Exam Code: 350-029
Exam Name: CCIE SP Written Exam
Vendor: CISCO
Version: DEMO
Part: A

1: What protocol is used for Path Setup in MPLS traffic engineering?
A. OSPF  
B. ISIS  
C. BGP  
D. RSVP  
E. PIM  
Correct Answers: D

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  
Correct Answers: C

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.  
Correct Answers: A D

4: What is periodically multicasted (every 10 seconds) by the DIS on a LAN to ensure IS-IS Link State Database accuracy?
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 of 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.
Correct Answers: B

6: Which 4 statements regarding MPLS Label Stack Encoding is true?
A. A value of 4 represents the "Implicit NULL Label."
B. 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"
Correct Answers: B C D F

7: When should traffic shaping be implemented on Frame Relay PVCs? (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.
Correct Answers: B D

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
Correct Answers: A

9: MPLS label headers for packet media consist of:
10: Which are correct descriptions and configurations of Anycast RP?
A. In Anycast RP, two or more RPs are configured with the same IP address on loopback interfaces.
B. Anycast RP provides redundancy and load-sharing capabilities.
C. Routers with Anycast RP can be configured statically (loopback 1.1.1.1) with the command ip pim rp-address 1.1.1.1
D. Routers with Anycast RP can be configured statically (loopback 1.1.1.1) with the command ip rp-address pim 1.1.1.1
E. Routers with Anycast RP can be configured statically (loopback 1.1.1.1) with the command ip anycast-rp pim 1.1.1.1
Correct Answers: A B C D E

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.
Correct Answers: C D

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.
Correct Answers: B

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.5,2,3,1,4
Correct Answers: D

14: Which two statements are true?
A.DPT/RPR uses a bi-directional ring consisting of two symmetric counter rotating fibre rings.
B.DPT/RPR 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.
Correct Answers: A C

15: Which of the following IOS commands cause syslog messages to be stamped with time and dates?
A.service timestamps log datetime
B.logging trap datetime
C.service logging datetime
D.logging datetime on
E.logging timestamps on
Correct Answers: A

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 in 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.

Correct Answers: A B C

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.

Correct Answers: A

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).

Correct Answers: A D

19: Which command will display the MPLS label binding for IP prefix 1.1.1.0 on the router?
A. show tag-switching tdp binding 1.1.1.0/24
B. show tag-switching tdp bindings neighbor 1.1.1.0
C. show tag-switching interface e0/0
D. A and B both will show the binding.
E. All of the above.

Correct Answers: A

20: Which two statements are true about RPF checks in MSDP (Multicast Source Discovery Protocol)?
A. It prevents message looping, Session Advertisement (SA) messages must be RPF checked.
B. RPF check should be done against the route to the source S of the corresponding PIM-SM domain.
C. RPF check should be done against the route to the Rendez-vous Point of the corresponding PIM-SM domain, which originated the SA.
D. RPF checking Session Advertisement (SA) messages will cause message looping.

Correct Answers: A C