Exam Code: 4A0-103
Exam Name: Alcatel-Lucent Multiprotocol Label Switching
Vendor: Alcatel-Lucent
Version: DEMO
Part: A

1: Which factor is a primary cause of IP hyper-aggregation?
A. IP routing protocols do not always select the best route to a destination
B. IP routing protocols always select multiple routes to a destination
C. IP routing protocols do not make use all available network attributes to select a path
D. Improper network design results in limited network path redundancy

**Correct Answers: C**

2: Inspecting the MPLS header in the received packet and exchanging it for a new MPLS header is the function of which device?
A. iLER
B. LER
C. LSR
D. PE
E. eLER

**Correct Answers: C**

3: Choose the answer that best completes the following statement. The device at the beginning of an LSP is referred to as the ____ while the device at the end of an LSP is referred to as the ____.
A. PE, P
B. LER, LSR
C. LSR, LER
D. iLER, eLER
E. eLER, iLER
F. P, PE

**Correct Answers: D**

4: Which of the following statements are true regarding the roles of devices in an MPLS domain?
Choose 2 answers.
A. An LER is located internal to the provider domain and switches labeled packets
B. An LSR is located internal to the provider domain and switches labeled packets
C. An LSR is located at the boundary of the provider domain and may forward labeled or unlabeled packets
D. An LER is located at the boundary of the provider domain and may forward labeled or unlabeled packets

**Correct Answers: B D**

5: Receiving labeled packets from the MPLS domain, removing the MPLS header and forwarding unlabeled packets outside the MPLS domain is the function of which device?
A. LER
B. LSR
C. PE
D. iLER
6: What are the functions of the control plane in a MPLS router? Choose 2 answers.
A. Route exchange  
B. Label swapping  
C. MPLS neighbor establishment  
D. Label signaling  
E. Routing lookups  
**Correct Answers: A D**

7: Which of the following factors are driving the evolution of the MPLS protocol and services? Choose 2 answers.
A. Customers demand for differentiated IP services  
B. MPLS usage has been mandated by the IETF  
C. Providers want to improve service availability and reliability  
D. It is an easier technology to configure and manage than IP alone  
**Correct Answers: A C**

8: Which of the following statements are true? Choose all that apply.
A. Selected labels from the FIB are populated to the LIB  
B. Selected labels from the LIB are populated to the LFIB  
C. Selected routes from the RIB are populated to the FIB  
D. Selected routes from the FIB are populated to the RIB  
E. All labels from the LIB are populated to the LFIB  
**Correct Answers: B C**

9: What is the function of the MPLS label assigned to a packet?
A. It identifies the FEC  
B. It specifies the packets header length  
C. It identifies the origin of the packet  
D. It specifies the type of data contained in the packet  
**Correct Answers: A**

10: What is the common usage of the MPLS EXP bits?
A. Each implementation may use them as they see fit  
B. They are used to carry the Ethertype value  
C. They are used to carry the TTL value  
D. They are used to map QoS classification  
E. They are used to carry fragmentation flags  
**Correct Answers: D**

11: If an Alcatel-Lucent 7750 SR receives an unlabeled packet with an IP TTL of 1, which of the following statements is true?
A. The packet will be labeled and forwarded with an MPLS TTL of 1
B. The packet will be labeled and forwarded with an MPLS TTL of 255
C. The packet will be dropped by the device
D. An error will occur when the device attempts to label the packet and assign the MPLS TTL of 0
Correct Answers: C

12: Which of the following statements is true regarding per-platform label space? Choose 2 answers.
A. A separate label is used for each interface that the FEC is advertised on
B. Uses fewer label resources than a per-interface label space
C. Is typically used when the device has ATM or Frame Relay interfaces
D. Uses more label resources than a per-interface label space
E. A single label may be assigned to a FEC and used across all interfaces of the same router
F. Only valid when the LDP peers are directly connected over an interface, and the label is only going to be used for traffic sent over that interface
Correct Answers: B E

13: How many bits of the MPLS header are used for the label field?
A. 16
B. 20
C. 24
D. 25
E. 32
Correct Answers: B

14: When a device receives a labeled packet which of the following can occur?
A. The packet may only be forwarded as an unlabeled packet
B. The packet may be forwarded as a labeled or unlabeled packet depending on the received label value
C. The packet may be forwarded as a labeled or unlabeled packet depending on whether there is a route to the destination in the FIB
D. The packet may only be forwarded as a labeled packet
Correct Answers: B

15: What is the significance of receiving a packet with the bottom MPLS label S bit is set to 1?
A. This condition results in forwarding based on the next packet header
B. This condition indicates that this label is the bottom of the MPLS label stack
C. This condition indicates that this label is the top of the MPLS label stack
D. Any LSR receiving an S bit set to 1 must discard the packet
Correct Answers: B

16: Which of the following statements is true regarding the control driven label distribution model?
A. Label bindings are formed before the arrival of any user traffic
B. Label bindings are formed upon the arrival of user traffic
C. Label bindings are formed manually
D. Control over label bindings is the responsibility of the IGP

**Correct Answers: A**

17: True or False? MPLS may use an existing data link layer header field to identify the label, instead of using a specific MPLS header.
A. True
B. False

**Correct Answers: A**

18: An MPLS router may originate a label mapping for a FEC under which of the following conditions? Choose 3 answers.
A. Only when the MPLS router is configured to use downstream on demand mode.
B. When the next-hop is external to the MPLS domain
C. When the FEC label mapping is statically configured
D. As soon as the FEC is removed from the MPLS router FIB. As soon as the FEC is removed from the MPLS router? FIB.
E. When the FEC is a directly connected interface

**Correct Answers: B C E**

19: If an Alcatel-Lucent 7750 SR receives a labeled packet with an outer label TTL of 250 and an inner label TTL of 251, which of the following statements is true?
A. The packet will be label switched and the outer label TTL will be 249 and the inner label TTL will be 250
B. The packet will be label switched and the outer label TTL will be 249 and the inner label TTL will be 251
C. The packet will be label switched and the outer label TTL will be 250 and the inner label TTL will be 250
D. The packet will be label switched and the outer label TTL will be 249 and the inner label TTL will set to 249 since they must be the same

**Correct Answers: B**

20: True or false? A Targeted-LDP session may exist between directly connected or non-directly connected devices.
A. True
B. False

**Correct Answers: A**