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Assessment System

Exam Viewer - Practice Final - CCNA 3 Switching Basics and Intermediate Routing (Version 3.1)

Below you will find the assessment items as presented on the exam as well as the scoring rules associated with the item.

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1 Which three interior routing protocols support VLSM? (Choose three.)

- OSPF
- RIP v1
- RIP v2
- EIGRP
- BGP
- STP

Scoring Rule For: correctness of response

Option 1, Option 3, and Option 4 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [1.1.1 What is VLSM and why is it used?](#)

2 Which of the following are considered limitations of RIP v1? (Choose three.)

- It does not support authentication.
- It sends updates as broadcasts on 255.255.255.255.
- It does not send subnet mask information in its updates.
- It is not widely supported in multivendor routing environments.
- It does not support equal-cost load balancing.

Scoring Rule For: correctness of response

Option 1, Option 2, and Option 3 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [1.2.1 RIP history](#)

3 How are RIP v1 and RIP v2 similar to one another? (Choose three.)

- They both use hop count as a metric.
- They both have the same metric value for infinite distance.
- They both broadcast their updates to their neighbors.
- They both send subnet mask information in their updates.
- They both provide for authentication of update sources.
- They both use split horizon to prevent routing loops.

Scoring Rule For: correctness of response

Option 1, Option 2, and Option 6 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [1.2.2 RIP v2 features](#)

- 4 Users are complaining that resources housed on a remote network have become unavailable. Which command can the administrator use to check whether this destination network is known to the local router?
- router# **show ip route**
 - router# **show route**
 - router# **show ip rip**
 - router# **show rip**
 - router# **show protocol**

Scoring Rule For: correctness of response

2 points for Option 1 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [1.2.5 Verifying RIP v2](#)

- 5 What is the purpose of a default route?
- A default route will cause packets addressed to unknown destination networks to be dropped.
 - A default route will cause packets addressed to unknown destination networks to be sent to a designated router interface.
 - A default route will cause packets addressed to known destinations to prefer a specified path to the destination network.
 - A default route will direct packets for all destination networks to a designated router and router interface.

Scoring Rule For: correctness of response

2 points for Option 2 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [1.2.7 Default routes](#)

- 6 The network 192.1.1.0 has been subnetted for a network design. The 192.1.1.16/28 subnet has been chosen for further subnetting to

provide for point-to-point serial link addressing. How many serial link subnets can be created while minimizing the number of wasted addresses?

- 1
- 2
- 4
- 6
- 8
- 16

Scoring Rule For: correctness of response

2 points for Option 3 0 points for any other option
--

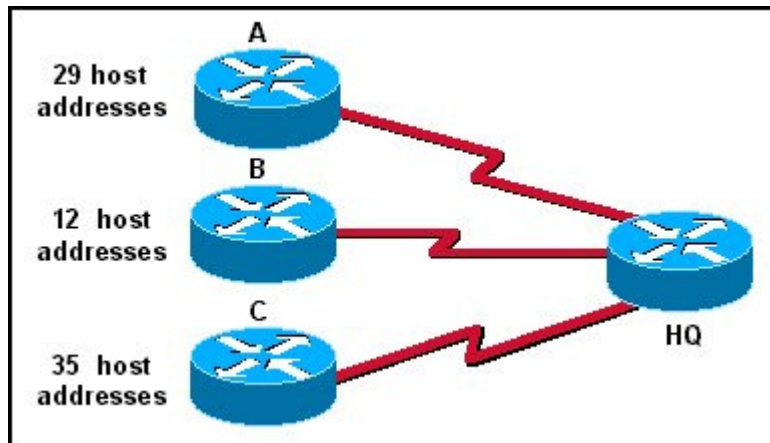
Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [1.1.3 When to use VLSM](#)

7



A Class C address has been assigned for use in the network shown in the graphic. Using VLSM, which bit mask should be used to most efficiently provide for the number of host addresses required by Router C, while wasting the fewest addresses?

- /31
- /30

- /29
- /28
- /27
- /26

Scoring Rule For: correctness of response

2 points for Option 6 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [1.1.3 When to use VLSM](#)
- 8 Router XYZ is to be added to OSPF area 0. Which of the following is the correct syntax for enabling OSPF on this router?
- XYZ(config)# **router ospf**
 - XYZ(config)# **router ospf 0**
 - XYZ(config)# **router ospf 10**
 - XYZ(config)# **router ospf process 0**
 - XYZ(config)# **router ospf process 10**
 - XYZ(config)# **router ospf processid 10**

Scoring Rule For: correctness of response

2 points for Option 3 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.3.1 Configuring OSPF routing process](#)
- 9 Which of the following is the metric that OSPF uses to determine the best route to a destination network?
- administrative distance

- cost
- hop count
- link delay

Scoring Rule For: correctness of response

2 points for Option 2 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.3.3 Modifying OSPF cost metric](#)

10 Under which of the following circumstances might two routers have trouble establishing a neighbor relationship in an OSPF network? (Choose three.)

- Hello packets are not sent from either neighbor.
- The interfaces are on different network types.
- The **network** command has put the connected interfaces into the same OSPF area.
- Slow network connections cause OSPF advertisements to time out.
- Authentication passwords or keys are different.

Scoring Rule For: correctness of response

Option 1, Option 2, and Option 5 are correct. 1 point for each correct option. 0 points if more options are selected than required.

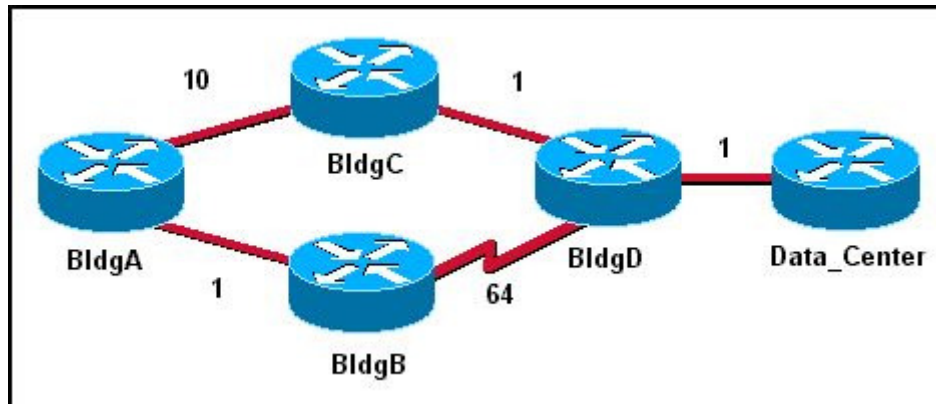
Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.3.7 Common OSPF configuration issues](#)

11



Refer to the topology and link path costs shown in the graphic. What is the total cost of the path that OSPF will use between the Data_Center router and the BldgA router?

- 2
- 11
- 12
- 65
- 66

Scoring Rule For: correctness of response

2 points for Option 3
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.2.4 Shortest path algorithm](#)

12 What is required for OSPF routers to share routing information?

- designated routers
- a backup designated router
- neighbor adjacencies
- an NBMA network topology
- links configured on the 224.0.0.0 network

Scoring Rule For: correctness of response

2 points for Option 3 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.2.5 OSPF network types](#)

13 Which of the following are characteristics of link-state routing protocols? (Choose three.)

- collection of routing information from within a defined area of the network
- view of network from neighbor's perspective
- independent calculation of best paths to all destinations
- propagation of incorrect information minimized
- demonstration of universal compatibility and simplicity

Scoring Rule For: correctness of response

Option 1, Option 3, and Option 4 are correct. 1 point for each correct option. 0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.1.2 Link-state routing protocol features](#)

14 Which of the following statements about link-state advertisements are correct? (Choose three.)

- LSAs are sent to neighboring routers on a regular basis.
- LSAs are used by a router to determine if a neighboring router is online.
- LSAs are multicast to all routers in the area.
- LSAs contain the topological database of the sending router.
- Routers use LSAs to learn about the topology of the entire network.
- LSAs are sent when the router detects a topology change.

Scoring Rule For: correctness of response

Option 3, Option 5, and Option 6 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.1.4 Link-state routing algorithms](#)

15 Which type of address does OSPF use to initiate new adjacencies and to ensure that neighbor routers are functioning?

- broadcast
 loopback
 multicast
 unicast

Scoring Rule For: correctness of response

2 points for Option 3
0 points for any other option

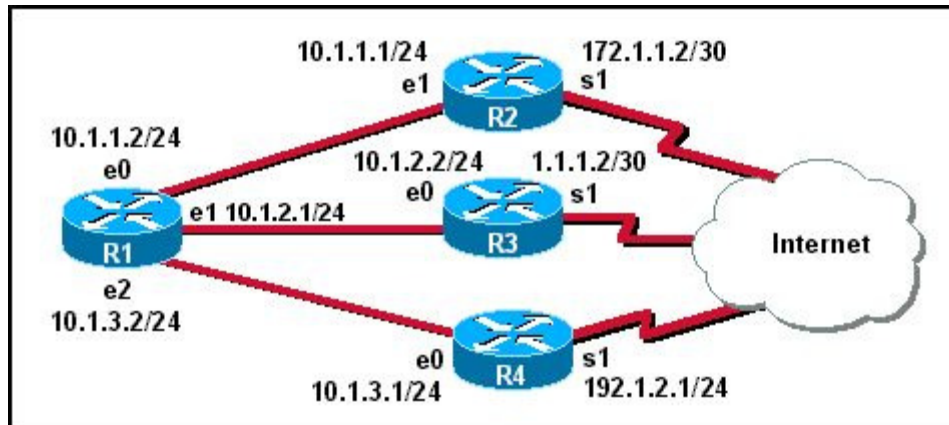
Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.2.6 OSPF Hello protocol](#)

16



What will be the result of OSPF DR/BDR elections in the network shown in the diagram? (Choose three.)

- R1 will be the DR for the 10.1.1.0/24 network.
- R1 will be the DR for the 10.1.2.0/24 network.
- R1 will be the DR for the 10.1.3.0/24 network.
- R2 will be the DR for the 10.1.1.0/24 network.
- R3 will be the DR for the 10.1.2.0/24 network.
- R4 will be the DR for the 10.1.3.0/24 network.

Scoring Rule For: correctness of response

Option 2, Option 4, and Option 6 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.3.2 Configuring OSPF loopback address and router priority](#)

- 17 If EIGRP routing is employed and the successor route to a destination becomes unreachable or unreliable, which of the following would be used as a replacement?
- the route flagged as active in the topology table
 - the feasible successor route in the topology table
 - the default gateway in the neighbor table

- the primary designated route in the topology table
- the backup designated router in the routing table

Scoring Rule For: correctness of response

2 points for Option 2 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [3.2.5 Discover routes](#)

- 18 What is indicated when an EIGRP route is in the passive state?
- The route has the highest path cost of all routes to that destination network.
 - The route must be confirmed by neighboring routers before it is put in the active state.
 - The route is a feasible successor and will be used if the active route fails.
 - There is no activity on the route to that network.
 - The route is viable and can be used to forward traffic.

Scoring Rule For: correctness of response

2 points for Option 5 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [3.2.7 Maintaining routing tables](#)

- 19 Which algorithm does EIGRP use to calculate routes?
- PDM
 - RTP
 - DUAL
 - LSA

Scoring Rule For: correctness of response

2 points for Option 3 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [3.1.2 EIGRP concepts and terminology](#)

20 Which of the following tables does DUAL use to calculate the lowest cost routes to each destination?

- routing table and topology table
- neighbor table and routing table
- neighbor table and topology table
- neighbor table and adjacency table

Scoring Rule For: correctness of response

2 points for Option 3 0 points for any other option
--

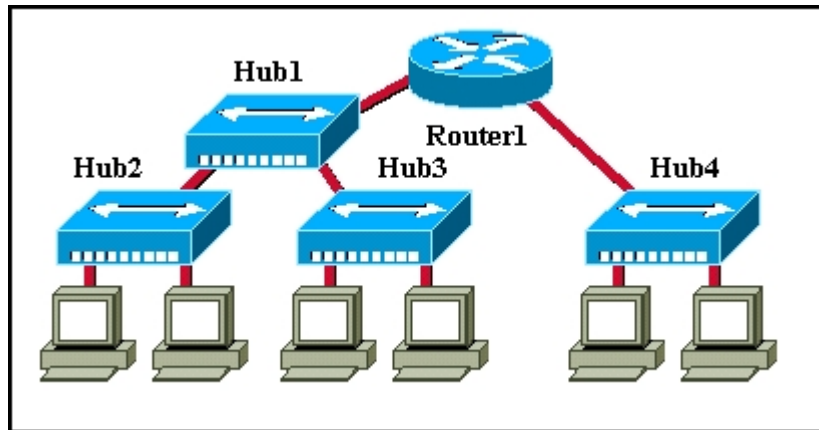
Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [3.1.2 EIGRP concepts and terminology](#)

21



How many collision domains will there be in the entire network shown in the graphic if Hub1 is replaced with a Layer 2 switch?

- 2
 3
 4
 7
 8
 10

Scoring Rule For: correctness of response

2 points for Option 3
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [4.2.4 LAN segmentation with switches](#)

22 How does an Ethernet switch improve network performance? (Choose three.)

- allows multiple frames to be forwarded simultaneously
 decreases the number of broadcast domains
 increases network latency
 eliminates unnecessary broadcast frames
reduces the size of collision domains

increases the number of collision domains**Scoring Rule For: correctness of response**

Option 1, Option 5, and Option 6 are correct.
 1 point for each correct option.
 0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [4.2.4 LAN segmentation with switches](#)

23

CAM Table				
Station	Port1	Port2	Port3	Port4
00-00-3D-1F-11-01			X	
00-00-3D-1F-11-02				X
00-00-3D-1F-11-03	X			

Received Frame			
Destination	Source	Data	CRC
00-00-3D-1F-11-05	00-00-3D-1F-11-01		

An Ethernet switch has developed the CAM table shown. What action will the switch take when it receives the frame shown at the bottom of the graphic?

- forward the frame out all interfaces except Interface3
- add station 00-00-3D-1F-11-05 to Interface2 in the forwarding table
- forward the frame out Interface3
- discard the frame
- forward the frame out all interfaces
- forward the frame out Interface2

Scoring Rule For: correctness of response

2 points for Option 1 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [4.2.5 Basic operations of a switch](#)

24 Which Ethernet device has the highest latency factor?

- transceiver
- hub
- MAU
- router
- switch

Scoring Rule For: correctness of response

2 points for Option 4 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [4.2.3 LAN segmentation with routers](#)

25 Which of the following statements regarding server placement are correct? (Choose two.)

- Enterprise servers should be located in the MDF.
- Enterprise servers should be located in an IDF.
- Workgroup servers should be located in the MDF.
- Workgroup servers should be located in an IDF.
- Both workgroup and enterprise servers should be located in the MDF.
- Both workgroup and enterprise servers should be located in an IDF.

Scoring Rule For: correctness of response

Option 1 and Option 4 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [5.1.2 LAN design considerations](#)

26 Which of the following are features of the distribution layer? (Choose three.)

- VLAN routing
- MAC layer filtering
- security
- microsegmentation
- packet filtering with access control lists
- workgroup access

Scoring Rule For: correctness of response

Option 1, Option 3, and Option 5 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [5.2.3 Distribution layer overview](#)

27 Which of the following are layers in the hierarchical design model? (Choose three.)

- gateway
- access
- distribution
- network

- core
 domain

Scoring Rule For: correctness of response

Option 2, Option 3, and Option 5 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [5.2.1 Switched LANs, access layer overview](#)

28 Which LAN design requirement addresses user-to user and user-to-application connectivity?

- adaptability
 manageability
 scalability
 functionality

Scoring Rule For: correctness of response

2 points for Option 4
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [5.1.1 LAN design goals](#)

29 What is the minimum amount of bandwidth that Layer 2 LAN switches should provide to servers?

- 1 Mbps
 10 Mbps
 100 Mbps
 1000 Mbps

1 Gbps

Scoring Rule For: correctness of response

2 points for Option 3
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [5.1.2 LAN design considerations](#)

30 Which distribution layer devices enhance Layer 2 switching with Layer 3 functionality? (Choose two.)

- multilayer routers
- multilayer switches
- bridges
- managed hubs
- VLANs
- a switch with a router module

Scoring Rule For: correctness of response

Option 2 and Option 6 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [5.2.4 Distribution layer switches](#)

31 What affects network availability? (Choose three.)

- location
- throughput
- user proficiency

- response time
- workstation speed
- access to resources

Scoring Rule For: correctness of response

Option 2, Option 4, and Option 6 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [5.1.3 LAN design methodology](#)

32 When the mode LED on a Cisco switch is set to STAT, what port status is indicated by a green flashing port LED?

- no link
- port is not forwarding
- port is sending or receiving data
- port is sending, but not receiving
- link fault

Scoring Rule For: correctness of response

2 points for Option 3
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [6.1.2 Switch LED indicators](#)

33 How can MAC address table entries be removed from a switch? (Choose two.)

- Power cycle the switch to clear all dynamically learned addresses.
- The **clear switching-tables** command will remove statically configured entries.

- The **clear mac-address-table** command will remove statically and dynamically configured table entries.
- The **erase flash** command will clear all statically configured table entries.
- Statically configured MAC addresses will automatically be removed from the address table 300 minutes after the last activity on a switch port.

Scoring Rule For: correctness of response

Option 1 and Option 3 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [6.2.3 Managing the MAC address table](#)

34 Which of the following statements are correct concerning the default configuration of a new switch? (Choose three.)

- VLAN1 is configured with a management IP address.
- All switch ports are assigned to VLAN1.
- Spanning Tree Protocol is disabled.
- All interfaces are set to auto.
- Enable password is configured as cisco.
- The flash directory contains the IOS image.

Scoring Rule For: correctness of response

Option 2, Option 4, and Option 6 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [6.2.1 Verifying the Catalyst switch default configuration](#)

35 Which command is used to copy a backup configuration file from a server to the non-volatile memory of a switch?

- Switch# **copy startup-config tftp**
- Switch# **copy tftp startup-config**
- Switch# **copy NVRAM tftp**
- Switch# **copy tftp NVRAM**
- Switch# **copy tftp flash**

Scoring Rule For: correctness of response

2 points for Option 2 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [6.2.7 Managing switch operating system file](#)

- 36 An entire workgroup has lost network connectivity. After shutting down and restarting the workgroup switch in the wiring closet, it is observed that the switch system LED is amber. What should be done?
- The switch should be reconfigured.
 - The switch should be replaced in order to restore connectivity to the workgroup.
 - The switch should be allowed to complete POST before its configuration is checked.
 - The switch has returned to service, however its configuration should be checked.

Scoring Rule For: correctness of response

2 points for Option 2 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [6.1.3 Verifying port LEDs during switch POST](#)

- 37 Using Telnet, a network administrator is unable to log in to a switch located at another office in order to make configuration changes to it. What could be the problem?
- The management station does not have access to a full-duplex Fast Ethernet link on the switch.

- VLAN 1 on the switch is not configured for TCP/IP network access.
- The switch must be managed from the local LAN.
- The switch hostname has not been set.

Scoring Rule For: correctness of response

2 points for Option 2 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [6.2.2 Configuring the Catalyst switch](#)

- 38** A switched Ethernet network is experiencing unusually heavy traffic to the extent that network delays have become intolerable. While investigating the problem, a network administrator disconnects a redundant uplink between two switches. The excessive traffic quickly subsides. What was the likely cause of this problem?
- broadcast storms
 - routing loops
 - multiple frame copies
 - load balancing
 - unicast frame forwarding

Scoring Rule For: correctness of response

2 points for Option 1 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [7.1.4 Broadcast storms](#)

- 39** A redundant switched topology is being installed in an enterprise. Which of the following should be configured to ensure that this network operates efficiently?
- TTL

- STP
- BID
- BPDU
- ARP

Scoring Rule For: correctness of response

2 points for Option 2 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [7.2.2 Spanning-tree protocol](#)

40 In which STP state does a switch port only receive BPDUs?

- blocking
- learning
- disabled
- listening
- forwarding

Scoring Rule For: correctness of response

2 points for Option 1 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [7.2.5 Stages of spanning-tree port states](#)

41 Which strategies can a company take to enhance network reliability through redundancy? (Choose two.)

- Eliminate single points of failure.
- Flood frames for unknown destinations.

- Send multiple frames to an end device.
- Design alternate routes to a destination.
- Forward MAC address tables to all switches on the network.
- Eliminate multiple paths to the same destination.

Scoring Rule For: correctness of response

Option 1 and Option 4 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [7.1.1 Redundancy](#)

42 Which of the following are performed by a switch port that is in the forwarding state in an STP network? (Choose three.)

- discarding data traffic
- receiving data traffic
- forwarding data traffic
- recalculating BPDUs
- receiving BPDUs
- blocking BPDUs

Scoring Rule For: correctness of response

Option 2, Option 3, and Option 5 are correct.
1 point for each correct option.
0 points if more options are selected than required.

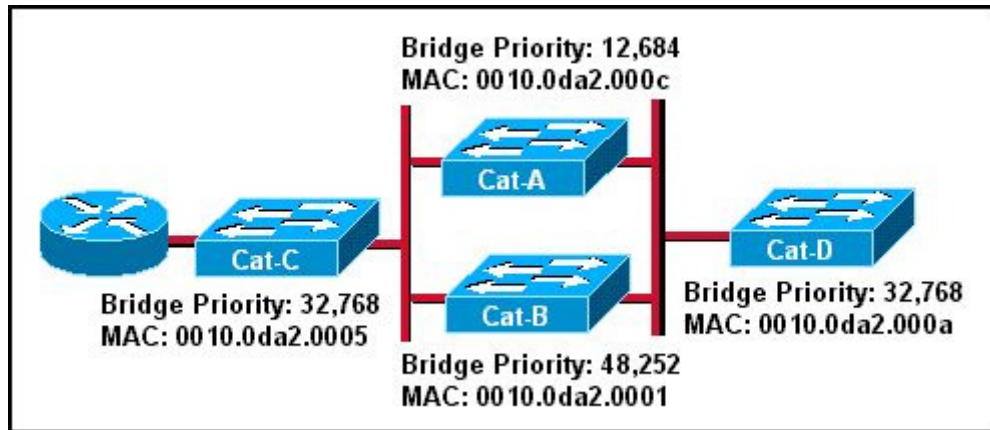
Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [7.2.5 Stages of spanning-tree port states](#)

43



Which of the switches shown in the graphic will be elected as the root bridge of the spanning tree topology?

- Cat-A
- Cat-B
- Cat-C
- Cat-D

Scoring Rule For: correctness of response

2 points for Option 1
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [7.2.4 Selecting the root bridge](#)

44 The spanning tree election process has taken place on a network containing five bridges. How many total root bridges have been elected?

- 1
- 3
- 5
- one per trunk port

Scoring Rule For: correctness of response

2 points for Option 1
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [8.3.5 VLAN troubleshooting scenarios](#)

- 45 While deleting the VLANs from a switch, a network administrator receives the following message, "A default VLAN may not be deleted". What did the administrator do to cause this message to be displayed?
- The **no vlan all** command was entered.
 - The **no switchport mode access** command was not properly entered.
 - The **no vlan 1** command was entered.
 - The **no vlan** command was entered in database configuration mode.
 - The **no default vlan** command was entered.
 - The administrator attempted to delete a VLAN that still has switch ports assigned to it.

Scoring Rule For: correctness of response

2 points for Option 3
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [8.2.6 Deleting VLANs](#)

- 46 A new color laser printer has been configured on the Marketing VLAN. Users on the Sales VLAN would also like to have access to this printer. What must be done in order for the Sales department users to be able to access this device?
- A root bridge must be elected to allow the traffic to cross.
 - A bridge must be configured with a compatible bridging protocol.
 - A router must be installed and configured to connect the VLANs.
 - No traffic should be allowed to pass between VLANs.
 - The print server must be configured to accept connections over VTP.

Scoring Rule For: correctness of response

2 points for Option 3
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [8.1.1 VLAN introduction](#)

- 47 Which VLAN implementation method requires less administration in the wiring closet and can provide notification if an unauthorized user attempts to connect to the network?
- port-centric
 - static
 - dynamic
 - geographic

Scoring Rule For: correctness of response

2 points for Option 3
0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [8.1.3 VLAN operation](#)

- 48 Which of the following statements describe trunking? (Choose two.)
- Trunking bundles multiple virtual links over one physical link.
 - Trunking decreases the number of switch ports available for hosts.
 - Trunking complicates the physical interconnection of switches in the wiring closet.
 - Trunks can be configured to carry traffic for several VLANs between switches.
 - Trunking requires one switch port for each configured VLAN.

Scoring Rule For: correctness of response

Option 1 and Option 4 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [9.1.1 History of trunking](#)

49 Which of the following are characteristics of a router-on-a-stick design for inter-VLAN routing? (Choose three.)

- multiple logical router interfaces
- multiple physical router interfaces
- one logical router interface
- one physical router interface
- multiple logical networks defined for each VLAN
- one logical network defined for each VLAN

Scoring Rule For: correctness of response

Option 1, Option 4, and Option 6 are correct.
1 point for each correct option.
0 points if more options are selected than required.

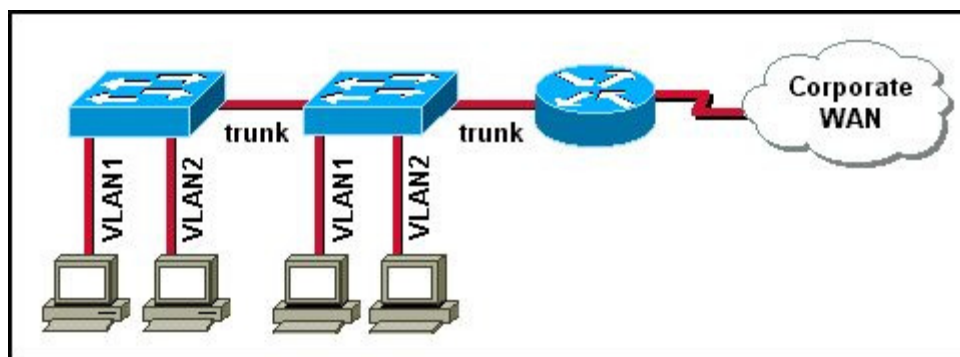
Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [9.3.3 Inter-VLAN issues and solutions](#)

50



What does the router shown in the graphic provide to the network? (Choose three.)

- forwarding of packets between VLANs
- forwarding of broadcast frames between VLANs
- improved efficiency in bandwidth utilization
- connectivity of local hosts with remote resources
- elimination of VLAN configuration errors
- prevention of switching loops

Scoring Rule For: correctness of response

Option 1, Option 3, and Option 4 are correct.
1 point for each correct option.
0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [9.3.3 Inter-VLAN issues and solutions](#)

- 51 A switch that was previously attached to another VTP management domain is added to an existing VTP domain. VLAN information on all the other switches in the existing VTP management domain is lost. Why did this happen?
- Adding the new switch caused spanning tree protocol to recalculate the network and erase the existing VLAN configurations.
 - The new switch BID was higher than the existing VTP server, causing the new switch to broadcast incorrect VLAN information to the domain.
 - The new switch had a higher VTP configuration revision number than the other switches in the domain and erased the VLAN information on the VTP server and VTP clients.
 - The new switch exceeded the maximum number of switches permitted in a management domain.

- The switch advertised VTP version 2 information to the network, causing the existing VLAN data to be overwritten.

Scoring Rule For: correctness of response

2 points for Option 3 0 points for any other option
--

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [9.2.5 VTP configuration](#)

52

```
RA(config)#interface fastethernet 0/1
RA(config-if)#no shutdown
RA(config-if)#interface fastethernet 0/1.1
RA(config-subif)#encapsulation dot1q 1
RA(config-subif)#ip address 192.168.1.62 255.255.255.224
RA(config-if)#interface fastethernet 0/1.2
RA(config-subif)#encapsulation dot1q 2
RA(config-subif)#ip address 192.168.1.94 255.255.255.224
RA(config-if)#interface fastethernet 0/1.3
RA(config-subif)#encapsulation dot1q 3
RA(config-subif)#ip address 192.168.1.126 255.255.255.224
RA(config-subif)#end
```

A router is configured to connect to a trunked uplink as shown in the graphic. A packet is received on the FastEthernet 0/1 physical interface from VLAN 1. The packet destination address is 192.168.1.85. What will the router do with this packet?

- The router will ignore the packet because the source and destination are on the same broadcast domain.
- The router will forward the packet out interface FastEthernet 0/1.1.
- The router will forward the packet out interface FastEthernet 0/1.2.
- The router will forward the packet out interface FastEthernet 0/1.3.
- The router will drop the packet since no network that includes the source address is attached to the router.

Scoring Rule For: correctness of response

2 points for Option 3 0 points for any other option
--

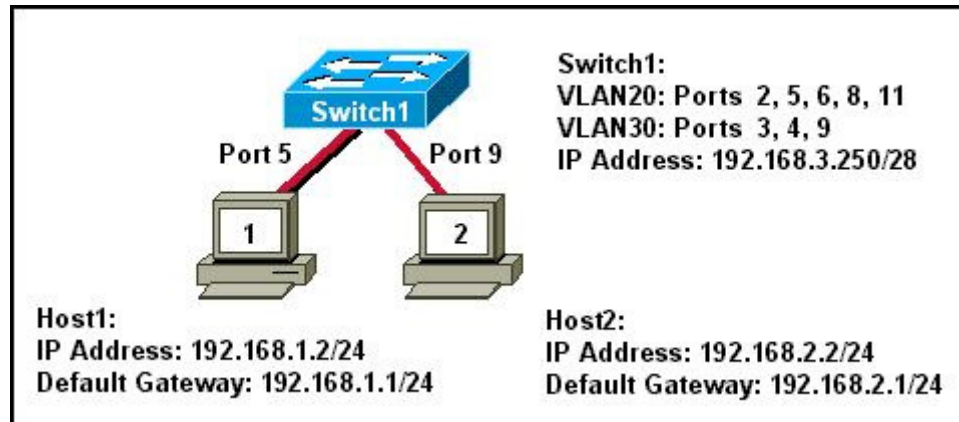
Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [9.3.5 Dividing physical interfaces into subinterfaces](#)

53



The LAN devices are configured as shown in the diagram. Why are Host1 and Host2 unable to communicate? (Choose three.)

- A router is required to forward traffic between the hosts.
- The switch ports are on different VLANs.
- The VLAN port assignments must be contiguous for each VLAN.
- The host default gateway addresses must be on the same logical network.
- The switch IP address is on the wrong subnet.
- The hosts are configured on different logical networks.

Scoring Rule For: correctness of response

Option 1, Option 2, and Option 6 are correct.
 1 point for each correct option.
 0 points if more options are selected than required.

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [9.3.2 Introducing inter-VLAN routing](#)

- 54 What will prevent RIP v1 updates from being correctly advertised?
- the use of variable-length subnet masks
 - the use of multiple Layer 3 networks on the same router
 - variations in connection speeds on the links to a destination
 - increases in network load
 - a mismatch between the configured bandwidth and the actual bandwidth of a link

Scoring Rule For: correctness of response

1 point for Option 1 0 points for any other option

Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [3.3.2 Troubleshooting RIP configuration](#)

- 55 Which action can be set to occur in response to a port security violation on a switch port?
- log-allow
 - return
 - shutdown
 - poison

Scoring Rule For: correctness of response

1 point for Option 3 0 points for any other option

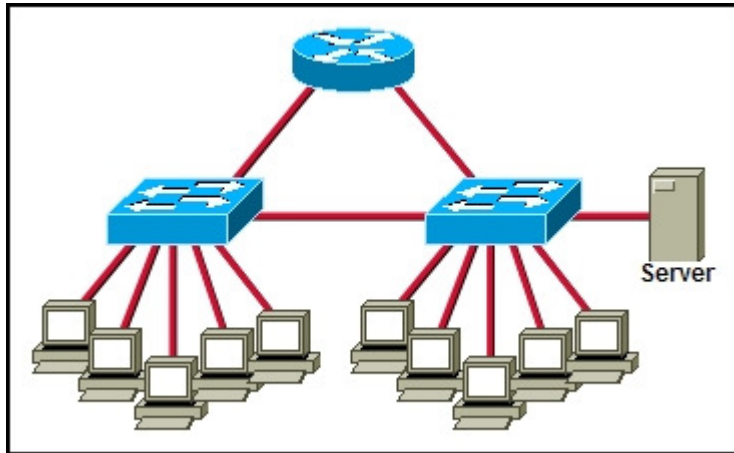
Max Value = 2

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [6.2.5 Configuring port security](#)

56



Which cables are used to connect the PCs and networking devices shown in the graphic? (Choose three.)

- straight-through cable from the switches to the workstations
- straight-through cable between the two switches
- straight-through cable from the router to the switches
- crossover cable from the router to the switches
- crossover cable between the two switches
- crossover cable from the switches to the workstations

Scoring Rule For: correctness of response

1 point for Option 1 , Option 3 , Option 5
0 points for any other option

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [9.3.2 Introducing inter-VLAN routing](#)

57 Which of the following are characteristics of OSPF? (Choose three.)

- uses shortest path
- easy to configure
- uses link-state advertisements
- broadcasts frequent updates

- slow to converge
 uses hello packets

Scoring Rule For: correctness of response

1 point for Option 1 , Option 3 , Option 6 0 points for any other option

Max Value = 3

This item references content from the following areas:

CCNA 3 Switching Basics and Intermediate Routing

- [2.1.2 Link-state routing protocol features](#)

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