Exam Number/Code:400-101

Exam Name: CCIE Routing and Switching (v5.0)

Version: Demo

QUESTION: 1

Refer to the exhibit.

```
Switch#show spanning-tree

VLAN0001

   Spanning tree enabled protocol ieee

   Root ID    Priority    32769
      Address        001a.6d4b.c500
      This bridge is the root
      Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec

   Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
      Address        001a.6d4b.c500
      Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
      Aging Time 15

Interface         Role Sts Cost        Prio.Nbr Type
---------------- ---- --- --------- -------- -----------------
Fa0/1            Desg FWD 19          128.1    P2p
```

If you change the Spanning Tree Protocol from pvst to rapid-pvst, what is the effect on the interface Fa0/1 port state?

A. It transitions to the listening state, and then the forwarding state.
B. It transitions to the learning state and then the forwarding state.
C. It transitions to the blocking state, then the learning state, and then the forwarding state.
D. It transitions to the blocking state and then the forwarding state.

Answer: C

QUESTION: 2

Refer to the exhibit.

```
interface GigabitEthernet0/0/0
 ip address 192.168.1.1 255.255.255.0
!
ip ssh version 2
!
ip access-list extended protect-ssh
  permit ip any any eq 22
!
line vty 0 4
 access-class protect-ssh in
 transport input ssh
```

Which configuration is missing that would enable SSH access on a router that is running Cisco IOS XE Software?

A. int Gig0/0/0
management-interface
B. class-map ssh-class
match access-group protect-ssh
policy-map control-plane-in
class ssh-class
police 80000 conform transmit exceed drop
control-plane
service-policy input control-plane-in
C. control-plane host
management-interface GigabitEthernet0/0/0 allow ssh
D. interface Gig0/0/0
ip access-group protect-ssh in

Answer: C

QUESTION: 3

Which two options are causes of out-of-order packets? (Choose two.)

A. a routing loop
B. a router in the packet flow path that is intermittently dropping packets
C. high latency
D. packets in a flow traversing multiple paths through the network
E. some packets in a flow being process-switched and others being interrupt-switched on a transit router

Answer: D,E

QUESTION: 4

A TCP/IP host is able to transmit small amounts of data (typically less than 1500 bytes),
but attempts to transmit larger amounts of data hang and then time out. What is the cause
of this problem?

A. A link is flapping between two intermediate devices.
B. The processor of an intermediate router is averaging 90 percent utilization.
C. A port on the switch that is connected to the TCP/IP host is duplicating traffic and
sending it to a port that has a sniffer attached.
D. There is a PMTUD failure in the network path.

Answer: D

QUESTION: 5

Refer to the exhibit.

```
Internet Protocol Version 4, Src: 10.149.4.110 (10.149.4.110), Dst: 192.168.3.1 (192.168.3.1)
    Version: 4
    Header length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP 0x00: Default; ECN: 0x00: Not-ECT (Not ECN-Capable Transport))
    Total Length: 60
    Identification: 0x64ac (25772)
    Flags: 0x00
    Fragment offset: 0
    Time to live: 1
    Protocol: ICMP (1)
    Header checksum: 0x8269 [correct]
    Source: 10.149.4.110 (10.149.4.110)
    Destination: 192.168.3.1 (192.168.3.1)
Internet Control Message Protocol
    Type: 8 (Echo (ping) request)
    Code: 0
    Checksum: 0x4d3d [correct]
    Identifier (BE): 1 (0x0001)
    Identifier (LE): 256 (0x0100)
    Sequence number (BE): 30 (0x001e)
    Sequence number (LE): 7680 (0x1e00)
    Data (32 bytes)

0000  61 62 63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f 70    abcdefghijklmnop
0010  71 72 73 74 75 76 77 61 62 63 64 65 66 67 68 69    qrstuvwabcdefghi
        Data: 6162636465666768696a6b6c6d6e6f707172737475767761...
        [Length: 32]
```

ICMP Echo requests from host A are not reaching the intended destination on host B.
What is the problem?

A. The ICMP payload is malformed.
B. The ICMP Identifier (BE) is invalid.
C. The negotiation of the connection failed.

D. The packet is dropped at the next hop.
E. The link is congested.

Answer: D

QUESTION: 6

Refer to the exhibit.

```
R101#show ip cache flow
[...]
SrcIf          SrcIPaddress    DstIf          DstIPaddress    Pr SrcP DstP  Pkts
Et0/0          10.0.0.1        Et0/0          15.0.0.2        01 0000 0800  2603
```

Which statement is true?

A. It is impossible for the destination interface to equal the source interface.
B. NAT on a stick is performed on interface Et0/0.
C. There is a potential routing loop.
D. This output represents a UDP flow or a TCP flow.

Answer: C

QUESTION: 7

Which three conditions can cause excessive unicast flooding? (Choose three.)

A. Asymmetric routing
B. Repeated TCNs
C. The use of HSRP
D. Frames sent to FFFF.FFFF.FFFF
E. MAC forwarding table overflow
F. The use of Unicast Reverse Path Forwarding

Answer: A,B,E

QUESTION: 8

Which congestion-avoidance or congestion-management technique can cause global synchronization?

A. Tail drop
B. Random early detection
C. Weighted random early detection
D. Weighted fair queuing

Answer: A

QUESTION: 9

Which two options are reasons for TCP starvation? (Choose two.)

A. The use of tail drop
B. The use of WRED
C. Mixing TCP and UDP traffic in the same traffic class
D. The use of TCP congestion control

Answer: C,D

QUESTION: 10

Which type of port would have root guard enabled on it?

A. A root port
B. An alternate port
C. A blocked port
D. A designated port

Answer: D

QUESTION: 11

Refer to the exhibit.

```
DOT1X-SP-5-SECURITY_VIOLATION: Security violation on interface GigabitEthernet4/8,
New MAC address 0080.ad00.c2e4 is seen on the interface in Single host mode
%PM-SP-4-ERR_DISABLE: security-violation error detected on Gi4/8, putting Gi4/8 in
err-disable state
```

Which action will solve the error state of this interface when connecting a host behind a
Cisco IP phone?

A. Configure dot1x-port control auto on this interface
B. Enable errdisable recovery for security violation errors
C. Enable port security on this interface
D. Configure multidomain authentication on this interface

Answer: D