

**Question: 1**

What protocol is used for Path Setup in MPLS traffic engineering?

- A. OSPF
- B. ISIS
- C. BGP
- D. RSVP
- E. PIM

**Answer: D**

**Question: 2**

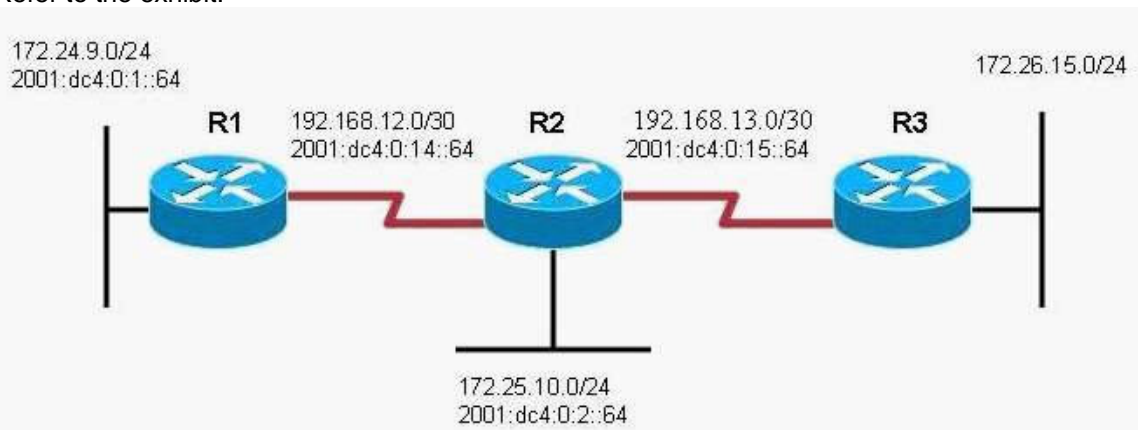
Which of the following is a correct arrangement of APS Action Requests in order of priority, with highest priority first?

- A. Lockout of Protection, Manual Switch, SD, Forced Switch
- B. Manual Switch, Lockout of Protection, Forced Switch, SD
- C. Lookout of Protection, Forced Switch, SD, Manual Switch
- D. Manual Switch, Forced Switch, Lockout of Protection, SD
- E. SD, Lockout of Protection, Forced Switch, Manual Switch
- F. None of the above

**Answer: C**

**Question: 3**

Refer to the exhibit.



Your customer has enabled IPv6 and IPv4 on routers R1 and R2, both running ISIS routing protocol, and they can no longer reach R3 network 172.26.15.0/24 (R3 does not enable IPv6, enables IPv4 only).

Which two steps should be taken to restore reachability to R3? (Choose Two.)

- A. Enable wide metrics.
- B. Enable OSPFv3 to support IPv4 and IPv6 simultaneously.
- C. Configure static routes to all unreachable networks and redistribute to IS-IS.
- D. Transition to IS-IS Multiple Topology Mode on R1 and R2.
- E. Transition to IS-IS Multiple Topology Mode on R3.
- F. Create an IPv6 tunnel from R2 to R3.

**Answer: A, D**

**Question: 4**

What is periodically multicasted (every 10 seconds) by the DIS on a LAN to ensure IS-IS Link State Database accuracy?

- A. PSNP
- B. CSNP
- C. LSP
- D. IIH
- E. ISH

**Answer: B**

**Question: 5**

What best explains the BGP route-reflector function?

- A. BGP route-reflector should be in forwarding path of data coming from its clients.
- B. BGP route-reflector does not have to be in the forwarding path & data coming from its clients.
- C. BGP route-reflector will stop reflecting the routes if they're not directly-connected clients.
- D. None of the above.

**Answer: B**

**Question: 6**

Which 4 statements regarding MPLS Label Stack Encoding is true?

- A. A value of 4 represents the "Implicit NULL Label."  
A value of 0 represents the "IPv4 Explicit NULL Label."
- C. A value of 1 represents the "Router Alert Label". The use of this label is analogous to the use of the "Router Alert Option" in IP packets (for example, ping with record route option).
- D. A value of 2 represents the "IPv6 Explicit NULL Label"
- E. A value of 1 represents the "IPv1 Explicit NULL Label"
- F. A value of 3 represents the "Implicit NULL Label"

**Answer: B, C, D, F**

**Question: 7**

When should traffic shaping be implemented on Frame Relay PVC s? (Choose two)

- A. When you want to drop excess traffic above the CIR
- B. When there is a speed mismatch between the central site and the remote site.
- C. When using Frame Relay SVCs
- D. When over-subscribing the central site link
- E. When LLQ is implemented on the Frame Relay PVC.
- F. When Multilink PPP LFI is implemented on the Frame Relay PVC.

**Answer: B, D**

**Question: 8**

There is MPLS VPN traffic traversing through a TE intermediate router. What is the MPLS packet label stack sequence (from outer to inner) for the VPN traffic on this router?

- A. TE label, IGP label, VPN label
- B. IGP label, TE label, VPN label
- C. TE label, VPN label, IGP label
- D. VPN label, IGP label, TE label

E. IGP label, VPN label, TE label

**Answer: A**

**Question: 9**

MPLS label headers for packet media consist of:

- A. Version
- B. Label
- C. COS/EXP
- D. TTL
- E. S flag

**Answer: B, C, D, E**

**Question: 10**

Which are correct descriptions and configurations of Any cast RP?

- A. In Any cast RP. two or more RPs are configured with the same IP address on loopback interfaces.
- B. Any cast RP provides redundancy and load-sharing capabilities.
- C. Routers with Any cast RP can be configured statically (loopback 1.1.1.1)with the command ip pim rp-address 1.1 .1.1
- D. Routers with Any cast RP can be configured statically (loopback 1.1.1.1)with the command ip rp-address pim 1.1.1.1
- E. Routers with Any cast RP can be configured statically (loopback 1.1.1.1)with the command ip any cast-rp pim 1.1.1.1

**Answer: A, B, C**

**Question: 11**

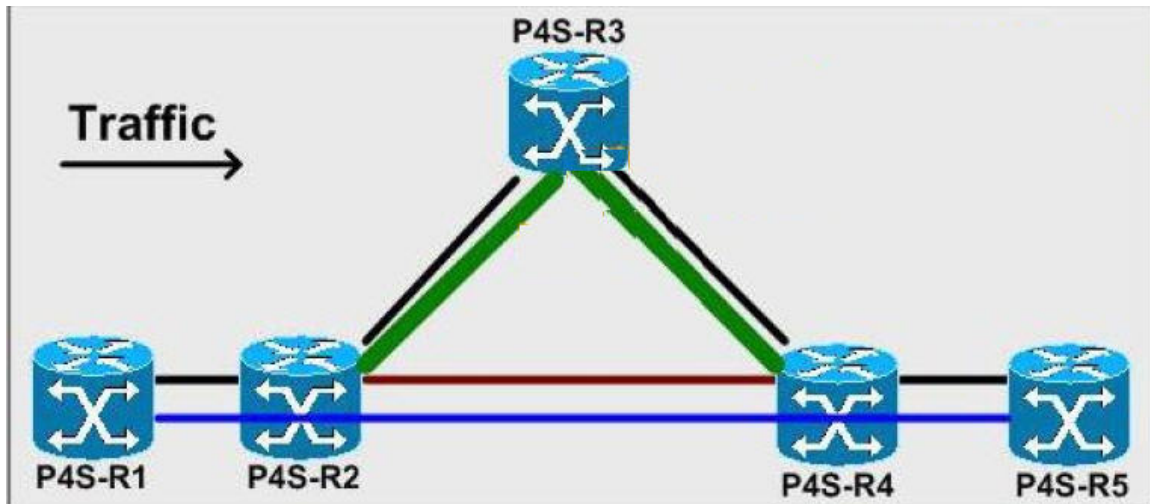
In which of the following BGP-related events is an End-of-RIB (EOR) message sent?

- A. Just before sending a CEASE message to tear down the session.
- B. Following a link flap in the BGP speaker's AS.
- C. Following a Route Processor Switchover.
- D. During initial convergence.
- E. During capability negotiation.

**Answer: C, D**

**Question: 12**

In the diagram, R1 is the head-end of a TE tunnel that terminates on R5. The red line indicates the protected link, and the gold line indicates the backup tunnel. Which router is the Point of Local Repair?



- A. R1
- B. R2
- C. R3
- D. R4
- E. R5
- F. None of the above.

**Answer: B**

**Question: 13**

The layer 2 protocol used by POS technology offers a standardized way for mapping IP packets into SONET/SDH payloads. Select the correct sequence of POS operation.

- 1) Data is scrambled and synchronous mapping takes place by octet into the SONET/SDH frame.
- 2) Encapsulated via Point-to-Point Protocol (PPP) takes place framing information is added with High-level Data Link Control (HDLC).
- 3) Gaps between frames are filled with flags, set to value 7E.
- 4) Octet stuffing occurs if any flags or resultant escape characters (of value 7D) are found in the data.
- 5) Data is segmented into an IP datagram with its 20-byte IP header.

- A. 1, 2,3,4,5
- B. 1,3,4,5,2
- C. 2,3,5,4,1
- D. 5,2,3,4,1
- E. 5,23,1,4

**Answer: D**

**Question: 14**

Which two statements are true?

- A. DPT/RPR uses a bi-directional ring consisting of two symmetric counter rotating fibre rings.
- B. DPTRPR is defined in the IEEE 802.17 standard and it uses Token Bucket system to avoid collisions on the fiber.
- C. In DPT/RPR rings, data packets can be sent in one direction (downstream) and the corresponding control packets in the opposite direction (upstream), thus using both fibres

- concurrently to maximize bandwidth.
- D. DPT/RPR can be deployed in the Core of the SP networks where point-to-point POS links are used to make best use of the Bandwidth.

**Answer: A, C**

**Question: 15**

Which of the following IOS commands cause syslog messages to be stamped with time and dates?

- A. service timestamps log date time
- B. logging trap date time
- C. service logging date time
- D. logging date time on
- E. logging timestamps on

**Answer: A**

**Question: 16**

The OSPF External LSA for prefix x.x.x.x exists in the OSPF database, but the prefix is not installed in the routing table. Which are possible explanations?

- A. Inbound distribute-list is configured under the ospf process and it is denying x.x.x.x
- B. ASBR origination the LSA is not reachable.
- C. Route to the Forwarding Address is not an internal OSPF route.
- D. Route to the Forwarding Address is an internal OSPF route.
- E. Route to the ASBR does not follow the same path as the one to the Forwarding Address.

**Answer: A, B, C**

**Question: 17**

What is the action of "pop" in the context of MPLS switching?

- A. It removes the top label in the MPLS label stack.
- B. It adds a top label in MPLS label stack.
- C. It replaces the top label in the MPLS label stack with another value.
- D. It replaces the top label in the MPLS label stack with a set of labels.
- E. None of above.

**Answer: A**

**Question: 18**

What are the differences between LLQ and CBWFQ? (Choose two.)

- A. LLQ supports the addition of strict priority queuing.
- B. With LLQ, bandwidth allocations for the priority queue and all the CBWFQ queues are configured using the priority command.
- C. LLQ is configured using MQC and CBWFQ is configured using the fair-queue command.
- D. LLQ priority queue bandwidth is policed with a congestion aware policer.
- E. LLQ does not support WFQ on the default traffic class (class-default).

**Answer: A, D**

**Question: 19**

Which command will display the MPLS label binding for IP prefix 1.1.1.0 on the router?