

Exam : 351-001

Title : CCIE Routing and Switching Written

Version : Demo

1. Which two commands are required to enable multicast on a router, knowing that the receivers only support IGMPv2? (Choose two.)

A. ip pim rp-address

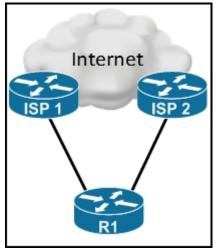
B. ip pim ssm

C. ip pim sparse-mode

D. ip pim passive

Answer: A C

2.Refer to the exhibit.



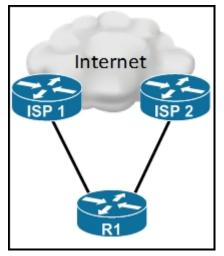
R1 has two eBGP sessions to ISP1 and ISP2 (one to each ISP router), and R1 receives the same prefixes through both links.

Which configuration should be applied for the link between R1 and ISP2 to be preferred for incoming traffic (ISP2 to R1)?

- A. increase local preference on R1 for routes advertised to ISP2
- B. decrease local preference on R1 for routes advertised to ISP2
- C. increase MED on R1 for routes advertised to ISP2
- D. decrease MED on R1 for routes advertised to ISP2

Answer: D

3.Refer to the exhibit.



A small enterprise connects its office to two ISPs, using separate T1 links. A static route is used for the default route, pointing to both interfaces with a different administrative distance, so that one of the default routes is preferred. Recently the primary link has been upgraded to a new 10 Mb/s Ethernet link. After a few weeks, they experienced a failure. The link did not pass traffic, but the primary static route remained active. They lost their Internet connectivity, even though the backup link was operating.

Which two solutions can be implemented to avoid this situation in the future? (Choose two.)

- A. Implement HSRP link tracking on the branch router R1.
- B. Use a track object with an IP SLA probe for the static route on R1.
- C. Track the link state of the Ethernet link using a track object on R1.
- D. Use a routing protocol between R1 and the upstream ISPs.

Answer: B D

4.Refer to the exhibit.

```
router#sh ip cache flow
IP packet size distribution (331 total packets):
   1-32
          64
               96
                   128
                        160
                             192
                                  224
                                       256
                                             288
                                                  320
                                                       352
                                                            384
                                                                 416
                                                                       448
                                                                            480
   .000 .050 .001 .002 .001 .003 .001 .006 .003 .001 .003 .001 .000 .000 .000
    512
         544
              576 1024 1536 2048 2560 3072 3584 4096 4608
   .000 .000 .000 .000 .000 .000 .000 .000 .000 .000
```

You are investigating a performance problem between two hosts. You have enabled NetFlow. What is the cause of this issue?

A. A firewall is stripping the TCP MSS option.

B. A firewall is stripping the IP MSS option.

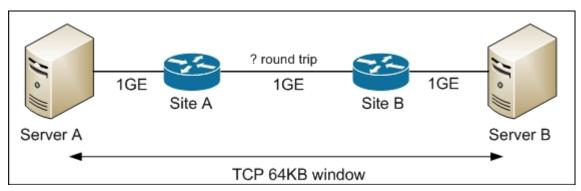
- C. An IPS is stripping the TCP MSS option.
- D. There is a VPN link causing low MTU.
- E. You must configure the MTU on the links on the router.

Answer: A

5. Which value should be used in a router configuration register in order to ignore the content of the NVRAM?

- A. 0x2102
- B. 0x2124
- C. 0x2142
- D. 0x2101
- Answer: C

6.Refer to the exhibit.



A single file transfer is executed between Server A in Site A and Server B in Site B.

What is the maximum allowable round-trip time if a speed of 1 Gb/s needs to be achieved? A. 500 microsec

- B. 10 ms
- C. 1 ms
- D. 50 ms

Answer: A

7. How many bytes make up the spanning-tree bridge ID?

- A. 4
- B. 8
- C. 12
- D. 16

Answer: B

8. Which two statements are true about 802.1s? (Choose two.)

- A. 802.1s supports a reduced number of spanning-tree instances.
- B. 802.1s has better convergence times than 802.1w.
- C. 802.1s does not support load balancing over the same physical topology.
- D. The CPU utilization for 802.1s is lower than the CPU utilization for 802.1w.

Answer: A D

9.An administrator of a peer-to-peer server application reports that the maximum bandwidth that his application receives is 90 Mb/s. You have an 8-port, 100-Mb/s EtherChannel bundle on the switching infrastructure between the two servers, resulting in a bidirectional throughput of more than what is recorded.

Which two solutions would allow for more bandwidth for the application? (Choose two.)

A. change the EtherChannel default hashing algorithm from XOR to use source port Layer 4 port load balancing to better load balance the traffic

B. change the EtherChannel default hashing algorithm from XOR to use destination Layer 4 port load balancing to better load balance the traffic

C. have the application recoded to use multiple connections instead of a single connection so EtherChannel can better load balance the traffic

D. upgrade the CPU and memory of the compute devices so they can better process traffic

E. upgrade the EtherChannel bundle to a single gigabit link because EtherChannel is not well suited for

single-connection traffic **Answer:** C E

10.Refer to the exhibit.

```
event manager applet CCIE
event timer cron name CCIE cron-entry */5 * * * *
action 1 cli command "en"
action 2 cli command "show log"
```

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action 1 cli command "en"
action 2 cli command "show log"
```

Which output will the EEM applet in the exhibit produce?

- A. The output of show version will be executed every 5 hours.
- B. The output of show log will be executed every 5 hours.
- C. The output of show log will be executed every 5 days.
- D. The output of show log will be executed every 5 minutes.

Answer: C

11.In an 802.1s BPDU, what is the size of the configuration revision number?

- A. 8 bits
- B. 16 bits
- C. 24 bits
- D. 32 bits
- Answer: B

12. Which three can be achieved by Cisco PVST+? (Choose three.)

- A. instances can control a selection of VLANs
- B. load balancing
- C. fast transition to forwarding state
- D. backbone, uplink, and portfast
- E. root, loop, and BPDU guard

```
Answer: B D E
```

13.In 802.1s, how is the VLAN to instance mapping represented in the BPDU?

- A. The VLAN to instance mapping is a normal 16-byte field in the MST BPDU.
- B. The VLAN to instance mapping is a normal 12-byte field in the MST BPDU.

C. The VLAN to instance mapping is a 16-byte MD5 signature field in the MST BPDU.

D. The VLAN to instance mapping is a 12-byte MD5 signature field in the MST BPDU. **Answer:** C

14.Refer to the exhibit.

```
class-map type inspect match-all CMAP ICMP
match protocol icmp
policy-map type inspect PMAP A B
class type inspect CMAP ICMP
  inspect
 class class-default
  drop
zone security INSIDE
zone security OUTSIDE
zone-pair security A B source INSIDE destination OUTSIDE
 service-policy type inspect PMAP A B
interface FastEthernet0/0
ip address 10.48.67.125 255.255.254.0
 zone-member security OUTSIDE
duplex auto
 speed auto
 ۱
interface FastEthernet0/1
ip address 192.168.101.1 255.255.255.0
 zone-member security INSIDE
 duplex auto
 speed auto
 1
```

What is true about traffic from the INSIDE zone to the OUTSIDE zone?

A. All icmp echo requests will be inspected.

B. All IP traffic will be dropped.

C. All icmp echo requests will be passed, but the icmp echo reply to the echo request from the OUTSIDE zone will be dropped.

D. All IP traffic will be inspected.

Answer: A

15. Which of the following is true about the MPLS header and its EXP field size?

A. The MPLS header is 2 bytes, and the EXP field is 3 bits long.

B. The MPLS header is 1 byte, and the EXP field is 3 bits long.

C. The MPLS header is 4 bytes, and the EXP field is 3 bits long.

D. The MPLS header is 3 bytes, and the EXP field is 3 bits long.

Answer: C

- 16.Which two statements are true about RED? (Choose two.)
- A. RED randomly drops packets before the queue becomes full.
- B. RED is always useful, without dependency on flow.
- C. RED increases the drop rate as the average queue size increases.
- D. RED has a per-flow intelligence.

Answer: AC

17. Which two protocols can have their headers compressed through MQC? (Choose two.)

- A. RTP
- B. RTSP
- C. HTTP
- D. TCP
- E. UDP
- Answer: AD

18.Refer to the exhibit.



SW1 is the root bridge for both VLAN_X and VLAN_Y.

How can traffic be load-shared across both trunks while maintaining redundancy in case a link fails,

without using any type of EtherChannel link-bundling??

A. Increase the root bridge priority (increasing the numerical priority number) for VLAN_Y on SW2 so that port Gi0/1 becomes the root port on SW2 for VLAN_Y.?

B. Decrease the port priority on Gi0/1 for VLAN_Y on SW1 so that port Gi0/0 will be blocked for VLAN_Y and port Gi0/1 will remain blocked for VLAN_X.?

C. Decrease the path cost on Gi0/1 on SW1 for VLAN_Y so that port Gi0/0 will be blocked for VLAN_Y and port Gi0/1 will remain blocked for VLAN_X.?

D. Increase the root bridge priority (decreasing the numerical priority number) for VLAN_Y on SW1 so that Gi0/1 becomes the root port on SW2 for VLAN_Y.?

Answer: B

19. When using extended system ID in 802.1D, how many bits are reserved for this field?

- A. 6
- B. 8
- C. 10
- D. 12

Answer: D

20.Refer to the exhibit.

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```
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event timer cron name CCIE cron-entry * * */5 * *
action 1 cli command "en"
action 2 cli command "show log"
```

Which result will the EEM applet in the exhibit produce?

A. The output of show version will be executed every 5 hours.

B. The output of show log will be executed every 5 hours.

C. The output of show log will be executed every Friday.

D. The output of show log will be executed every 5 minutes.

Answer: D