider's network.

D. On the customer premises.

Correct Answer: *C*

Question #165 *Topic 1*

Which of the following are considered Virtual Private Networks? Choose all that apply.

A. IES

B. VPWS

C. VPLS

D. VPRN

Correct Answer: *BCD*

Question #166 *Topic 1*

Which of the following are NOT examples of a VPN service offered on the Nokia 7750 SR? Choose two.

A. VPWS Virtual Private Wire Service

B. VPLS Virtual Private LAN Service.

C. VPRN Virtual Private Routed Networks.

D. MLPPP Multi-link Point-to-Point protocol

E. VPDFS Virtual Private Dark Fiber Service.

Correct Answer: *DE*

Question #167 *Topic 1*

Which statement best describes a SAP?

A. The Service ATM Point is used for ATM connections to a PE.

B. The Service Access Point is defined on the PE device and is the customers access to the service.

C. The Service Access Point is defined on the P device and is the customers access to the service.

D. The Service Access Point is defined on the CE device and is the customers access to the service.

Correct Answer: *B*

Question #168 *Topic 1*

Multiple SAPs may be defined on the same physical port and may be used for different services.

A. True

B. False

Correct Answer: *A*

Community vote distribution

A (100%)

Question #169 *Topic 1*

SAPs may be a port, a port with a specific VLAN tag in the case of an Ethernet port, or a port with a specific Circuit ID in the case of ATM or Frame Relay.

A. True

B. False

Correct Answer: *A*

Community vote distribution

A (100%)

Question #170 *Topic 1*

Which statement best describes an SDP?

A. Service Delivery Points are defined on the service provider network side and used to bind the service to an MPLS transport tunnel. Many services can be bound to a single SDP.

B. Service Delivery Points are defined on the service provider access side and used to bind the connection of the service to CE device. Many services can be bound to a single SDP.

C. Service Delivery Points are defined on the service provider network side and used to bind the service to an MPLS transport tunnel. Only one service can be bound to a single SDP.

D. Service Delivery Points are defined on the service provider access side and used to bind the service to CE device. Only one service can be bound to a single SDP.

Correct Answer: *A*

Question #171 *Topic 1*

Which statement best describes a VPRN service?

A. From the customers perspective it looks as if all sites are connected by the same set of dark fibers.

B. From the customers perspective it looks as if all sites are connected to a private switched network administered by the service provider.

C. From the customers perspective it looks as if all sites are connected to a private routed network administered by the service provider.

D. From the customers perspective it looks as if all sites have public internet access administered by the service provider.

Correct Answer: *C*

Question #172 *Topic 1*

How does a VPRN service avoid the problem of overlapping IP addresses from different customers?

A. You cannot have overlapping IP addresses. The service provider must ensure that its customers are all using discrete IP address space.

B. Each VPRN service maintains a separate VPN routing and forwarding instance to separate customer routing information.

C. A VPRN will ignore IP addressing information and use MAC addressing instead which are always unique.

D. A VPRN will translate customer IP addresses to a private addressing scheme administered by the service provider.

Correct Answer: *B*

Question #173 *Topic 1*

How does a VPRN service avoid the problem of overlapping IP addresses from different customers?

A. You cannot have overlapping IP addresses. Customers must change their IP address assignment.

B. Each VPRN service maintains a separate VPN routing and forwarding instance to separate customer routing information. This allows for overlapping addresses.

C. A VPRN ignores IP addressing information and uses MAC addressing instead, which are always unique.

D. A VPRN translates customer IP addresses to a private addressing scheme administered by the service provider.

Correct Answer: *B*

Question #174 *Topic 1*

A VPWS service maintains a MAC Forwarding Database (FDB) for Ethernet SAPs.

A. True

B. False

Correct Answer: *B*

Question #175 *Topic 1*

Which of the following mediums can be used in a VPWS when defining SAPs (Select three)?

A. Ethernet.

B. ATM.

C. Frame Relay.

D. Token Ring.

Correct Answer: *ABC*

Question #176 *Topic 1*

If a customer requires a point-to-point layer 2 VPN service between two locations which VPN service would be typically suited for this customer?

A. Virtual Private Wire Service .

B. Virtual Private LAN Service.

C. Virtual Private Routed Networks.

D. Virtual Private Dark Fiber Service.

Correct Answer: *A*

Question #177 *Topic 1*

Which of the following statements is FALSE when describing a Virtual Private LAN Service?

A. A VPLS emulates a virtual switch or bridge.

B. The VPLS performs MAC learning on MAC addresses seen from SAPs and SDPs.

C. When a VPLS receives a frame with an unknown MAC destination, the frame will be dropped.

D. MAC addresses are maintained in a MAC address forwarding database (FDB).

Correct Answer: *C*

Question #178 *Topic 1*

If a customer requires a multipoint layer 2 VPN service between three or more locations which VPN service is best suited for this customer?

A. Virtual Private Wire Service

B. Virtual Private LAN Service

C. Virtual Private Routed Networks

D. Virtual Private Dark Fibre Service

Correct Answer: *B*

Question #179 *Topic 1*

What does a VPLS solution look like from a customers perspective?

A. To the customer, it appears as if all sites are directly connected by a single cable.

B. To the customer, it appears as if all sites are connected through a single switched LAN.

C. To the customer, it appears as if all sites are connected through a single router.

D. To the customer, it appears as if all sites are connected through a series of private point-to-point connections.

Correct Answer: *B*

Question #180 *Topic 1*

Which of the following best describes the function of the service label?

A. Customer traffic is encapsulated with a service label by the ingress PE. The service label identifies which transport tunnel to use.

B. Customer traffic is encapsulated with a service label by the egress PE. The service label identifies which transport tunnel to use.

C. Customer traffic is encapsulated with a service label by the egress PE. The service label identifies the specific service the data belongs to.

D. Customer traffic is encapsulated with a service label by the ingress PE. The service label identifies the specific service the data belongs to.

Correct Answer: *D*

Question #181 *Topic 1*

In regards to the Nokia 7750 SR-12 router, how many of the front access card slots are dedicated for Control Processors?

A. 1

B. 2

C. 7

D. 10

Correct Answer: *B*

Question #182 *Topic 1*

From the CE perspective, how does a VPLS operate?

A. A VPLS operates as if 2 sites are directly connected by a single cable.

B. A VPLS operates as if multiple sites are connected through a single switched LAN.

C. A VPLS operates as if multiple sites are connected through a single router.

D. A VPLS operates as if multiple sites are connected through a series of private point-to-point routed connections.

Correct Answer: *B*

Question #183 *Topic 1*

Which of the following is a characteristic of Layer 2 framing?

A. Provides a universal addressing scheme to uniquely identify destinations in the network

B. Size of frame cannot exceed 1518 bytes.

C. Provides error checking of the frame contents on ingress.

D. All of the above.

Correct Answer: *C*

Question #184 *Topic 1*

The statement below describes which of the following activities?
"A set of tasks that moves a packet from its entry into an IP network to its exit from the IP network."

A. IP forwarding

B. IP decapsulation

C. IP encapsulation

D. IP tunneling

Correct Answer: *A*

Question #185 *Topic 1*

Which of the following are considered Virtual Private Network (VPN) technologies? (Choose 3)

A. BGP

B. VPWS

C. VPRN

D. ISP

E. VPLS

Correct Answer: *BCE*

Question #186 *Topic 1*

The 201.148.26.0/24 network is subnetted using a /26 mask. How many subnets and host addresses will be obtained with this mask?

A. 4 subnets, 64 hosts

B. 64 subnets, 4 hosts

C. 4 subnets, 62 hosts

D. 64 subnets, 2 hosts

E. 6 subnets, 30 hosts

Correct Answer: *C*

Question #187 *Topic 1*

What problem was Spanning Tree Protocol (STP) primarily designed to solve?

A. Inability to perform switch to switch redundancy using multiple connections at Layer 2.

B. Missing protocol field in Ethernet II required to identify redundancy protocols at Layer 2.

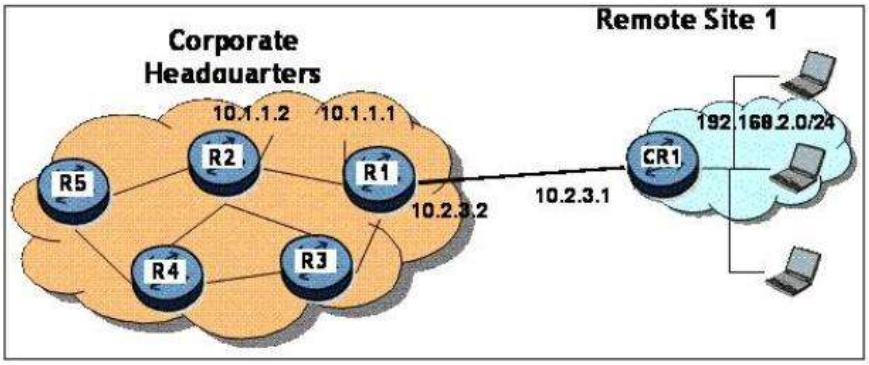
C. Missing packet sequencing in Layer 2 Ethernet required to re-order packets on arrival.

D. Inability to forward multicast frames without a routing protocol.

Correct Answer: *A*

Question #188 *Topic 1*

Based on the network diagram (click the Exhibit Button).



R2 wants to connect a host on 192.168.2.0/24 behind CR1. What is the correct next-hop to use, assuming R1 is configured correctly?

A. 10.2.3.2

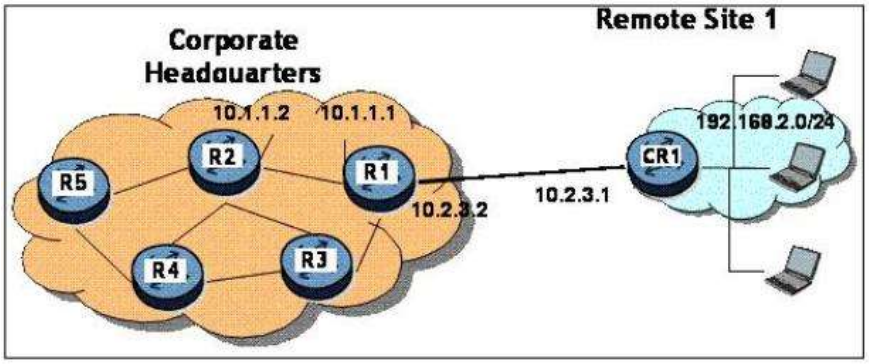
B. 10.1.1.1

C. 10.2.3.1

D. 10.1.1.2

Correct Answer: *B*

Question #189 *Topic 1*



Based on the network diagram (click the Exhibit Button), what is the next-hop used on R1 to setup a static route to the network on CR1?

A. next-hop 10.2.3.2

B. next-hop 192.168.2.1

C. next-hop 10.2 3.1

D. next-hop 192.168.2.0

Correct Answer: *C*

Question #190 *Topic 1*

Which field in the Routing Information Base (RIB) determines the direction frames will egress the node?

A. Preference

B. Metric

C. Dest prefix

D. Next-hop

E. Cost

Correct Answer: *D*

Question #191 *Topic 1*

Which of the following applications would be likely to use UDP?

A. Real-time audio application, such as VoIP

B. Web browser

C. Email application

D. Telnet

Correct Answer: *A*

Question #192 *Topic 1*

What are the tasks of a Routing Table Manager (RTM)? (Choose 2)

A. To select the best route from among multiple routing protocols.

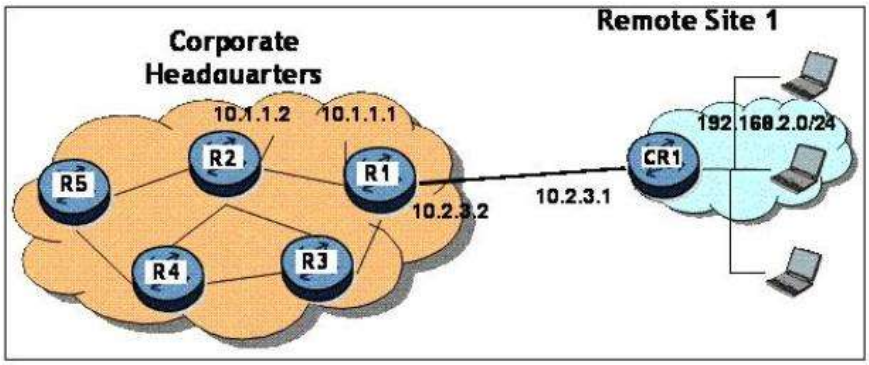
B. To select the best route using the metric as criteria.

C. To send its best route to all its directly connected neighbors.

D. To install its best route in the routing table.

Correct Answer: *AD*

Question #193 *Topic 1*



Based on the network diagram (click the Exhibit Button), what are the prefix, mask, and next-hop used on CR1 to setup a default static route to R1?

A. 0.0.0.0/0 next-hop 10.2 3.2

B. 0.0.0.0/32 next-hop 10.2.3.2

C. 10.2.3.2/32 next-hop 0.0.0.0/0

D. 0.0.0.0/0 next-hop 192.168.2.0

Correct Answer: *A*

Question #194 *Topic 1*

Which bit pattern identifies the network address in the subnet mask?

A. A string of consecutive 1's.

B. A string of consecutive 0's.

C. A string of alternating 10's.

D. The network address is determined by masking the source address with a port's if Index binary representation.

Correct Answer: *A*

Question #195 *Topic 1*

Which of the following are important to consider when designing IPv4 subnets? (Choose 3)

A. The number of subnetworks currently required.

B. The version of the Ethernet used by each segment.

C. Future network growth requirements.

D. The number of hosts each subnetwork will support.

E. The class of the IP address assigned to an organization.

Correct Answer: *ACD*

Question #196 *Topic 1*

Which of the following statements regarding TCP is TRUE?

A. Sequence numbers are used to ensure that the data received is offered to the application in the correct order.

B. The SYN flag is used to identify congestion in the network.

C. The NACK flag is set on confirmation segments to acknowledge FCS errors.

D. The window size is transmitted in all TCP segments to communicate MTU limitations of lower layer protocols to upper layer applications.

Correct Answer: *A*

Question #197 *Topic 1*

Which of the following statements is TRUE regarding IP addressing?

A. Classful IP addressing provides hierarchy based on variable subnet masks.

B. Classless IP addresses provide hierarchy based on a variable length subnet mask.

C. Classless IP addresses provide hierarchy based on fixed subnet masks of /24. /16 and/8.

D. IP addresses provide hierarchy based on the country code and regional identifier.

Correct Answer: *B*

Question #198 *Topic 1*

Which of the following statements best characterize Distance Vector Routing? (Choose 2)

A. Routers periodically send a copy of their routing table to their neighbors.

B. Routers flood link information throughout the entire area.

C. Network converges quickly (within several seconds) after a topology change.

D. Routers do not have precise knowledge of the entire network topology.

Correct Answer: *AD*

Question #199 *Topic 1*

Which of the following describes a static default route?

A. A routing entry, included in the RIB by default, that forwards packets with an unknown destination to the CPM for inspection.

B. A manual entry used when the destination address of a network is not specifically listed in the routing table.

C. A manual entry that matches a specific /32 host address using the least cost to the destination.

D. A default entry in the FIB used when forwarding multicast and broadcast packets.

Correct Answer: *B*

Question #200 *Topic 1*

Which of the following is a characteristic of a static route?

A. Responds in real time to network failures.

B. Can only be used for routing within an autonomous system.

C. Uses a hop-count metric to determine the best route to a network.

D. Explicitly defines the next-hop based on operator input.

Correct Answer: *D*

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Question #201 *Topic 1*

Which of the following are functions of VLANs? (Choose 2)

A. VLANs can group ports on multiple switches into unified broadcast domains

B. VLANs allow multiple Ethernet switches to be connected in a single collision domain

C. VLANs can separate ports on the same switch into different broadcast domains

D. VLANs can group ports on the same switch into different collision domains

Correct Answer: *AC*

Question #202 *Topic 1*

Which of the following information can be seen within the FILE context of the SR 7x50? (Choose 2)

A. File sizes

B. Port statistics

C. Log-id 100 files

D. TiMOS image files

Correct Answer: *AD*

Question #203 *Topic 1*

Which of the following best describes a repeater?

A. A passive device simply used to connect two or more cables. It does not generate or amplify any signals.

B. A device that receives and retransmits a signal out its ports but does not do any Layer 2 analysis of the data.

C. A device that receives a signal and based on the Layer 2 destination address, makes a decision on which ports the signal should be retransmitted.

D. A device that receives a signal and based on the Layer 3 destination address makes a decision on which ports the signal should be retransmitted.

Correct Answer: *B*

Question #204 *Topic 1*

Which of the following statements is TRUE regarding a VPWS service?

A. VPWS is a point-to-multipoint service.

B. VPWS requires MAC learning in order to forward frames to the correct destination

C. A Spanning Tree Protocol must be enabled when deploying a VPWS.

D. VPWS treats multicast traffic similar to unicast traffic.

Correct Answer: *D*

Question #205 *Topic 1*

Public IP addresses are globally coordinated by which organization?

A. Network Solutions INC

B. IANA

C. IETF

D. ITU-T

E. IEEE

Correct Answer: *B*

Question #206 *Topic 1*

Which of the following protocols belongs to the OSI suite of protocols? (Choose 2)

A. OSPF

B. BGP

C. X.500

D. IS-IS

E. Ethernet

Correct Answer: *CD*

Question #207 *Topic 1*

Which of the following is TRUE regarding Ethernet half-duplex transmission?

A. Half-duplex transmission is less efficient because the frame MTU is smaller.

B. An end-station connected to a hub will always be half-duplex.

C. Ethernet switches only support half-duplex transmission.

D. All of the above.

Correct Answer: *B*

Question #208 *Topic 1*

What is the basic unit of framing in SDH and the bit rate for transmission?

A. STM-1 with a bit rate of 1.544 Mbit/s.

B. STM-1 with a bit rate of 2.048 Mbit/s.

C. STM-1 with a bit rate of 51.84 Mbit/s.

D. STM-1 with a bit rate of 155.52 Mbit/s.

Correct Answer: *D*

Question #209 *Topic 1*

Which of the following SAP types can be associated to a VPWS? (Choose 3)

A. Ethernet

B. ATM

C. Token Ring

D. Frame Relay

Correct Answer: *ABD*

Question #210 *Topic 1*

Which of the following statements are TRUE about the Nokia SR 7750? (Choose 2)

A. It can boot without a compact flash in the CF3 slot.

B. It cannot boot without a compact flash in the CF3 slot.

C. It can operate without a compact flash in the CF3 slot once it has booted.

D. It cannot operate without a compact flash in the CF3 slot once it has booted.

Correct Answer: *BC*

Question #211 *Topic 1*

Which answer reflects the correct message sequence used when a source attempts to ping a destination for which it has no Address Resolution Protocol (ARP) cache entry?

A. ICMP echo request, ARP request, ARP reply, ICMP echo reply

B. ARP request, ARP reply, ICMP echo request, ICMP echo reply

C. ICMP echo request, ICMP echo reply, ARP request, ARP reply

D. ICMP echo request. ARP reply, ARP request, ICMP echo reply

Correct Answer: *B*

Question #212 *Topic 1*

Which of the following statements are TRUE regarding SONET/SDH? (Choose 2)

A. They are deployed over point-to-point physical topologies to allow sub-50ms convergence.

B. An ADM (Add Drop Multiplexer) is used to connect various sites to the infrastructure.

C. IP datagrams are encapsulated in a PPP frame for transmission over an SDH network,

D. IP datagrams are encapsulated in an Ethernet frame for transmission over a SONET network.

Correct Answer: *AD*

Question #213 *Topic 1*

How is Ethernet II different from Ethernet 802.3?

A. Ethernet II can be used on broadcast networks where as 802.3 was designed for point-to-point networks.

B. Ethernet II identifies its payload type where as 802.3 indicates the frame length.

C. Ethernet II identifies its frame length while 802.3 indicates the payload type.

D. Ethernet II and Ethernet 802.3 are two different names for the same protocol.

Correct Answer: *B*

Question #214 *Topic 1*

Which of the following statements best characterize Link State Routing? (Choose 2)

A. Routers periodically send a copy of their routing table to their neighbors.

B. Routers flood link information throughout the entire area.

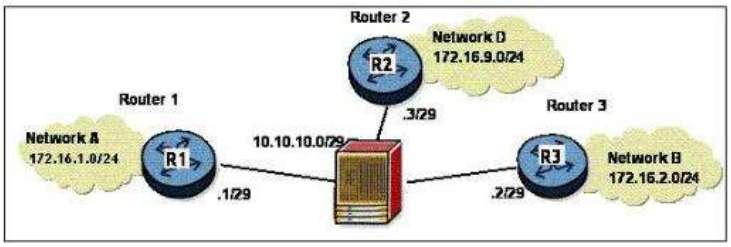
C. Network converges quickly (within several seconds) after a topology change.

D. Routers do not have precise knowledge of the entire network topology.

Correct Answer: *BC*

Question #215 *Topic 1*

Based on the network diagram (click the Exhibit Button). Router 1 installs network D in its routing table following a dynamic routing update from Router 2. Which of the following describes the information that will be installed in the routing table?



A. 172.16.9.0/24 next-hop 10.10.10.1

B. 172.16.9.0/24 next-hop 10.10.10.2

C. 172.16.9.0.24 next-hop 10.10 10 3

D. 0.0.0.0/32 next-hop 172.16.9.1

Correct Answer: *C*

Question #216 *Topic 1*

Which of the following statements best describe the purpose of UDP? (Choose two)

A. Provides a connectionless delivery service.

B. Provides a connection oriented delivery service

C. Provides an unreliable transmission service,

D. Provides a reliable transmission service.

Correct Answer: *AC*

Question #217 *Topic 1*

Which of the following are correct statements about MPLS labels? (Choose 3)

A. A sequence of label actions from one LER to another LER represents a logical tunnel known as an LSP.

B. MPLS labels must be dynamically signaled.

C. Labels are globally significant to the MPLS network.

D. MPLS labels may be dynamically signaled or statically assigned by the service provider.

E. Labels are locally significant to the MPLS router.

Correct Answer: *ADE*

Question #218 *Topic 1*

Which of the following statements are TRUE regarding IP-filters? (Choose 2)

A. IP-filters may be applied on interface ingress, egress, or both.

B. Multiple IP-filters can be applied in each direction.

C. An IP-filter may only be applied to a single interface if the scope is set to template.

D. An IP-filter may have multiple match criteria per entry.

E. The default-action of an IP-filter is always drop.

Correct Answer: *AD*

Question #219 *Topic 1*

What must occur before a LAG becomes operational?

A. There must be multiple ports assigned to the LAG.

B. All ports in the LAG must be configured with the same speed and duplex settings.

C. Auto-negotiation must be enabled on all ports in the LAG.

D. The duplex setting on all the ports must be forced to half.

E. Auto-negotiation must be set to limited or disabled on at least one member port.

Correct Answer: *B*

Question #220 *Topic 1*

What is the function of a Routing Table Manager (RTM)?

A. To find the best path to the destination network and install it in the routing table - based on the metrics of the routing protocol.

B. To provide a CLI interface that allows the operator to configure the dynamic routing protocol on the router.

C. To choose the route with the lowest preference and install it in the routing table - based on the routing protocol preference values.

D. To provide a CLI interface that allows the network operator to install static routes in the routing table.

Correct Answer: *C*

Question #221 *Topic 1*

Which field in the TCP header is used by the receiver to indicate the number of segments it can receive?

A. Checksum

B. SYN

C. Destination port

D. Window size

E. MTU

Correct Answer: *D*

Question #222 *Topic 1*

TCP is sending data in 5 segments with SEQ numbers 27000, 27500.28000, 28500, and 29000 respectively. During transmission, the segment with SEQ=28500 is dropped in the network. How does TCP handle this situation?

A. The receiving end station sends an ACK flag with SEQ=28000 to indicate it has received a segment out of order.

B. The receiving station sends a NACK frame with SEQ=28500 requesting that the frame be retransmitted

C. Once the reciever's window is full. TCP assembles the payload and determines that SEQ=28500 is missing. At this point, the reciever sends the RST flag with SEQ=28500 to Request Single Transmission of the missing segment.

D. TCP will collect the segments and forward them to the application layer where the SEQ numbers will be processed and a retransmit request will occur for the entire packet.

Correct Answer: *A*

Question #223 *Topic 1*

Which of the following is NOT an advantage pf TCP/IP layering?

A. It provides a standardized method of communication.

B. It simplifies complex procedures.

C. It reduces protocol overhead.

D. It isolates layers and defines how they should interact.

Correct Answer: *C*

Question #224 *Topic 1*

Which TCP/IP layer is responsible for providing the user's interface to the network?

A. the application services layer

B. The transport layer

C. The Internet protocol layer

D. The network interface layer

Correct Answer: *D*

Community vote distribution

A (100%)

Question #225 *Topic 1*

Which tier of Internet service providers provides transit services to other ISPs?

A. Tier 1 and Tier 2 ISPs

B. Tier 1 and Tier 3 ISPs

C. Tier 2 and Tier 3 ISPs

D. Tier 3 ISP

Correct Answer: *B*

Question #226 *Topic 1*

Which of the following is IANA responsible for?

A. The allocation of enterprise IP address space

B. The allocation of residential IP address space

C. The allocation of global IP address space

D. The allocation of North American IP address space

Correct Answer: *D*

Question #227 *Topic 1*

Which compact flash on a Control/Switch processor on a Nokia 7750 SR stores the runtime image and the running configuration?

A. SF 1

B. SF 2

C. SF 3

D. Both CF1 and CF2

Correct Answer: *D*

Question #228 *Topic 1*

On the Nokia 7750 SR, which key displays all command options and their descriptions?

A. ?

B. Tab

C. Space bar

D. Return

Correct Answer: *A*

Question #229 *Topic 1*

With which of the following log destinations does an event log disappear when you log off a Nokia 7750 SR?

A. Console

B. Session

C. Memory

D. File

Correct Answer: *B*

Question #230 *Topic 1*

Which of the following Nokia 7750 SR components is NOT part of the data plane?

A. The Media Dependent Adapter (MDA)

B. The Input/ Output Module (IOM)

C. The Switch Fabric (SF)

D. The Control Processor Module (CPM)

Correct Answer: *D*

Question #231 *Topic 1*

Which of the following ports can be used to access a Nokia 7750 SR that has not been configured?

A. CPM management Ethernet port

B. CPM console serial port

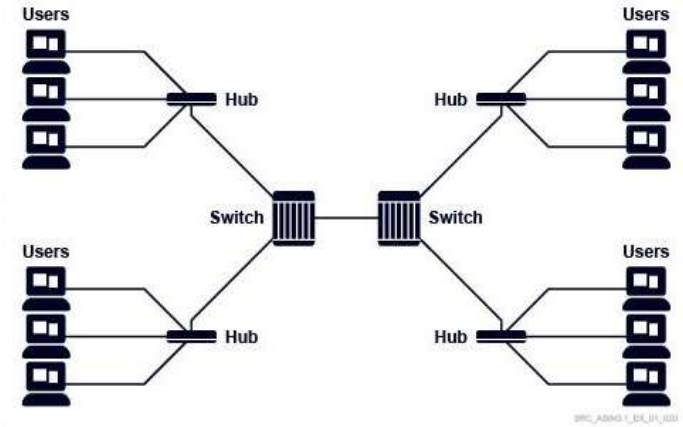
C. Port 1/1/1

D. Any port on an installed MDA

Correct Answer: *B*

Question #232 Topic 1

An Ethernet Local Area Network (LAN) consists of the components shown in the diagram. How many collision domains are on this LAN?



A. 1

B. 2

C. 5

D. 6

Correct Answer: *C*

Question #233 Topic 1

Which of the following best describes an Ethernet switch?

A. A passive device used to connect cables without signal amplification.

B. A device that receives and retransmits data without Layer 2 header inspection.

C. A device that receives and retransmits data based on the Layer 2 destination address.

D. A device that receives and retransmits data based on the Layer 3 destination address.

Correct Answer: *C*

Question #234 Topic 1

Which ATM adaptation layer is usually used for connectionless data service?

A. AAL1

B. AAL2

C. AAL3/4

D. AAL5

Correct Answer: *C*

Question #235 *Topic 1*

What must be configured before a LAG becomes operational?

A. The cost must be statically configured on all ports in the LAG.

B. The speed and duplex setting on all ports in the LAG must be the same.

C. Auto-negotiation must be enabled on all ports in the LAG.

D. The duplex setting on all the ports in the LAG must be forced to half.

Correct Answer: *B*

Question #236 *Topic 1*

Which of the following is NOT characteristic of Ethernet?

A. It is a broadcast technology that can send frames to all devices attached to shared media.

B. It uses a passive, wait-listen protocol called Carrier Sense Multiple Access with Collision Detection (CSMA/ CD).

C. It uses IP addresses to identify interfaces on the common network media.

D. It is part of the network interface layer of the TCP/IP protocol suite.

Correct Answer: *C*

Question #237 *Topic 1*

What is the function of Layer 2?

A. Layer 2 is responsible for encapsulating packets into frames for transmission on physical media.

B. Layer 2 is responsible for encapsulating packets into IP datagrams and routing them.

C. Layer 2 is responsible for encapsulating application data into TCP/UDP messages.

D. Layer 2 is responsible for the timing of the signals on physical media.

Correct Answer: *D*

Question #238 *Topic 1*

What type of MAC address is 01:00:5e:01:01:01?

A. Unicast

B. Multicast

C. Broadcast

D. Anycast

Correct Answer: *B*

Question #239 *Topic 1*

A switch with the MAC FDB shown in the exhibit receives an Ethernet frame with source MAC address 00:00:8c:01:00:0a and destination MAC address ff:ff:ff:ff:ff:ff. On which ports is the frame forwarded?

MAC FDB

1/1/1	00:00:8c:01:00:0a
1/1/2	00:00:8c:01:00:0b
1/1/3	00:00:8c:01:00:0c
1/1/4	00:00:8c:01:00:0d

A. Only on port 1/1/1.

B. On all ports except 1/1/1.

C. On all four ports.

D. On none of the ports.

Correct Answer: *A*

Community vote distribution

B (100%)

Question #240 *Topic 1*

Which of the following statements about the IP forwarding process is TRUE?

A. It uses the forwarding table to find a match for the source IP address.

B. It uses the ARP table to find a match for the source MAC address.

C. It uses the ARP table to find a match for the destination MAC address.

D. It uses the forwarding table to find a match for the destination IP address.

Correct Answer: *D*

Question #241 *Topic 1*

Which of the following if a Layer 3 protocol?

A. Ethernet

B. TCP

C. IP

D. FTP

Correct Answer: *C*

Question #242 *Topic 1*

A given network with address 200.12.30.0 and network mask 255.255.255.0 is divided into 16 equal-sized subnetworks. How many hosts does each subnetwork support?

A. 6

B. 14

C. 30

D. 62

Correct Answer: *B*

Question #243 *Topic 1*

Which of the following involves grouping a number of routes with common prefixes into a single route advertisement?

A. Hierarchical IP Addressing

B. IP Address Subnetting

C. Variable Length Subnet Masking

D. IP Address Summarization

Correct Answer: *D*

Question #244 *Topic 1*

Which of the following is a characteristic of a subnet created with a prefix length of /32?

A. The subnet has only one address reserved for a loopback interface or the system interface.

B. The subnet has a broadcast address.

C. The subnet is configured for a point-to point link.

D. The subnet is reserved for a multicast address groups.

Correct Answer: *A*

Question #245 *Topic 1*

Which of the following statements about IP addressing is TRUE?

A. IP addresses are assigned by IEEE to vendors.

B. Classless IP addresses provide hierarchy based on a variable length subnet mask.

C. Classless IP addresses provide hierarchy based on fixed subnet masks of /24, /16, and /8.

D. IP addresses provide hierarchy based on the country code and regional identifier.

Correct Answer: *B*

Question #246 *Topic 1*

What is the most specific aggregate prefix for the following 4 subnets?
100.1.1.4/30
100.1.1.8/30
100.1.1.12/30
100.1.1.16/30

A. 100.1.1.0/25

B. 100.1.1.0/26

C. 100.1.1.0/27

D. 100.1.1.0/28

Correct Answer: *C*

Question #247 *Topic 1*

Network 201.148.104.0/21 is subnetted using a /23 mask. How many subnets and host addresses per subnet will be obtained with this mask?

A. 2 subnets, 1022 hosts

B. 4 subnets, 510 hosts

C. 2 subnets, 2048 hosts

D. 4 subnets, 512 hosts

Correct Answer: *A*

Community vote distribution

B (100%)

Question #248 *Topic 1*

A network with address 208.40.224.0/24 is divided into /28 subnets. What is the host address range of the fourth subnetwork?

A. 208.40.224.17 "" 208.40.224.30

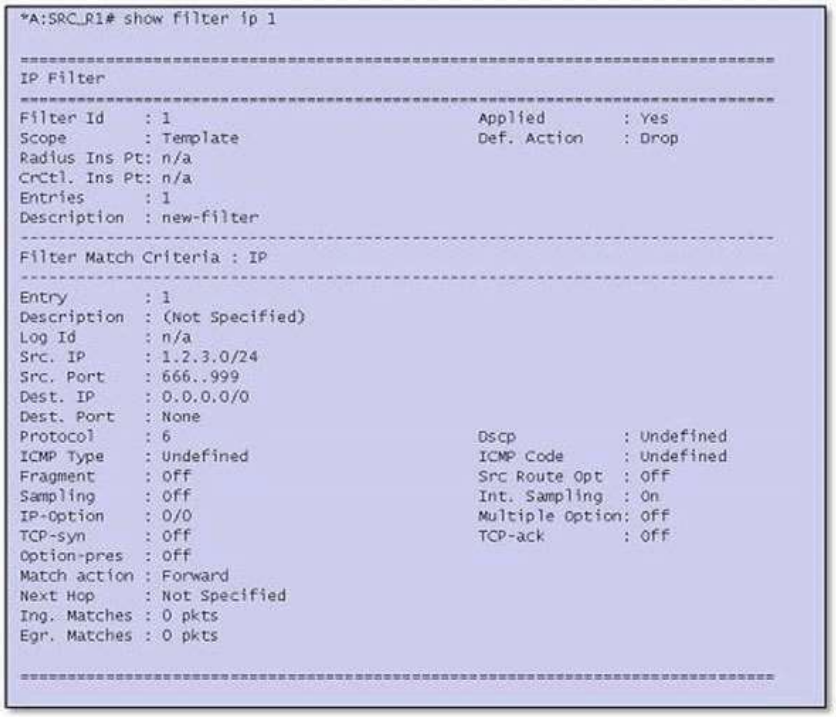
B. 208.40.224.33 "" 208.40.224.46

C. 208.40.224.49 "" 208.40.224.62

D. 208.40.224.65 "" 208.40.224.78

Correct Answer: *C*

Which of the following about the displayed IP filter is TRUE?



```
*A:SRC_R1# show filter ip 1

===============================================================================
IP Filter
===============================================================================
Filter Id    : 1                              Applied        : Yes
Scope        : Template                       Def. Action    : Drop
Radius Ins Pt: n/a
CrCtl. Ins Pt: n/a
Entries      : 1
Description  : new-filter
-------------------------------------------------------------------------------
Filter Match Criteria : IP
-------------------------------------------------------------------------------
Entry        : 1
Description  : (Not Specified)
Log Id       : n/a
Src. IP      : 1.2.3.0/24
Src. Port    : 666..999
Dest. IP     : 0.0.0.0/0
Dest. Port   : None
Protocol     : 6                              Dscp           : Undefined
ICMP Type    : Undefined                      ICMP Code      : Undefined
Fragment     : Off                            Src Route Opt  : Off
Sampling     : Off                            Int. Sampling  : On
IP-Option    : 0/0                            Multiple Option: Off
TCP-syn      : Off                            TCP-ack        : Off
Option-pres  : Off
Match action : Forward
Next Hop     : Not Specified
Ing. Matches : 0 pkts
Egr. Matches : 0 pkts

===============================================================================
```

A. TCP (protocol 6) packets with source IP address 1.2.3.0/24 and source port number between 666 and 999 are forwarded.

B. TCP (protocol 6) packets with source IP address 1.2.3.0/24 and source port number between 666 and 999 are dropped.

C. TCP (protocol 6) packets with source IP address 1.2.3.0/24 or source port number between 666 and 999 are forwarded.

D. TCP (protocol 6) packets with destination IP address 1.2.3.0/24 and source port number between 666 and 999 are forwarded.

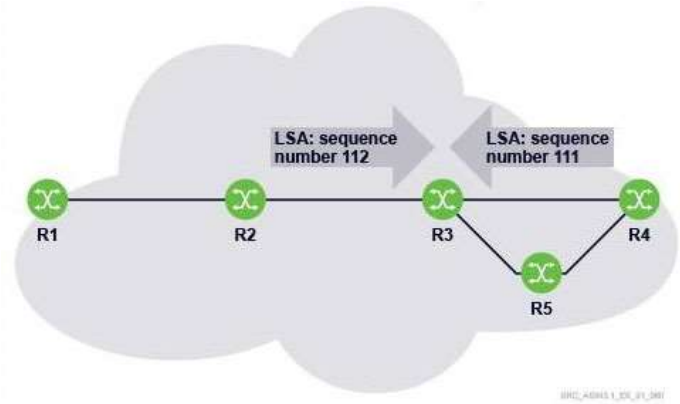
Correct Answer: *B*

Community vote distribution

A (100%)

Question #250 *Topic 1*

Router R3 receives an LSA with the sequence number 111 from router R4 and then receives another copy of the LSA with a sequence number 112 from router
R2. What does router R3 do with the LSA from R2?



A. R3 discards the LSA received from R2 and sends a copy of the LSA from its link state base to R2.

B. R3 installs the LSA received from R2 in its link state database and floods a copy to its neighbors.

C. R3 discards the LSA received from R2 and sends an ACK to R2.

D. R3 installs the LSA received from R2 in its link state database, sends an ACK to R2, and floods a copy to its neighbors.

Correct Answer: *C*

Community vote distribution

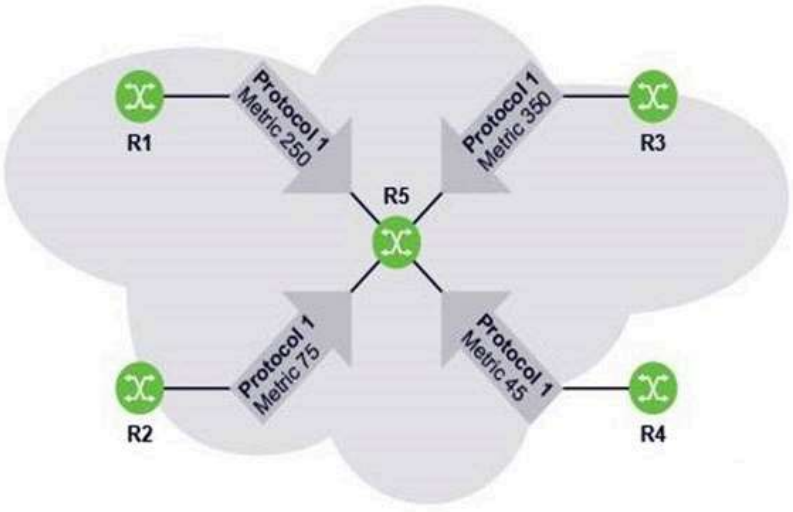
D (100%)

Next Questions →

Custom View Settings

Question #251 *Topic 1*

Router R5 receives four route updates for the same prefix 10.10.10.1/32. Which of the four routes will be installed in R5's routing table?



A. Route learned from router R1.

B. Route learned from router R2.

C. Router learned from router R3.

D. Route learned from router R4.

Correct Answer: *D*

Question #252 *Topic 1*

Which of the following egress interfaces is used to forward a packet with destination IP address 140.10.0.110?

```
===============================================================
Route Table (Router: Base)
===============================================================
Dest Prefix[Flags]              Type    Proto    Age         Pref
      Next Hop[Interface Name]                    Metric
---------------------------------------------------------------
0.0.0.0/0                       Remote  Static   01d18h59m   5
       140.10.0.106 [toC1]                        1
140.10.0.0/32                   Local   Local    01d18h59m   0
       system                                     0
140.10.0.96/30                  Local   Local    01d18h59m   0
       toP1                                       0
140.10.0.100/30                 Local   Local    01d18h59m   0
       toP2                                       0
140.10.0.104/30                 Local   Local    01d18h59m   0
       toC1                                       0
140.10.0.108/30                 Remote  OSPF     00h39m02s   10
       140.10.0.98 [toP1]                         200
140.10.0.112/30                 Remote  OSPF     01h14m34s   10
       140.10.0.102 [toP2]                        200
---------------------------------------------------------------
No. of Routes: 7
Flags: L = LFA nexthop available   B = BGP backup route available
       n = Number of times nexthop is repeated
===============================================================
```

A. System interface

B. Interface "toC1"

C. Interface "toP1"

D. Interface "toP2"

Correct Answer: *C*

Question #253 *Topic 1*

Which of the following is a characteristic of Link State protocols?

A. Routers send a copy of their entire routing table to their neighbors.

B. Routers send frequent periodic updates to the entire network.

C. Routers know the entire network topology.

D. Routers use hop-count to calculate their routing tables.

Correct Answer: *C*

Question #254 *Topic 1*

Which of the following describes an IP filter on the Nokia 7750 SR?

A. An IP filter is used to discard packets with checksum errors.

B. An IP filter can allow IP packets into a network or deny IP packets from entering a network.

C. Multiple ingress and egress filter policies can be applied to a network interface.

D. Once an IP filter is applied, it cannot be modified.

Correct Answer: *B*

Question #255 *Topic 1*

Which of the following statements about OSPF routing protocol is FALSE?

A. It is a link state protocol.

B. It supports hierarchy using multiple areas.

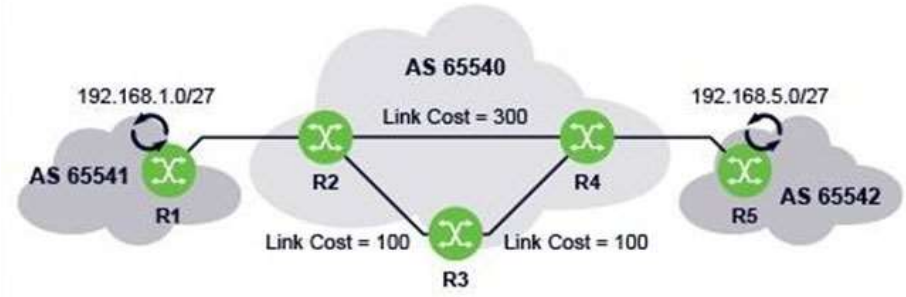
C. It supports VLSM and address aggregation.

D. It uses hop-count for route selection.

Correct Answer: *D*

Question #256 *Topic 1*

Which of the following protocols can be used to force traffic from router R2 to use the direct link to router R4?



A. Static routing

B. IS-IS

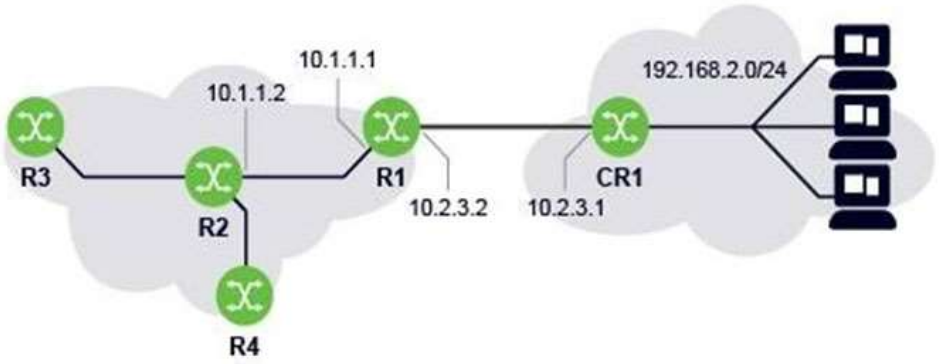
C. OSPF

D. eBGP

Correct Answer: *A*

Question #257 *Topic 1*

What next-hop should be used on CR1 to configure a default route to router R1?



A. 10.2.3.2

B. 10.2.3.1

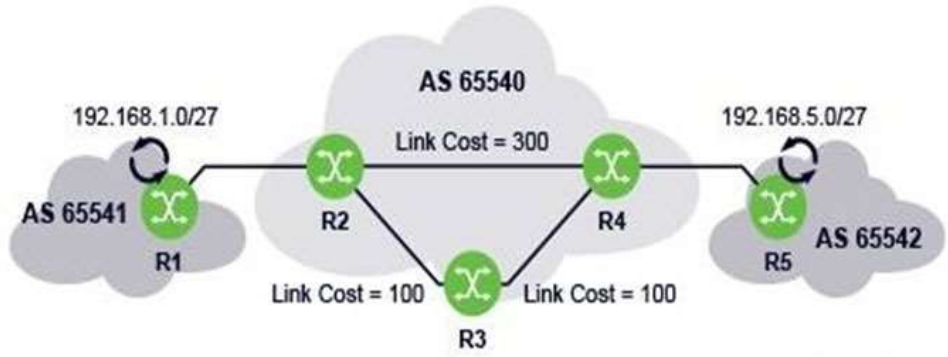
C. 192.168.2.0

D. 10.1.1.1

Correct Answer: *A*

Question #258 *Topic 1*

Which of the following routing protocols SHOULD NOT be used between routers R1 and R2?



A. Static Routing

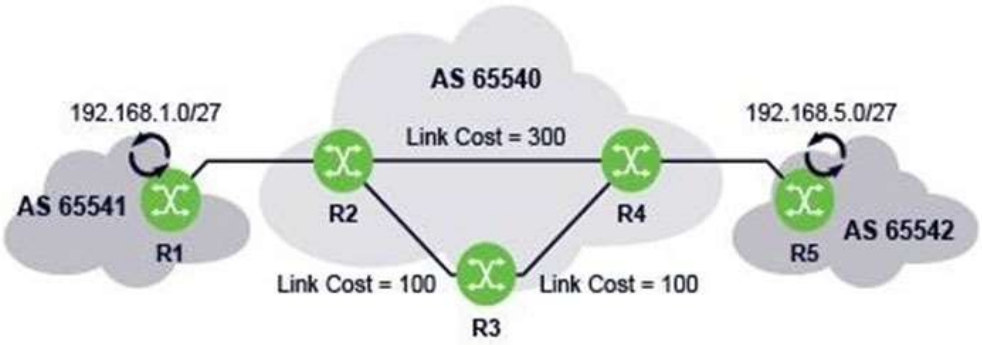
B. Default Routing

C. OSPF

D. BGP

Correct Answer: *C*

Question #259 *Topic 1*



What type of BGP sessions does router R2 need to establish in order to reach networks 192.168.1.0/27 and 192.168.5.0/27?

A. eBGP peering sessions with routers R1, R3 and R4

B. iBGP peering sessions with routers R1 and R5

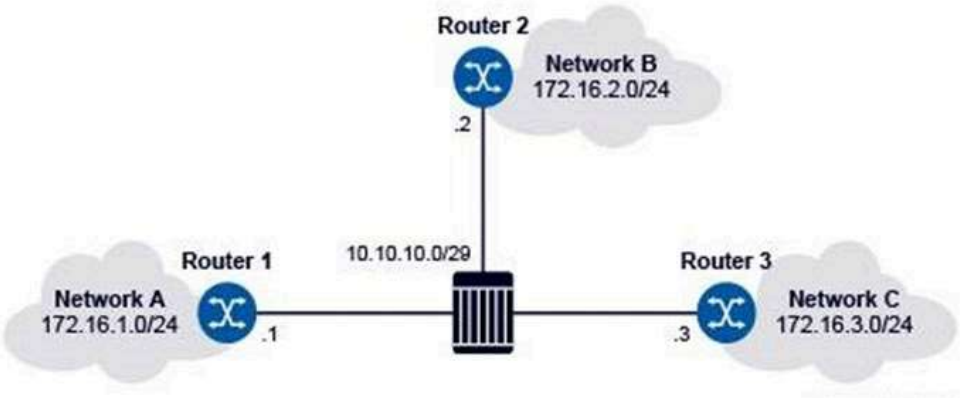
C. An eBGP peering session with router R1, and iBGP peering sessions with routers R3 and R4

D. An iBGP peering session with router R1, and an eBGP peering session with router R4

Correct Answer: *C*

Question #260 *Topic 1*

What is the next-hop for network 172.16.1.0/24 installed in router 2's routing table?



A. 10.10.10.0

B. 10.10.10.1

C. 10.10.10.2

D. 10.10.10.3

Correct Answer: *B*

Question #261 *Topic 1*

On what type of device/router is a Service Access Point (SAP) defined?

A. The SAP is defined on the CE device.

B. The SAP is defined on the PE device.

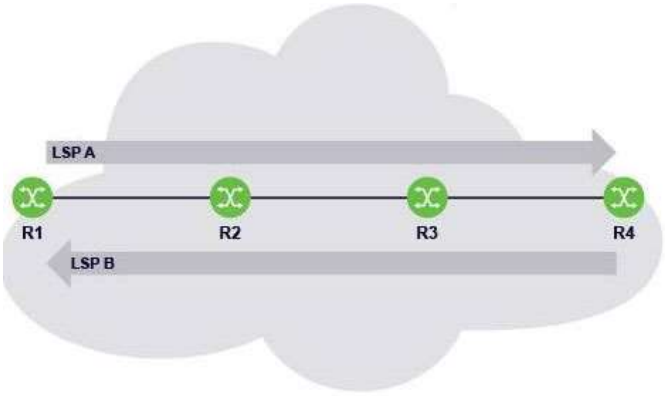
C. The SAP is defined on the P device.

D. The SAP is defined on both CE and PE devices.

Correct Answer: *B*

Question #262 *Topic 1*

Which of the following is TRUE regarding routers R2 and R3 in the pictured MPLS network?



A. Router R2 pushes labels for LSP A, and R3 swaps labels for LSP A.

B. Router R2 swaps labels for LSP A, and R3 pops labels for LSP A.

C. Router R2 and R3 swap labels for LSP A and LSP B.

D. Router R2 and R3 push labels for LSP A and LSP B, respectively.

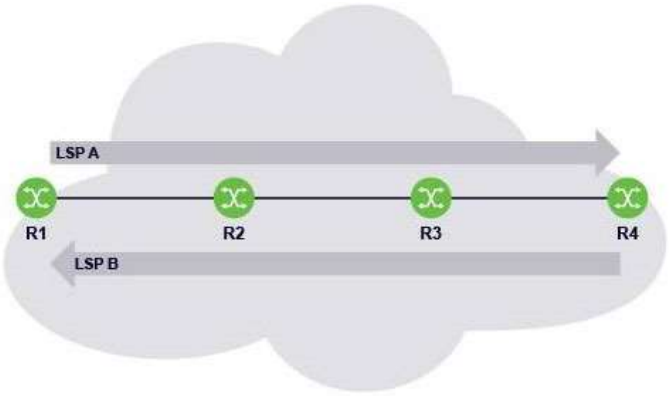
Correct Answer: *D*

Community vote distribution

C (100%)

Question #263 *Topic 1*

Which of the following statements about router R1 is TRUE?



A. Router R1 is an iLER for both LSPs.

B. Router R1 is an eLER for both LSPs.

C. Router R1 is an iLER for LSP A and an eLER for LSP B.

D. Router R1 is an iLER for LSP B and an eLER for LSP A.

Correct Answer: *C*

Question #264 *Topic 1*

Which of the following is TRUE about a PE router within a service provider's MPLS network?

A. It resides on the customer premises.

B. It is not aware of the VPN services provided by the service provider.

C. It should connect to at least one other PE router.

D. It should connect to at least one CE device.

Correct Answer: *D*

Question #265 *Topic 1*

What type of VPN service does a VPRN provide?

A. Layer 3 direct internet access service

B. Layer 3 IP routed service

C. Layer 2 point-to-point service

D. Layer 2 multipoint service

Correct Answer: *B*

Question #266 Topic 1

From a customer's perspective, how does a VPRN service operate?

A. All sites are connected to a single wire.

B. All sites are connected to a switched network.

C. All sites are connected to a routed network.

D. All sites are connected to the Internet.

Correct Answer: *C*

Question #267 Topic 1

What is the name for an organization that provides Internet services to its customers?

A. An Internet content provider

B. An Internet service provider

C. An enterprise

D. A regional Internet registry

Correct Answer: *B*

Question #268 Topic 1

What types of addresses are part of encapsulation at the transport layer?

A. Source and destination MAC addresses

B. Source and destination IP addresses

C. Source and destination port numbers

D. Source and destination email addresses

Correct Answer: *C*

Question #269 Topic 1

Which statement describes the primary purpose of TCP?

A. To establish reliable communication for the application services layer.

B. To provide low overhead communication for the application services layer.

C. To route IP packets for the application services layer.

D. To transmit packets over the physical infrastructure.

Correct Answer: *A*

Question #270 *Topic 1*

Which of the following is used for the auto completion of CLI commands in a Nokia 7750 SR?

A. Type the first few letters of the command, then press Ctrl C.

B. Type the first few letters of the command, then press Esc.

C. Type the first few letters of the command, then press Tab.

D. Type the first few letters of the command, then type ?.

Correct Answer: *C*

Question #271 *Topic 1*

Which of the following shows a typical data packet flow when ingressing a Nokia 7750 SR?

A. SFP -> IOM -> MDA -> SF/CPM

B. SFP-> MDA-> IOM -> SF/CPM

C. SFP -> SF/CPM -> MDA -> IOM

D. IOM -> MDA -> SF/CPM -> SFP

Correct Answer: *B*

Question #272 *Topic 1*

On a Nokia 7750 SR, which of the following event log destinations is used to store an event log to the compact flash?

A. Console

B. Session

C. Memory

D. File

Correct Answer: *D*

Question #273 *Topic 1*

Which of the following tasks can be performed in the boot options file (BOF)?

A. Specifying authorization information to control access to the router.

B. Defining an IP address for the management port.

C. Provisioning the IOM cards.

D. Setting the date and time for the system.

Correct Answer: *B*

Question #274 *Topic 1*

What information is used to separate VLANs on a VLAN trunk that connects multiple VLANs?

A. The VLAN tag

B. The IP Header

C. The VID

D. The Priority Value

Correct Answer: *A*

Question #275 *Topic 1*

How do ATM and Frame-Relay protocols differentiate multiple customers or traffic types on the same physical wire?

A. They use virtual circuits to create a logical separation of traffic.

B. They use subnetting to create a logical separation of traffic.

C. They use VLANs to create a logical separation of traffic.

D. They use IP header information to create a logical separation of traffic.

Correct Answer: *A*

Question #276 *Topic 1*

Which Ethernet frame field allows the transmitter and receiver to synchronize communications?

A. Preamble

B. Start Frame Delimiter

C. Length/Type

D. Frame Check Sequence

Correct Answer: *A*

Question #277 *Topic 1*

Which of the following is required if devices on different VLANs wish to communicate with each other?

A. Devices on different VLANs cannot communicate with each other.

B. Devices on different VLANs can communicate with each other if they are connected to the same switch.

C. Devices on different VLANs can communicate with each other if the switches are connected using a single high-bandwidth port.

D. Devices on different VLANs can communicate with each other if there is a router to connect the VLANs.

Correct Answer: *D*

Question #278 *Topic 1*

In what type of network is a broadcast storm likely to occur?

A. An MPLS network with multiple LSPs to the same LER.

B. An OSPF network with equal cost multiple paths.

C. A SONET network with a ring topology.

D. An Ethernet network with redundant paths not running STP.

Correct Answer: *D*

Question #279 *Topic 1*

Which of the following best describes a hub?

A. A passive device used to connect cables without signal amplification.

B. A device that receives and retransmits data without Layer 2 header inspection.

C. A device that receives and retransmits data based on the Layer 2 destination address.

D. A device that receives and retransmits data based on the Layer 3 destination address.

Correct Answer: *B*

Question #280 *Topic 1*

What is the purpose of a multicast address?

A. To provide an address that refers to all devices in a network.

B. To provide an address that refers to a specific group of devices in a network.

C. To provide an address that refers to a group of devices with the same IP address in different Layer 2 networks.

D. To provide an address that refers to a single device in a network.

Correct Answer: *B*

Question #281 *Topic 1*

What is the sequence of events that must occur for a client to receive an IP address using DHCP?

A. Discover, Offer, Request, Acknowledgement

B. Request, Offer, Discover, Acknowledgement

C. Discover, Acknowledgement, Request, Offer

D. Request, Acknowledgement, Discover, Offer

Correct Answer: *A*

Question #282 *Topic 1*

How many subnets and host addresses are obtained by subnetting network 201.148.26.0/24 using a /26 subnet mask?

A. 4 subnets, 64 hosts per subnet

B. 8 subnets, 32 hosts per subnet

C. 4 subnets, 62 hosts per subnet

D. 8 subnets, 30 hosts per subnet

Correct Answer: *A*

Community vote distribution

C (100%)

Question #283 *Topic 1*

Which of the following statements about ARP request and ARP response messages is TRUE?

A. Both ARP request and response messages are unicast messages.

B. Both ARP request and response messages are broadcast messages.

C. An ARP request is a broadcast message, while an ARP response is a unicast message.

D. An ARP request is a unicast message, while an ARP response is a broadcast message.

Correct Answer: *C*

Question #284 *Topic 1*

Which of the following is a characteristic of the IP layer?

A. Provides a connectionless data transmission service.

B. Provides physical interconnection of network devices.

C. Provides reliable transfers of data.

D. Provides services equivalent to the OSI data link layer.

Correct Answer: *A*

Question #285 *Topic 1*

Which of the following is a characteristic of a subnet created with a /31 prefix?

A. There is no broadcast address on the network.

B. The address is only used as a loopback address.

C. This specifies a single host address.

D. The address is only used for router IDs.

Correct Answer: *A*

Question #286 Topic 1

Given network address 200.12.30.0 with network mask 255.255.255.0, which subnet mask can be used to create 12 subnetworks? Each subnetwork must support
10 host addresses.

A. /25
B. /26
C. /28
D. /30

Correct Answer: *C*

Question #287 Topic 1

Which bit pattern represents a subnet mask of 255.255.240.0?

A. 11111111.11111111.11111111.00000000
B. 11111111.11111111.11110000.00000000
C. 11111111.11111111.11000000.00000000
D. 11111111.11111111.00000000.00000000

Correct Answer: *B*

Question #288 Topic 1

How does address summarization reduce the routing table size?

A. By allowing a block of routes to be represented by one route.
B. By only keeping best routes in the routing table.
C. By rejecting duplicate route advertisements.
D. By not advertising directly connected routes.

Correct Answer: *A*

Question #289 Topic 1

A network with address 208.40.224.0/24 is divided into /28 subnets. What is the network address of the third subnet?

A. 208.40.224.16/28
B. 208.40.224.32/28
C. 208.40.224.48/28
D. 208.40.224.64/28

Correct Answer: *C*

Question #290 *Topic 1*

Which of the following IP header fields defines the way packets should be queued?

A. Type of Service

B. Identification

C. Flags

D. Protocol

Correct Answer: *A*

Question #291 *Topic 1*

Which of the following statements about packet forwarding is FALSE?

A. The router consults the forwarding table on the ingress IOM.

B. The router looks for a longest match to the destination IP address.

C. The router resolves the next-hop address of the matching route to a physical interface.

D. If there is no match in the forwarding table, the router sends a "No route to destination" notification.

Correct Answer: *A*

Question #292 *Topic 1*

What is the most specific aggregate prefix for the following 4 subnets?
136.160.17.192/29
136.160.17.200/29
136.160.17.208/29
136.160.17.216/29

A. 136.160.17.128/25

B. 136.160.17.192/26

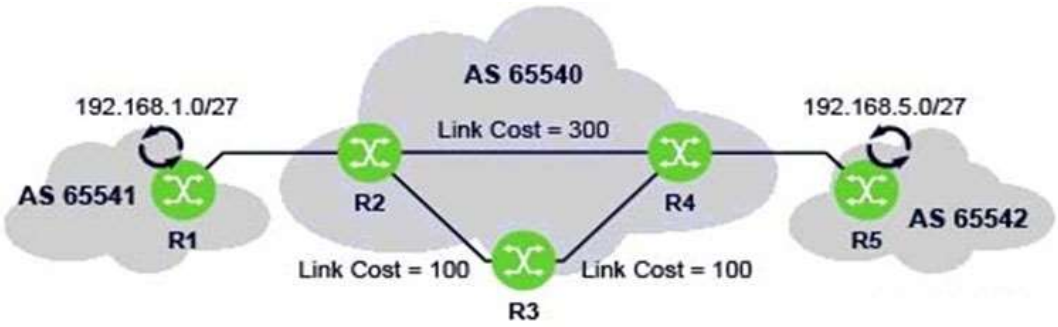
C. 136.160.17.192/27

D. 136.160.17.192/28

Correct Answer: *C*

Question #293 *Topic 1*

Which of the following protocols is used to exchange routes between routers R1 and R2, and between routers R4 and R5?



A. RIPv2

B. IS-IS

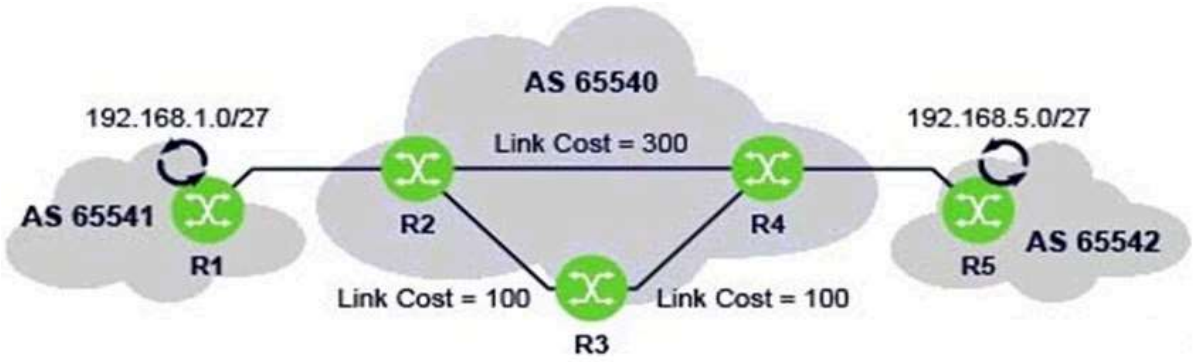
C. OSPF

D. BGP

Correct Answer: *D*

Question #294 *Topic 1*

What type of BGP sessions does router R2 need to establish in order to reach network 192.168.5.0/27?



A. An iBGP peering session with router R5, and an eBGP peering session with router R4

B. iBGP peering sessions with routers R3 and R4

C. An eBGP peering session with router R4

D. An iBGP peering session with router R5

Correct Answer: *B*

Question #295 *Topic 1*

Which of the following statements about IP filters on a Nokia 7750 SR is FALSE?

A. IP filters can be applied on inbound traffic, outbound traffic, or both.

B. IP filters can be created to filter based on IP and MAC addressing.

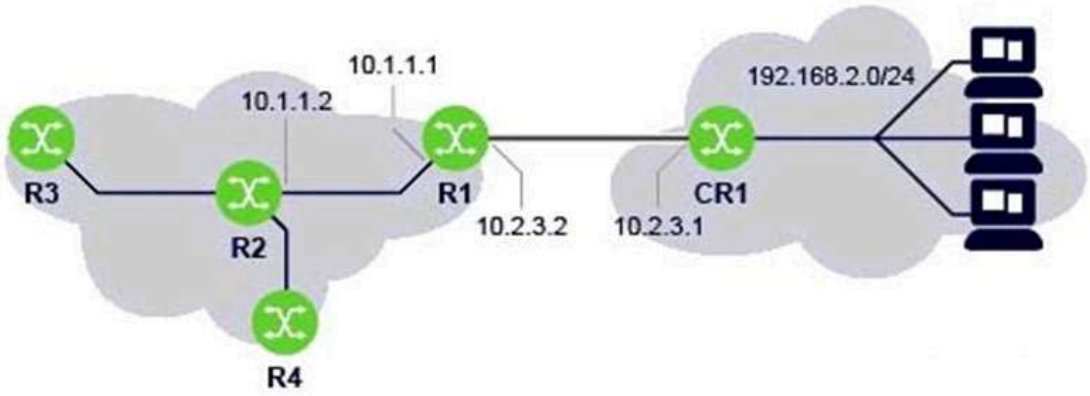
C. By default, no IP filter is applied to an interface.

D. The default action of an IP filter is to forward packets.

Correct Answer: *D*

Question #296 *Topic 1*

What is the next-hop address used on router R1 to configure a static route to the network on CR1?



A. 10.2.3.2

B. 10.1.1.1

C. 10.2.3.1

D. 192.168.2.0

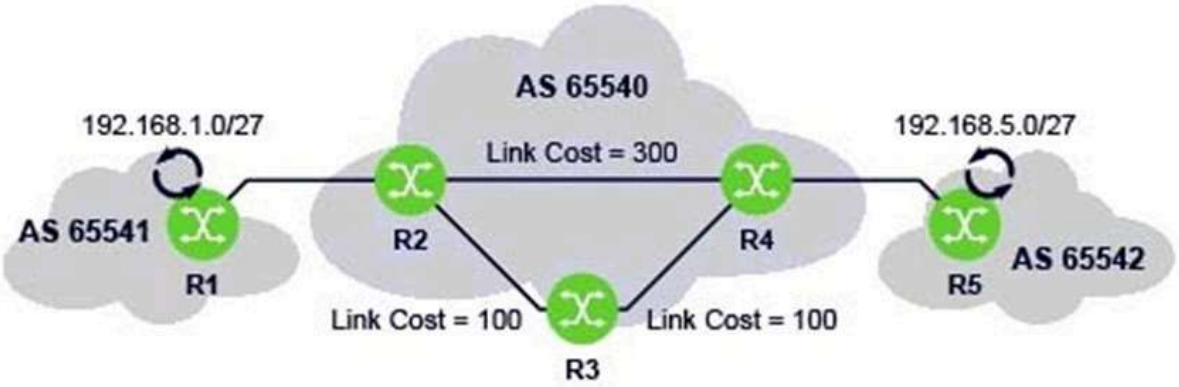
Correct Answer: *A*

Community vote distribution

C (100%)

Question #297 *Topic 1*

Which of the following routing protocols cannot be used between routers R2 and R4?



A. Static Routing

B. IS-IS

C. OSPF

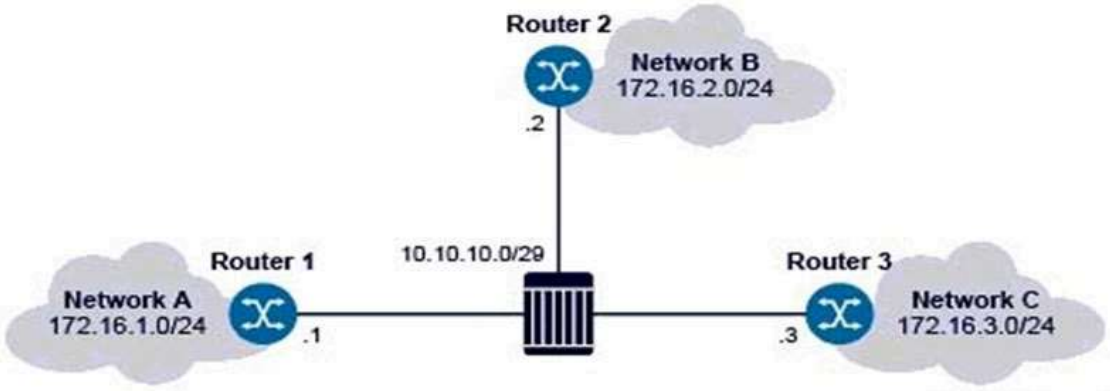
D. iBGP

E. eBGP

Correct Answer: *E*

Question #298 *Topic 1*

What is the next-hop for network 172.16.2.0/24 installed in router 1's routing table?



A. 10.10.10.0

B. 10.10.10.1

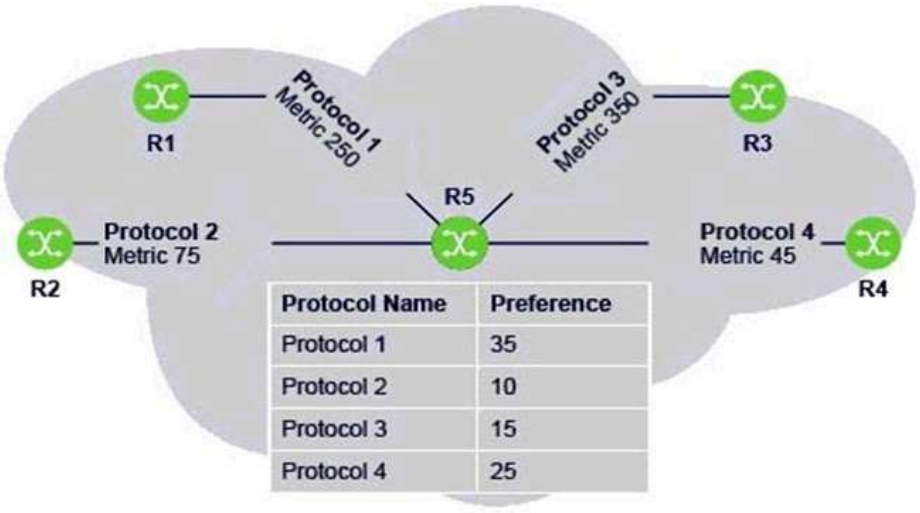
C. 10.10.10.2

D. 10.10.10.3

Correct Answer: *C*

Question #299 *Topic 1*

Router R5 receives four route updates for the same prefix 10.10.10.1/32. Which of the four routes will be installed in R5's routing table?



Protocol Name	Preference
Protocol 1	35
Protocol 2	10
Protocol 3	15
Protocol 4	25

A. Route learned from router R1.

B. Route learned from router R2.

C. Route learned from router R3.

D. Route learned from router R4.

Correct Answer: *B*

Question #300 *Topic 1*

Which of the following statements about the OSPF HELLO message is TRUE?

A. It is used to maintain adjacency between neighbors.

B. It is used to request link state updates from neighbors.

C. It is used to deliver link state updates to neighbors.

D. It is used to confirm delivery of updates between neighbors.

Correct Answer: *A*

Previous Questions

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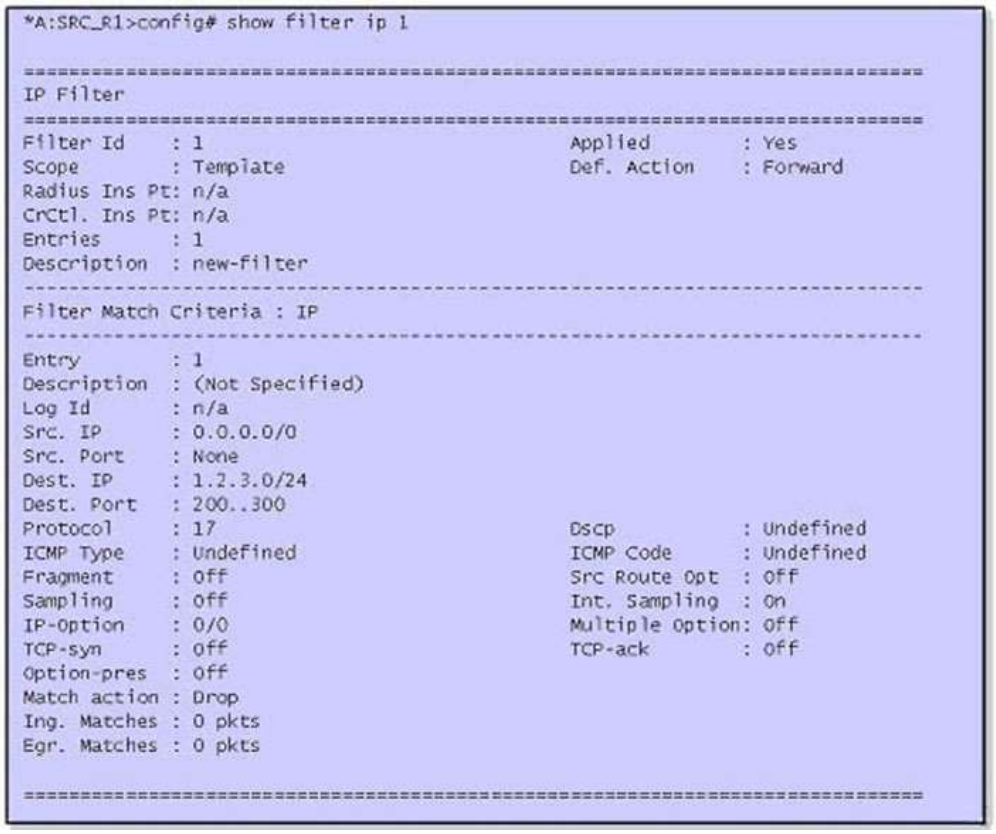
Custom View Settings

Question #301 *Topic 1*

Which of the following about the displayed IP filter is TRUE?



```
*A:SRC_R1>config# show filter ip 1

===============================================================================
IP Filter
===============================================================================
Filter Id    : 1                                Applied        : Yes
Scope        : Template                         Def. Action    : Forward
Radius Ins Pt: n/a
CrCtl. Ins Pt: n/a
Entries      : 1
Description  : new-filter
-------------------------------------------------------------------------------
Filter Match Criteria : IP
-------------------------------------------------------------------------------
Entry        : 1
Description  : (Not Specified)
Log Id       : n/a
Src. IP      : 0.0.0.0/0
Src. Port    : None
Dest. IP     : 1.2.3.0/24
Dest. Port   : 200..300
Protocol     : 17                               Dscp           : Undefined
ICMP Type    : Undefined                        ICMP Code      : Undefined
Fragment     : Off                              Src Route Opt  : Off
Sampling     : Off                              Int. Sampling  : On
IP-Option    : 0/0                              Multiple Option: Off
TCP-syn      : Off                              TCP-ack        : Off
Option-pres  : Off
Match action : Drop
Ing. Matches : 0 pkts
Egr. Matches : 0 pkts

===============================================================================
```

A. UDP (protocol 17) packets with destination IP address 1.2.3.0/24 and destination port number between 200 and 300 are forwarded.

B. UDP (protocol 17) packets with destination IP address 1.2.3.0/24 and destination port number between 200 and 300 are dropped.

C. UDP (protocol 17) packets with destination IP address 1.2.3.0/24 or destination port numbers 200 or 300 are dropped.

D. UDP (protocol 17) packets with destination IP address 1.2.3.0/24 and source port number between 200 and 300 are dropped.

Correct Answer: *A*

Community vote distribution

B (100%)

Question #302 *Topic 1*

What is the preference value in the routing table used for?

A. To select from routes with different next-hops.

B. To select from routes with different costs.

C. To select from routes learned from different routing protocols.

D. To select from routes with different prefixes.

Correct Answer: *C*

Question #303 *Topic 1*

Which of the following statements about SDPs is FALSE?

A. The same SDP ID can be used on multiple routers.

B. Each service requires a unique SDP.

C. SDPs are not configured on P routers.

D. SDPs are not configured on CE devices.

Correct Answer: *D*

Question #304 *Topic 1*

Which of the following statements about VPWS service on a Nokia 7750 SR is FALSE?

A. VPWS is a simple point-to-point service.

B. VPWS emulates a Layer 2 connection between two customers.

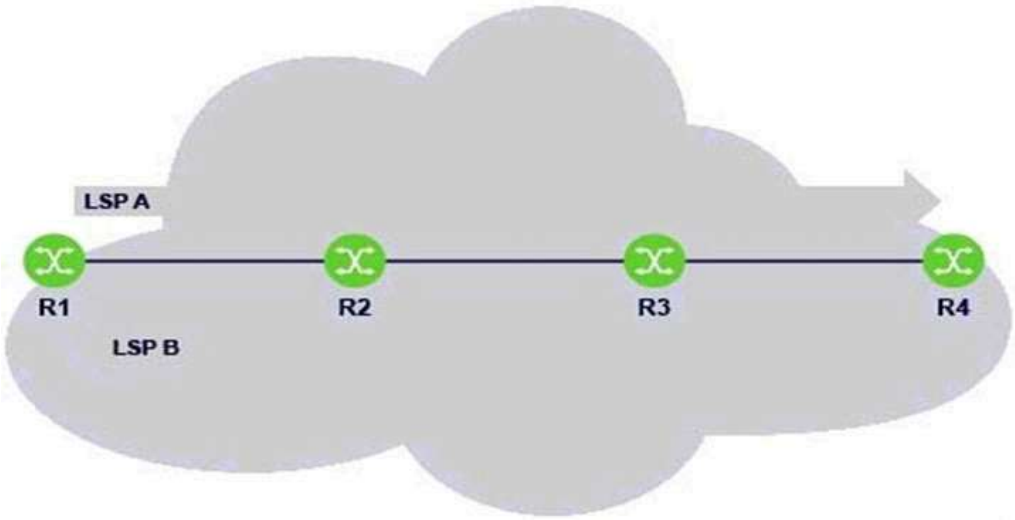
C. VPWS does not perform MAC learning.

D. VPWS encapsulates Layer 2 frames into IP datagrams.

Correct Answer: *D*

Question #305 *Topic 1*

Which of the routers is the iLER for LSP B?



A. Router R1

B. Router R2

C. Router R3

D. Router R4

Correct Answer: *B*

Question #306 *Topic 1*

What type of VPN service does a VPWS provide?

A. Layer 3 direct internet access service

B. Layer 3 IP routed service

C. Layer 2 point-to-point service

D. Layer 2 multipoint service

Correct Answer: *C*

Question #307 *Topic 1*

What operation is performed by an egress Label Edge Router (eLER) when it receives an MPLS labeled packet?

A. It forwards the packet to the next LSR without altering the MPLS label.

B. It swaps the MPLS label and forwards the packet to the next LSR.

C. It pushes a new MPLS label and forwards the packet to the next LSR.

D. It pops the MPLS label and forwards the packet to the next IP router.

Correct Answer: *D*

Question #308 *Topic 1*

What problem was Spanning Tree Protocol (STP) primarily designed to solve?

A. Broadcast storms caused by redundancy in Layer 2 networks.

B. Missing protocol field in the Ethernet header.

C. Missing sequence number in the Ethernet header.

D. Unreliable data transfer in Layer 2 networks.

Correct Answer: *A*

Question #309 *Topic 1*

What kind of information can a Dynamic Host Configuration Protocol (DHCP) client receive?

A. MAC address of the default gateway.

B. IP addresses of other DHCP clients.

C. IP addresses offered to the client.

D. IP addresses of all DHCP servers.

Correct Answer: *C*

Question #310 *Topic 1*

Which tier of Internet service providers can reach any part of the Internet without having to purchase transit services from other Internet service providers?

A. A Tier 1 ISP

B. A Tier 2 ISP

C. A Tier 3 ISP

D. Tier 1 and Tier 2 ISPs

Correct Answer: *A*

Question #311 *Topic 1*

Which of the following is NOT a characteristic of the Internet protocol layer?

A. It provides a unique addressing scheme to identify hosts.

B. It provides a user interface to the network.

C. It uses routing protocols for path determination.

D. It provides end-to-end forwarding of datagrams.

Correct Answer: *B*

Question #312 *Topic 1*

Which of the following is NOT a characteristic of the Internet?

A. The Internet is a global and distributed network.

B. The Internet is a network owned by Tier 1 service providers.

C. The Internet is an open network of networks.

D. The Internet is a network that is advertised across the globe.

Correct Answer: *B*

Question #313 *Topic 1*

Which of the following is NOT a function of the control plane?

A. Building routing tables using dynamic routing protocols.

B. Building forwarding tables for the IOMs.

C. Handling router configuration and management functions.

D. Processing and forwarding user application traffic.

Correct Answer: *D*

Question #314 *Topic 1*

Which of the following is NOT a valid log source in a Nokia 7750 SR?

A. Main

B. Security

C. Syslog

D. Debug

Correct Answer: *C*

Question #315 *Topic 1*

What happens when a switch receives an Ethernet frame with unknown source and destination MAC addresses?

A. The frame is silently discarded.

B. The source MAC address is saved in the MAC FDB, and the frame is discarded.

C. The source MAC address is saved in the MAC FDB, and the frame is flooded to all ports except the receiving port.

D. The source and destination MAC addresses are saved in the MAC FDB, and the frame is flooded to all ports.

Correct Answer: *C*

Question #316 *Topic 1*

A switch with the MAC FDB shown receives an Ethernet frame with source MAC address 00:00:8c:01:00:0a and destination MAC address 00:00:8c:01:00:0c. On which port is the frame forwarded?

MAC FDB

1/1/1	00:00:8c:01:00:0a
1/1/2	00:00:8c:01:00:0b
1/1/3	00:00:8c:01:00:0c
1/1/4	00:00:8c:01:00:0d

A. 1/1/1

B. 1/1/2

C. 1/1/3

D. 1/1/4

Correct Answer: *C*

Question #317 *Topic 1*

If a 5-port LAG is configured with the option of "˜port-threshold 2 action down', and dynamic-cost is enabled, what will happen if the total number of operational links in the LAG is 2?

A. The LAG cost is equal to the link cost divided by 3.

B. The LAG cost is equal to the link cost.

C. The LAG is operationally down.

D. The LAG cost is equal to the link cost divided by 5.

Correct Answer: *C*

Question #318 *Topic 1*

What type of MAC address is ff:ff:ff:ff:ff:ff?

A. Unicast

B. Multicast

C. Broadcast

D. Anycast

Correct Answer: *C*

Question #319 *Topic 1*

Which of the following statements about IP filters on a Nokia 7750 SR is TRUE?

A. Multiple ingress IP filters can be used on a single interface.

B. An IP filter can be applied to the management port.

C. The same IP filter can be used on multiple interfaces.

D. Only one IP filter can be defined per router.

Correct Answer: *C*

Question #320 *Topic 1*

Which of the following about the displayed IP filter is TRUE?

```
*A:SRC_R1# show filter ip 1

===============================================================================
IP Filter
===============================================================================
Filter Id    : 1                              Applied        : Yes
Scope        : Template                       Def. Action    : Forward
Radius Ins Pt: n/a
CrCtl. Ins Pt: n/a
Entries      : 1
Description  : new-filter
-------------------------------------------------------------------------------
Filter Match Criteria : IP
-------------------------------------------------------------------------------
Entry        : 1
Description  : (Not Specified)
Log Id       : n/a
Src. IP      : 1.2.3.0/24
Src. Port    : None
Dest. IP     : 2.3.4.0/24
Dest. Port   : None
Protocol     : 6                              Dscp           : Undefined
ICMP Type    : Undefined                      ICMP Code      : Undefined
Fragment     : Off                            Src Route Opt  : Off
Sampling     : Off                            Int. Sampling  : On
IP-Option    : 0/0                            Multiple Option: Off
TCP-syn      : Off                            TCP-ack        : Off
Option-pres  : Off
Match action : Drop
Ing. Matches : 0 pkts
Egr. Matches : 0 pkts

===============================================================================
```

A. TCP (protocol 6) traffic between addresses 1.2.3.0/24 and 2.3.4.0/24 is dropped.

B. TCP (protocol 6) traffic from source address 1.2.3.0/24 to destination address 2.3.4.0/24 is forwarded.

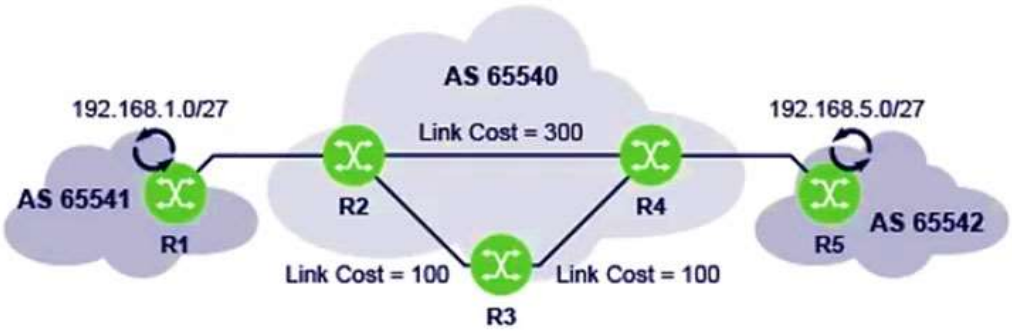
C. TCP (protocol 6) traffic from source address 2.3.4.0/24 to destination address 1.2.3.0/24 is dropped.

D. TCP (protocol 6) traffic from source address 1.2.3.0/24 to destination address 2.3.4.0/24 is dropped.

Correct Answer: *A*

Question #321 *Topic 1*

Which of the following routing protocols provides routing between routers R1 and R2?



A. BGP

B. RIPv2

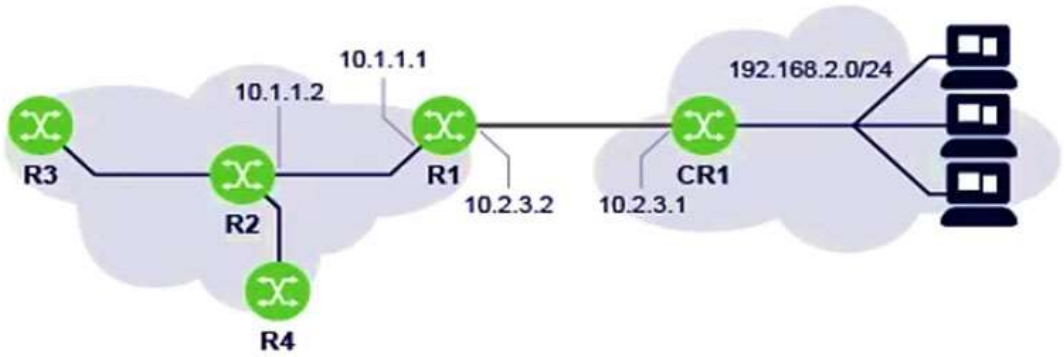
C. OSPF

D. IS-IS

Correct Answer: *A*

Question #322 *Topic 1*

What next-hop address should router R2 use to reach a host on 192.168.2.0/24?



A. 10.2.3.2

B. 10.1.1.1

C. 10.2.3.1

D. 10.1.1.2

Correct Answer: *B*

Question #323 *Topic 1*

Which of the following is a characteristic of Link State protocols?

A. Routers send a copy of their entire routing table to their neighbors.

B. Routers send frequent periodic updates to the entire network.

C. Routers know the entire network topology.

D. Routers use hop-count to calculate their routing tables.

Correct Answer: *C*

Question #324 *Topic 1*

When forwarding a packet, which field in the following table determines the egress interface?

A. Preference

B. Metric

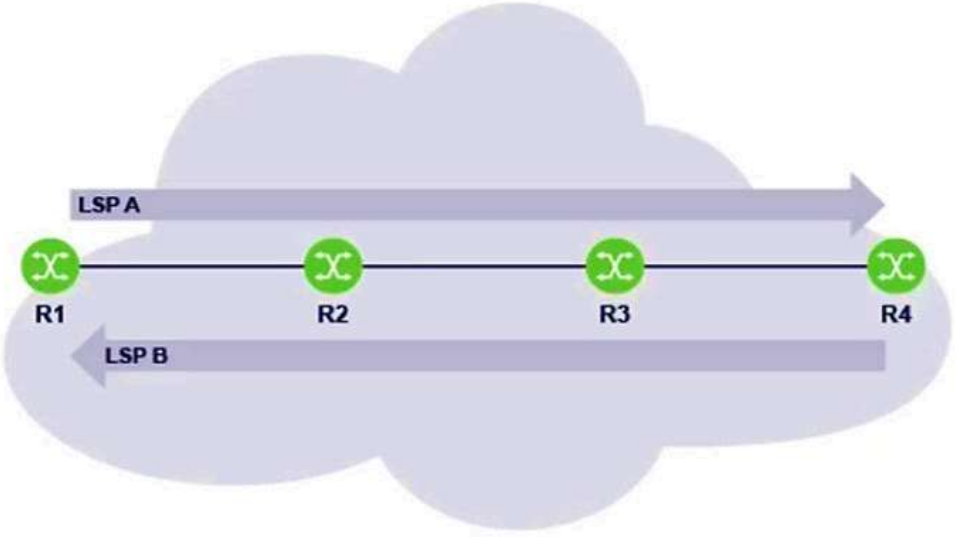
C. Next-hop

D. Cost

Correct Answer: *C*

Question #325 *Topic 1*

Which of the following statements about router R3 is TRUE?



A. Router R3 is the iLER for LSP B.

B. Router R3 is the eLER for LSP A.

C. Router R is an LSR for both LSP A and LSP B.

D. Router R3 is LSR for LSP A and an LER for LSP B.

Correct Answer: *C*

Question #326 *Topic 1*

Which device is responsible for removing the MPLS label before the packet reaches the customer?

A. The ingress LER

B. The CE device

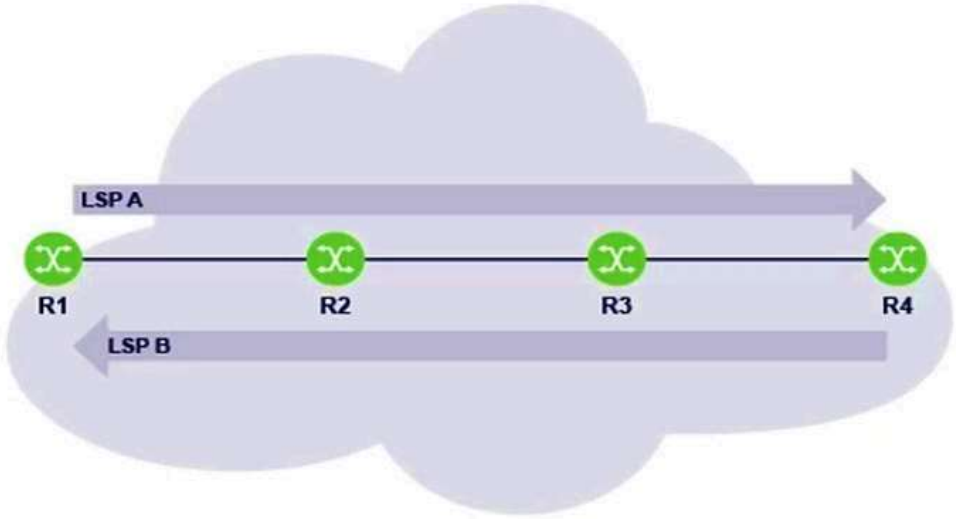
C. The P router

D. The egress LER

Correct Answer: *D*

Question #327 *Topic 1*

Which of the MPLS routers is responsible for pushing new labels for LSP A and LSP B?



A. Router R1 pushes labels for both LSP A and LSP B.

B. Router R4 pushes labels for both LSP A and LSP B.

C. Router R1 pushes labels for LSP A, while router R4 pushes labels for LSP B.

D. Router R4 pushes labels for LSP A, while router R1 pushes labels for LSP B.

Correct Answer: *C*

Question #328 *Topic 1*

From the CE perspective, how does a VPWS operate?

A. Two sites are directly connected by a single cable.

B. Two sites are connected through a single switched LAN.

C. Two sites are connected through a public routed network.

D. Two sites are connected through a private routed network.

Correct Answer: *A*

Previous Questions