4A0-M01.exam.90q

Number: 4A0-M01 Passing Score: 800 Time Limit: 120 min



4A0-M01

Alcatel-Lucent IP/MPLS Mobile Backhaul Transport

Exam A

QUESTION 1

An SROS router obtains its timing exclusively from its BITS input port. The router sets Quality Level (QL) SONET Traceability Unknown (STU) on this Superframe (SF) framed DS1 BITS reference.

What must you configure on this master router to pass the best clock quality level to the downstream Synchronous Ethernet (SyncE) slave nodes while maintaining traceability to the DS1 source?

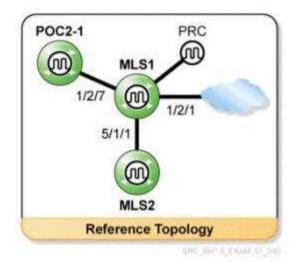


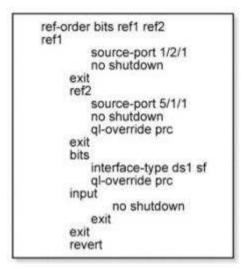
- A. Enable "ql-override prs" on the BITS reference
- B. Enable "ql-override prs" on the master's SyncE ports
- C. Enable "gl-selection prs" on the BITS reference
- D. Set the master router to choose its source by quality level

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 2





Consider the topology and MLS1 configuration shown, and given the following conditions:

- * MLS1 delivers the PRC traceable clock to the network
- * Reference 1 receives Quality Level (QL) EEC1
- * Reference 2 receives QL SSU-A
- * BITS sets QL-SSU-B

Which quality level will MLS1 deliver to POC2-1 on its Synchronous Ethernet (SyncE) port 1/2/7?

- A. QL-EEC1
- B. QL-PRC
- C. QL-SSU-A
- D. QL-STU

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 3

Which synchronization technique supports time of day and phase synchronization?

- A. IEEE 1588 v2/Precision Time Protocol (PTP) v2
- B. Adaptive Clock Recovery (ACR)
- C. Time Division Multiplexing (TDM) line timing
- D. Synchronization Ethernet (SyncE)/Synchronization Status Message (SSM)

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 4

Which is a characteristic of the IEEE 802.3 Slow Protocol?

- A. There are a maximum of 10 frames transmitted per second
- B. There are a maximum of 20 slow protocol subtypes per interface
- C. The maximum slow protocol frame size is 64 bytes
- D. The slow protocol header carries the clock quality level

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 5

Which statement best describes phase synchronization as it is used in the backhaul transport?

- A. The master and slave clocks cycle at a rate within 50 parts per billion (ppb)
- B. The master and slave clock frames start within +/- 500 nanoseconds
- C. The slave clock sets its clock frequency to the incoming bit rate
- D. The slave sets its time and date accordingly to the arriving packet rate

Correct Answer: B Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

Which command example correctly configures a 7750 Service Router (SR) for Synchronous Ethernet (SyncE) support?



- A. configure card 1 mda 1 sync-e
- B. configure card 1 ethernet sync-e
- C. configure system sync-if-timing sync-e no shutdown
- D. configure port 1/1/1 ethernet sync-e no shutdown

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 7

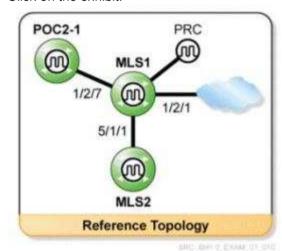
Which component must you configure on an IEEE 1588v2/Precision Time Protocol (PTP) v2 slave to enable it to choose its master based on Synchronization Status Message (SSM) Option 1 or Option 2 Quality Levels?

- A. Set the PTP port to the desired ITU-T G.781 Option 1 or 2 mode
- B. Set the SROS IEEE 1588v2 profile to IEEE 1588-2008
- C. Set the SROS IEEE 1588v2 profile to ITU-T G.8265.1
- D. Configure ql-override on the PTP reference entry

Correct Answer: C Section: (none) Explanation

QUESTION 8

Click on the exhibit.





Consider the topology and MLS1 configuration shown, and given the following conditions:

- MLS1 delivers the PRC traceable clock to the network
- Reference 1 receives Quality Level (QL) PRS
- Reference 2 receives QL DUS
- BITS sets QL-STU

Which quality level will MLS1 deliver to POC2-1 on its Synchronous Ethernet (SyncE) port 1/2/7?

- A. QL-DUS
- B. QL-EEC2
- C. QL-PRS
- D. QL-STU

Correct Answer: C Section: (none) Explanation

QUESTION 9

Click on the exhibit.

```
A:MLS1>config>router>bgp# info

group "Cluster"

next-hop-self
type internal
cluster 10.10.10.10
peer-as 65000
neighbor 192.0.2.2
exit
neighbor 192.0.2.3
exit
exit
no shutdown
```

Based on the default SROS Border Gateway Protocol (BGP) timer settings and the configuration shown:

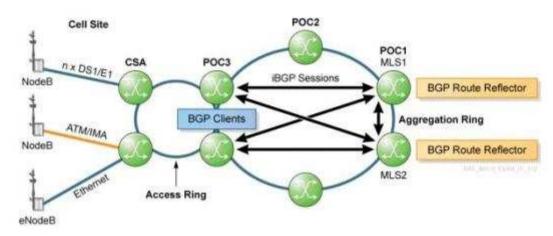
If the Interior Gateway Protocol (IGP) removes its route to the BGP neighbor 192.0.2.2, how long will BGP wait to drop its peering session with that neighbor router?

- A. 0 seconds
- B. 30 seconds
- C. 90 seconds
- D. 170 seconds

Correct Answer: C Section: (none) Explanation

QUESTION 10

Click on the exhibit.



Given the topology shown:

With Border Gateway Protocol (BGP) peer tracking enabled, what will router MLS1 do if the Interior Gateway Protocol (IGP) removes the route to its BGP peer MLS2 system ID?

- A. It will look for an alternate route reflection peer
- B. It will shut down BGP route reflection
- C. It will set its peering session state to connect
- D. It will try to peer with one of the POC3 routers

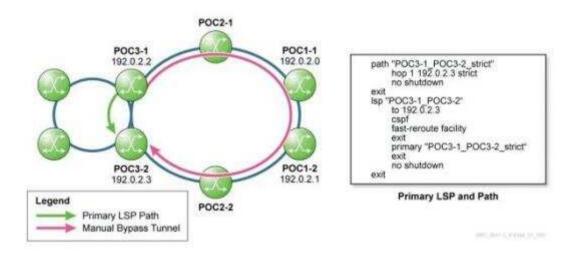
Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 11

Click on the exhibit.

Given the topology and the Multiprotocol Label Switching (MPLS) Label Switch Path (LSP) and path configurations shown:



You wish to protect the LSP POC3-1_POC3-2 with a manual bypass tunnel. Which statement correctly describes the manual bypass tunnel configuration requirement for the ring topology shown?

- A. All nodes must have manual bypass enabled in the MPLS context
- B. All nodes must have fast reroute facility enabled in the MPLS context.
- C. The bypass tunnel first hop must avoid the protected LSP's tail end router
- D. Each node must have a bypass-only tunnel configured to terminate on POC3-2

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 12

BGP Neighbor			
Peer : 192.0.2.2 Group : Cluster			
Peer AS Peer Address	: 65000 : 192.0.2.2	Peer Fort	: 179
Local AS Local Address Peer Type	: 65000 : 192.0.2.0 : Internal	Local Port	: 50547
State Last Event Last Error Local Family Remote Family	: Established : recvKeepAlive : Coase : IPv4 : IPv4	Last State	: Active
Hold Time	: 90	Keep Alive	: 30
Active Hold Time Cluster Id	: 90 : 10.10.10.10	Active Keep Alive	
Preference	: 170	Num of Update Flaps	: 0

Which field in the show command result indicates that the router MLS1 is configured as a Border Gateway Protocol (BGP) route reflector?



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- A. Peer Type;
- B. Group:
- C. Peer AS:
- D. Cluster Id:

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 13

Click on the exhibit.

Static Route Table (Router: Bas	e) Family: IPv4				
Prefix Next Hop	Tag Interface	Met	Pref	Type	Act
192.0.2.1/32 192.0.2.29	0 MLS1 MLS2	1	5	NH	Y
192.0.2.2/32 192.0.2.17	0 MLS1_CSA1	1	5	NH	Y
192.0.2.2/32 192.0.2.29	0 n/a	1	10	NH	N

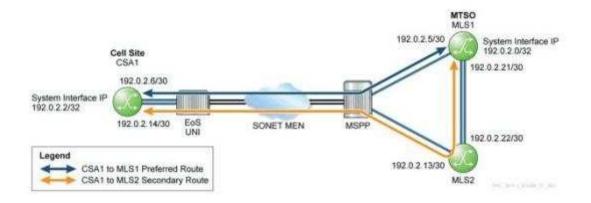
With the information given, why is the second static route to prefix 192.0.2.2/32 inactive?

- A. The second route is a black hole static route
- B. The static route is missing a next hop entry
- C. A route with a better preference is active
- D. The next hop interface is unreachable

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 14



You wish to configure a secondary static route on MLS1 targeting the CSA1 system interface. The route must forward packets over the secondary route path as shown in the diagram. Given the following:

- BFD must be enabled on the preferred route
- BFD is configured on the interfaces
- The MLS1 router must choose the preferred route in normal operations

Which command example correctly configures the secondary static route on MLS1?

- A. configure router static-route 192 0.2.2/32 next-hop 192.0.2.6 bfd-enable
- B. configure router static-route 192.0.2.6/32 next-hop 192.0.2.22 bfd-enable
- C. configure router static-route 192.0.2.2/32 next-hop 192.0.2.14 precedence 10
- D. configure router static-route 192.0.2.2/32 next-hop 192.0.2.22 precedence 10

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 15

Which statement correctly describes a Versatile Service Module (VSM) Layer 2 and Layer 3 service cross-connect's operation?

A. Layer 3 Service Access Points (SAPs) must use the "A" paths; Layer 2 services use the B path

- B. The Cross Connect Aggregation Group (CCAG) B path can optionally act as a hot standby path for the A path
- C. A CCAG may rate limit the A or B path all the way up to the maximum CCAG available bandwidth
- D. For resiliency, the CCAG distributes each conversation flow across multiple Cross Connect Adapters (CCA)

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 16

Which statement correctly describes Virtual Routing and Redundancy Protocol (VRRP) configuration?

- A. The router assigns priority 100 to a non-owner VRRP interface by default
- B. An interface can only be a member of a single Virtual Router ID (VRD)
- C. An owner mode VRID can back up as many as sixteen virtual gateway addresses
- D. An owner mode VRID requires a backup address not used by the physical interfaces

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 17

Choose the two SAP identifiers that a Cross Connect ID (CCID) can bind to create a bi-directional Layer 2 and Layer 3 service cross connect. (Choose two.)

- A. sap 1/1/9:100:200
- B. sap 1/1/8:100:200
- C. sap ccag-l.a:l00
- D. sap ccag-2.a:100
- E. sap ccag-1.b:100
- F. sap ccag-2.b:200

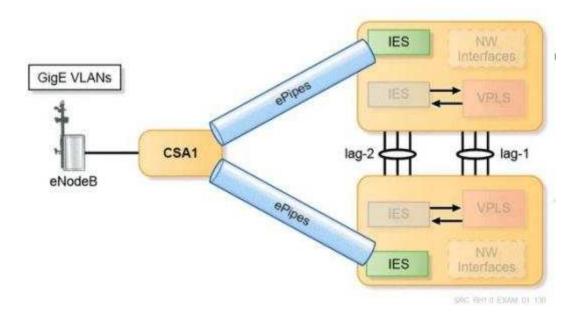
Correct Answer: CE Section: (none)

Explanation

Explanation/Reference:

QUESTION 18

Click on the exhibit



Given the diagram shown and the following information:

- Configured on the CSA1 router is an ePipe with redundant spoke Service Distribution Points (SDPs)
 The spoke SDPs terminate on Internet Enhanced Services (IES) interfaces configured on each of the two remote Provider Edge (PE) routers.

Which statement correctly describes how the remote PEs signal Maximum Transmission Unit (MTU) values for the ePipe spoke terminations?

- A. The remote PE routers signal the default IES service 1514 byte MTU to the CSA1 router
- B. The remote PE routers signal the IES spoke SDP Virtual Circuit (VC)-MTU based on the SDP path MTU
- C. The PE routers set the service MTUs to the lowest negotiated value
- D. The remote PE routers must signal a VC-MTU equal to the ePipe service MTU plus the Ethernet header size

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 19 Click on the exhibit

```
A:MLS1>config>service>vprn# info
   description "3G Voice VPRN"
    router-id 198.51.100.0
   route-distinguisher 65100:2
   interface "L3 VLAN402" create
       description "Cross connect to 3G SM Inner VPLS"
       address 198.51.100.65/27
       vrrp 1
           backup 198.51.100.67
           priority 230
           ping-reply
       exit
       sap 1/1/9:2 create
           exit
A:MLS2>config>service>vprn# info
   description "3G Voice VPRN"
   router-id 198.51.100.1
   route-distinguisher 65100:2
   interface "L3 VLAN402" create
       description "Cross connect to 3G SM Inner VPLS"
       address 198.51.100.66/27
       vrrp 1
           backup 198.51.100.67
           priority 220
           ping-reply
       exit
       sap 1/1/9:2 create
           exit
            exit
```

Given the configurations shown and the following information:

- Multilayer Switch (MLS) 1 and 2 host duplicate Virtual Private Routed Network (VPRN) services.
- Configured on the interfaces L3_VLAN402 is Virtual Router ID (VRID) 1

Your customer states that if the master interface fails and recovers, they want traffic to remain on the VRID backup interface.

What must you change in the configuration shown to keep the VRID from moving traffic back to the master?

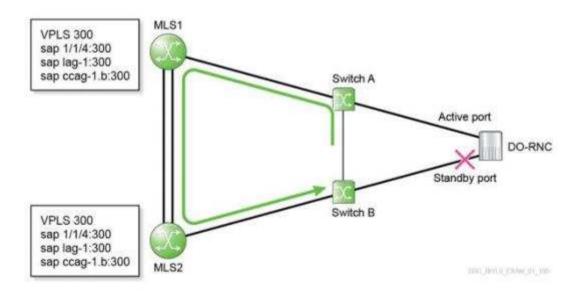
- A. set a revert time value of infinity
- B. configure no preempt in the VRID
- C. set both interface priorities to the default
- D. set MLS1 interface L3_VLAN402 to priority 255

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 20

Click on the exhibit. Given the diagram.



On the MLS routers, you wish to configure a Management Virtual Private LAN Service (mVPLS) running Spanning Tree Protocol (STP) on behalf of VPLS 300.

What must you configure on the MLS routers? (Choose two.)

- A. Configure mVPLS Service Access Points (SAPs) on the same access ports as used in the VPLS 300 service
- B. Configure mVPLS SAPs with the same Virtual LAN (VLAN) tags as those used on the VPLS 300 SAPs
- C. Turn up STP on each of the MLS1 and MLS2 VPLS 300 SAP physical access ports
- D. Create a managed VLAN list on each mVPLS SAP for all protected VPLS 300 VLANs
- E. Provision the mVPLS SAPs with unique VLAN tags within the VPLS 300 service context

Correct Answer: AD Section: (none) Explanation

Explanation/Reference:

QUESTION 21

A network element (NE) forwards external traffic through a Virtual Routing and Redundancy Protocol (VRRP) protected gateway interface. If the master goes offline, how does the NE learn to forward traffic to the new master interface?

- A. Upon assuming the master role, the new master advertises its presence through Gratuitous Address Resolution Protocol (ARP) messages
- B. The master updates the forwarding table entries by delivering all frames into the network using the virtual Media Access Control (MAC) source address
- C. The network elements use their current gateway interface ARP cache entry or send out an ARP request if the entry is timed out
- D. The new master interface delivers the new virtual interface MAC address into the network via Master Advertisement Messages

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 22

Which statement correctly describes SROS Virtual Private Wire Service (VPWS) endpoint characteristics?



- A. An implicit endpoint may have both a SAP and a spoke SDP object
- B. Within a local service context a router will only forward traffic between objects in different endpoints
- C. An explicit ePipe service endpoint may have up to four associated SAP objects, but only one forwarding
- D. An explicit endpoint may contain up to four primary pseudowire objects to support load balancing

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 23

Click on the exhibit.

```
epipe 10 customer 1 create

description "3G_BTS10"
endpoint "epipe10" create
exit
sap 1/2/1:1 create
exit
spoke-sdp 1:10 endpoint "epipe10" create
precedence primary
exit
spoke-sdp 2:10 endpoint "epipe10" create
exit
no shutdown
exit
```

Given the local Provider Edge (PE) router configuration shown and the following condition:

• All Service Access Points (SAPs) and spoke SDPs are operational

Upon startup, which pseudowire status value will the local PE router signal for the standby spoke SDP?

- A. 0x00, Pseudowire forwarding
- B. 0x01, Pseudowire not forwarding
- C. 0x20, Pseudowire forwarding Standby
- D. 0x21, Pseudowire in standby and not forwarding

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 24

```
ipipe 100 customer 1 create
            description "Distributed iPipe for 3G IPoTDM services"
            endpoint "ipipe100" create
                standby-signaling-master
            exit
            sap bundle-ppp-1/1.2 create
                ce-address 203.0.113.50
                ipcp
                    assign-peer-ce-addr
                    dns 198.51.100.250
                exit
            exit
            spoke-sdp 1:100 endpoint "ipipe100" create
                ce-address 203.0.113.51
               precedence primary
            exit
            spoke-sdp 2:100 endpoint "ipipe100" create
                ce-address 203.0.113.51
            exit
            no shutdown
```

Given the cell site router configuration shown:

The local Provider Edge (PE) router originates a redundant iPipe service terminated on each of two remote PE routers.

Which statement correctly describes the iPipe service operation?

- A. The local PE router will assign to the Customer Edge (CE) device the IP address defined in the SAP DNS context
- B. The remote PEs will load-balance base station destined packets through both return spoke SDPs
- C. The remote PE routers forward base station packets through the iPipe service associated with the active spoke SDP
- D. The local PE router signals the base station's IP address to the remote PE in the Targeted Label Distribution Protocol (T-LDP) label messages

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 25

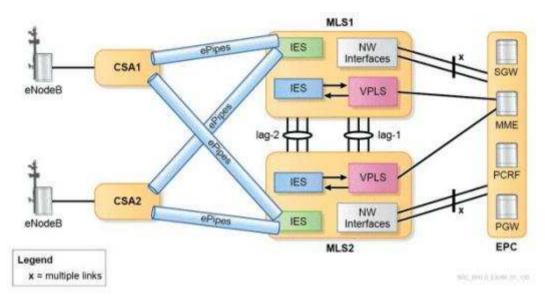
As cells enter an aPipe service configured for vc-type atm-vcc, how does the ingress Provider Edge (PE) router handle the cell header Virtual Path Identifier/Virtual Channel Identifier (VPI/VCI) values?

- A. The PE strips the cell headers and transports just the payload with a control word
- B. The PE replaces the VPI/VCI with the MPLS service label and control word
- C. The PE replaces the VPI/VCI with another set defined within the service context
- D. The PE transports the original VPI/VCI along with the payload to the egress PE

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 26



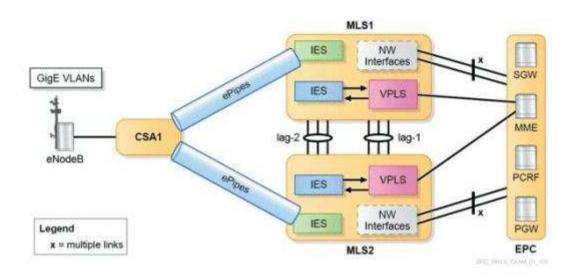
Which statement correctly describes eNodeB-to-eNodeB X2 interface traffic flow in the Model 1 hub and spoke architecture Long Term Evolution (LTE) service model shown?

- A. X2 traffic travels through the red Virtual Private LAN Service (VPLS) to the Mobility Management Entity (MME) pool and on to the target CSA router
- B. The green Internet Enhanced Service (IES) provides the Layer 3 interfaces used for X2 eNodeB-to-eNodeB handoff traffic
- C. Split horizon allows direct eNodeB-eNodeB handoff without the need to route through the green IES interfaces
- D. The red VPLS supports Virtual Routing and Redundancy Protocol (VRRP) sessions for X2 inter-eNodeB Layer 3 interface resiliency

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 27



Which statement correctly describes the Model 1 hub and spoke architecture Long Term Evolution (LTE) service model shown?

- A. The blue Internet Enhanced Service (IES) SAP interfaces include static Media Access Control (MAC) address entries for the eNodeBs
- B. The red Virtual Private LAN Service (VPLS) provides the Layer 2 transport to support blue IES Virtual Routing and Redundancy Protocol (VRRP) sessions
- C. The green IES spoke SDP interfaces include static MAC address entries for the eNodeBs
- D. The blue IES interfaces forward traffic to external networks and the mobile core

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 28

VRRP Instances		 				
Interface Name	VR Id IP		State Pol Id	Base Pri InUse Pri	Mag Inh	
L3_VLAN402	1 IPv4		Backup n/a	230 230	1 No	
Backup Addr: 198.51.100.67 Instances : 1 A:MLS2# show router 2 verp in	stance					
Instances: 1	stance	 	*********		(****	
Instances: 1 A:MLS2# show router 2 verp in	*********			Base Pri InUse Pri		

Given the show command results shown and the following information:

* MLS1 interface L3_VLAN402 is the preferred Virtual Router ID (VRID) 1 master interface * The master interface failed and later recovered

Why does the MLS2 interface L3_VLAN402 remain in the Master state?

- A. You must configure a VRRP policy to control master recovery time
- B. The VRRP VRID 1 configuration disallows preempting the existing master
- C. SROS requires operator intervention to recover the VRRP master interface
- D. The Layer 2 interface carrying the VRRP announcements is operationally down

Correct Answer: B Section: (none) Explanation

QUESTION 29

Which statement is correct concerning spoke SDP use in point-to-point services?

- A. Each service requires its own set of SDPs
- B. The spoke SDP must specify the vc-type of the service transported
- C. SDP bindings must include the service encapsulation type value
- D. An explicit endpoint may have up to four spoke SDP bindings
- E. Each service includes two default explicit endpoints

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 30

LDP LS	R ID: 19	2.0.2.3						
Legend	S - St E - Eps A - Aps P - Ips	atus Signale lpe Service, ipe Service, ipe Service,	d Up, D V - VPLS F - Fpip WP - Lab	Not In Use, W - Status Signa Service, M - e Service, I - el Withdraw Pe	aled Down Mirror Ser - IES Servi	vice ce, R - 1		
LDP Se	***	Type, Lengt 128 Bindin						
LDP Se	rvice FE		gs ========	***********	IngLbl	EgrLbl	LMTU	RMTU
	rvice FE	C 128 Bindin	gs SDPId	***********	1310610		1500	1536

Given the show command result shown and the following information:

- The local Provider Edge (PE) ePipe 300 service uses redundant pseudowires spoke-terminated into Internet Enhanced Service (IES) interfaces on two separate remote PE routers.
- Changes made to the service configuration must not affect the operation of other services.

What change can you make to the interconnected services to correct the spoke SDP Egress Label status highlighted?

- A. Enable standby-signalling-master in the ePipe primary spoke SDP binding
- B. Adjust the local PE SDP 1 and 2 SDP path Maximum Transmission Unit (MTUs) to match the IES service MTU
- C. Adjust the remote PE IES spoke interface IP-MTUs to match the ePipe service Virtual Circuit (VC)-MTU
- D. Configure one of the ePipe 300 spoke SDP bindings as endpoint precedence primary

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 31

Which statement is true concerning aPipe ATM cell mode versus ATM Adaptation Layer (AAL) 5 Service Data Unit (SDU) frame mode?

- A. AAL5 SDU frame mode supports ATM cell concatenation
- B. ATM cell mode can bind multiple virtual circuits to a single service
- C. AAL5 SDU frame mode passes the cell header with the payload
- D. ATM cell mode requires a control word for cell reordering

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 32

Click on the exhibit.

Given the show result shown:

```
A:CSAl# show service id 200 base
Service Id : 200
Service Type : Apipe VLL Type : ATMVCC
Description : 3G_BTS02
Customer Id : 1
Last Status Change: 12/05/2011 08:18:21
Last Mgmt Change : 12/05/2011 08:17:51
Admin State : Up
                          Oper State
                                         : Up
           : 1508
Vc Switching : False
                            SDP Bind Count : 2
            : 1
SAP Count
Service Access & Destination Points
                                  AdmMTU OprMTU Adm Opr
```

Which example shows the proper format for a Service Access Point (SAP) configured within this service context?

A. sapbundle-ppp-1/2.1:1/200

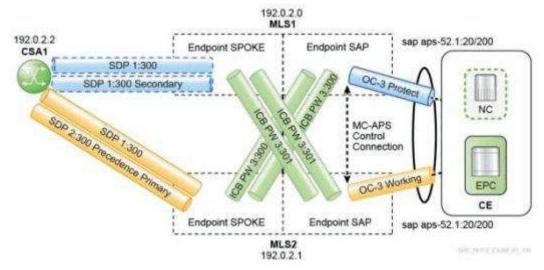
- B. sap bundle-ima-2/1.1:1
- C. sap 1/1/1.1:200.20
- D. sap 1/1/6.1:200/20

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 33

Click on the exhibit



Given the diagram shown, and the following information:

- Configured on CSA1 and the two MLS routers is redundant aPipe 300
- Interchassis Backup Pseudowires (ICB-PW) provide a path of last resort to the Customer Edge (CE) Service Access Points (SAPs)
- Multichassis Automatic Protection Switching (MC-APS) protects the CE access ports
- Assume normal status on all aPipe 300 spoke Service Distribution Points (SDPs)

If the working OC-3 fails, which three statements correctly describe the resulting status of the MLS1 aPipe 300 endpoint objects (Choose three)

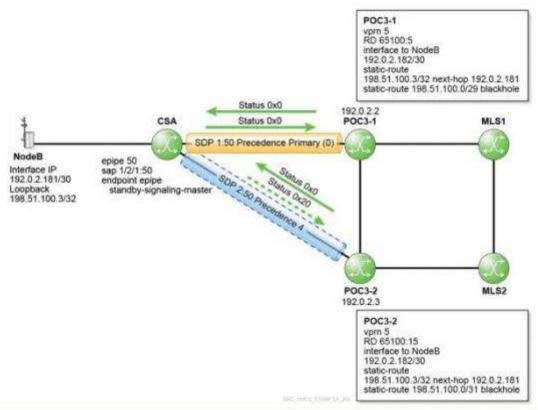


- ittps://www.gratisexam.com
- A. Spoke SDP 1:300 active
- B. Spoke SDP 1:300 standby
- C. Spoke SDP 3:300 active
- D. Spoke SDP 3:300 standby
- E. Spoke SDP 3:301 active
- F. Spoke SDP 3:301 standby

Correct Answer: ADF Section: (none) Explanation

Explanation/Reference:

QUESTION 34 Click on the exhibit



Given the diagram and the following information:

- Virtual Private Routed Network (VPRN) 5 spans the routers Point of Concentration (POC) 3-1 and 3-2 and the Multilevel Switch (MLS) routers MLS1 and MLS2
- Multiprotocol Border Gateway Protocol (MP-BGP) is configured and operational
- Pseudowire status is signaled, as shown, on the ePipe/VPRN spoke Service Distribution Paths (SDPs)

Which statement correctly describes the illustrated services' normal operations?

- A. A failure on the POC3-1 VPRN interface 'to NodeB" will cause a pseudowire switch on the CSA router
- B. A failure on the POC3-2 VPRN interface 'to NodeB" will cause a pseudowire switch on the CSA router
- C. The CSA router sends traffic down both spoke SDPs 1:50 and 2:50 simultaneously
- D. Both POC3-1 and POC3-2 VPRN interfaces "to NodeB" simultaneously forward traffic to the CSA router

Correct Answer: A

Section: (none) Explanation

Explanation/Reference:

QUESTION 35

Click on the exhibit.

Given the configuration shown:

```
A:CSA1>config>port# info

multilink-bundle
    ima
        atm
        exit
        test-pattern-procedure
        exit
        exit
        member 1/1/1.1
        member 1/1/2.1
        member 1/1/3.1
        exit
        no shutdown
```

Which statement correctly describes the port configuration shown?

- A. The bundle will become operational once it is associated with a Layer 3 interface
- B. The bundle may be used for aPipe cell mode N:1 or N=1 service access points (SAPs)
- C. The bundle can be protected via Multichassis Automatic Protection Switching (MC-APS)
- D. The bundle members are configured on a SONET/SDH Optical Carrier (OC)-3 port

Correct Answer: B Section: (none)

Explanation

Explanation/Reference:

QUESTION 36

Click on the exhibit

192.0.2.2

MLS1

SDP 1:10 Precedence Primary SPOKE

SDP 1:10 Precedence Primary SPOKE

MC-LAG
Control
Connection

AG2 Standay

ERC

SC2 Standay

SC2 Standay

ERC

SC2 Standay

SC2 Standay

SC2 Standay

Endpoint SPOKE

> 192.0.2.1 MLS2

Endpoint SAP

Given the diagram shown, and the following information:

- Configured on CSA1 and the two MLS routers is redundant ePipe 10
- Interchassis Backup Pseudowires (ICB-PW) provide a path of last resort to the Customer Edge (CE) Service Access Points (SAPs)
- A Multichassis Link Aggregation Group (MC-LAG) protects the CE access ports
- Assume normal status on all ePipe 10 spoke Service Distribution Points (SDPs)

If the CSA1 primary spoke SDP fails, which three statements correctly describe the resulting status of the MLS2 ePipe 10 endpoint objects? (Choose three)

sap lag-2

- A. SAP LAG-2 active
- B. SAP LAG-2 standby
- C. Spoke SDP 3:10 active
- D. Spoke SDP 3:10 standby
- E. Spoke SDP 3:100 active

F. Spoke SDP 3:100 standby

Correct Answer: BDE Section: (none)
Explanation

Explanation/Reference:

QUESTION 37

Click on the exhibit

```
A:NodeA>config>port>tdm# info

ds1

channel-group 1

shutdown

exit

no shutdown

exit

exit
```

Given the configuration example shown:

The DS1 port shown will become a Structure Agnostic TDM over Packet (SAToP) Service Access Point (SAP) access port.

What must be configured on the DS1 port to allow it to carry all 24 TDM timeslots as a stream of consecutive octets?

- A. Set encap-cem in the channel group
- B. Set encap-type satop-t1 on the port
- C. Set framing ds1-unframed on the port
- D. Set the channel-group timeslots to 1-24

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 38

Click on the exhibit

```
A:NodeA>config>port>tdm# info

el

framing el-unframed
channel-group 1
encap-type cem
no shutdown
exit
no shutdown
exit
```

Given the configuration shown and the following information:

- The port configured as shown is used in a cPipe service Service Access Point (SAP) 1/2/1.1
- Each packet contains a 256 byte payload.

Based on the number of timeslots in each frame, what jitter buffer size, in milliseconds (ms), does the router set for this SAP?

- A. 5 ms
- B. 8 ms
- C. 16 ms
- D. 32 ms

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 39

Type	: E-Eth	VcId	: 1
SvcId	: 1	SdpId	: 1
Peer Address	: 192.0.2.0	Vc-switching	
LMTU	: 1500	RMTU	: 1500
Egr. Lbl	: 131059S	Egr. Ctl Word	
Egr. Flags	: None	Egr. Status Bits	: Supported (0x0)
Ing. Lb1	: 1310700	Ing. Ctl Word	: No
Ing. Flags	: None	Ing. Status Bits	: Supported (0x0)
Type	: E-Eth	Veld	: 1
Sveld	: 1	Sdpld	1 2
Peer Address	: 192.0.2.1	Vc-switching	: No
LMTU	: 1500	RMTU	: 1500
Egr. Lbl	: 131058D	Egr. Ctl Word	: No
Egr. Flags	: None	Egr. Status Bits	: Supported (0x26)
Ing. Lbl	: 131068U	Ing. Ctl Word	: No
Ing. Flags	: None	Ing. Status Bits	: Supported (0x0)

Given the show results shown, and the following information:

- CSA1 originates a redundant ePipe service
- The remote PE Service Access Points (SAPs) are Multichassis-Link Aggregation Group (MC-LAG) members

What would cause the spoke SDP status 0x26?

- A. Peer 192.0.2.1's ePipe SAP is in standby
- B. The local node has deleted its label for spoke SDP 2:1
- C. Peer 192.0.2.1's ePipe SAP port is operationally down
- D. Spoke SDP 1:1 is the active redundant pseudowire

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 40

Which statement correctly describes bi-directional Automatic Protection Switching (APS) as implemented in SROS?

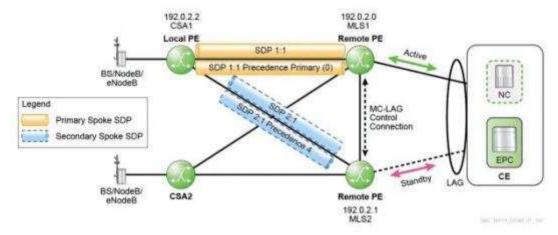
- A. The endpoints transmit the same data on the working and protect circuits
- B. The endpoints send K2 keepalive bits on the working and protect circuits
- C. A failure on the receive path causes both paths to switch to the protect circuit
- D. Either the working or protection circuit can signal an APS switch

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 41

Click on the exhibit



Given the diagram shown, and the following information:

- Configured on CSA1 is a redundant ePipe service
- A Multichassis-Link Aggregation Group (MC-LAG) protects the CE access links
- The preferred spoke SDP has failed

After the failure, which status will the MLS2 router signal to CSA 1 on its return spoke SDP 2:1?

A. Pseudowire forwarding, 0x00

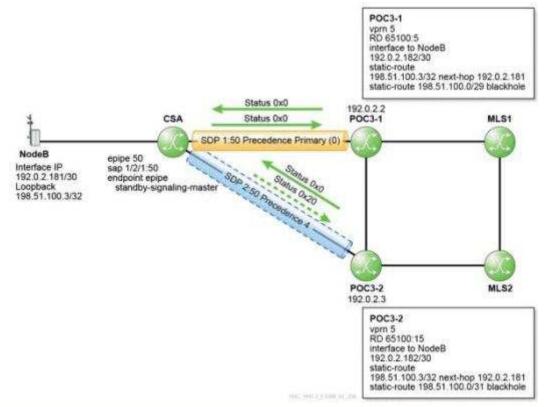
- B. Remote pseudowire active, remote SAP is down, 0x06
- C. Pseudowire forwarding standby, 0x20
- D. Remote pseudowire in standby, remote SAP is down, 0x26

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 42

Click on the exhibit



Given the diagram and the following information:

- Virtual Private Routed Network (VPRN) 5 spans the routers Point of Concentration (POC) 3-1 and 3-2 and the Multilevel Switch (MLS) routers MLS1 and MLS2
- Multiprotocol Border Gateway Protocol (MP-BGP) is configured and operational
- Pseudowire status is signaled, as shown, on the ePipe/VPRN spoke Service Distribution Points (SDPs)

In the exhibit, how does the signaled pseudowire status affect the VPRN 5 service?

- A. The spoke SDP 1:50 status 0x00 keeps the POC3-1 VPRN interface "to NodeB" operationally down
- B. The spoke SDP 2:50 status 0x20 holds down the POC3-2 static routes until SDP 2 recovers
- C. MLS1 and MLS2 route traffic targeting the NodeB loopback interface through router POC3-1
- D. MLS1 and MLS2 route traffic targeting the NodeB loopback interface through router POC3-2

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 43

Click on the exhibit.

Given the show command and the result shown:

Service Basic Inf	ormation					
Service Id Service Type Bescription	: 300 : Cpipe : 2G BTS03	VLL Type	: \$	ATOPT1		
Customer Id	: 1 e: 12/05/2011 09:12:05 : 12/05/2011 09:11:06					
Admin State MTU Vc Switching	: Up : 1514 : Falme	Oper State	: 0	P		
SAP Count	: 1	SDP Bind C	ount : 2			
Service Access &	Destination Points				поста	
Identifier		Type	AdmMTU	OprMTU	Adm	Opr
sap:1/1/7.1		cem	1514	1514		Up
sdp:1:300 S(192.0.2.0) sdp:2:300 S(192.0.2.1)		n/a n/a	0	1550	Up	Up Up

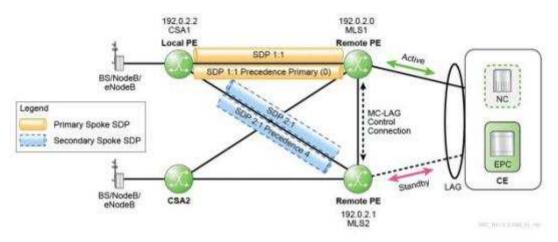
Which payload type does this service transport?

- A. A channelized E1 circuit carrying all 32 timeslots
- B. An unframed DSI circuit carrying all 24 timeslots
- C. Multilink Protocol (MP) framed bundled E1s
- D. Ethernet over TDM framed DS1 circuits

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 44



Given the diagram shown, and the following information:

- Configured on CSA1 is a redundant ePipe service
- A Multichassis-Link Aggregation Group (MC-LAG) protects the CE access links
- •The active MC-LAG has switched to MLS2

Which status does MLS1 signal to CSA1 on its return spoke SDP 1:1?

- A. Pseudowire forwarding, 0x00
- B. Remote pseudowire active, remote SAP is down, 0x06
- C. Pseudowire forwarding standby, 0x20
- D. Remote pseudowire in standby, remote SAP is down, 0x26

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 45

Which statement correctly describes an MSP Aggregation Gateway (MG) function?

A. It aggregates and terminates base station traffic for multiple mobile operators

- B. It resides in the MTSO and terminates BTP transport interfaces at the UNI-MG
- C. It aggregates and delivers cell site traffic to the mobile operator's control elements



D. It terminates the backhaul transport provider's SONET or TDM transport interfaces

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 46

Which statement correctly describes a Point-to-Point (PPP) Multilink Protocol (MP) frame characteristic?

- A. The MP frame header carries the Layer 3 payload fragment offset value
- B. The CLS field identifies the frame's Differentiated Services Code Point (DSCP) value
- C. Only the first fragment in a sequence carries the Layer 3 payload header
- D. The frame's B and E bits indicate payload discard eligibility

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 47

Once an IEEE 1588v2/Precision Time Protocol (PTP) v2 clock is configured and turned up, to which state do the ports transit on first in order to wait for announcements from the Master?

- A. Initial
- B. Listening

C. Slave D. Un-calibrated
Correct Answer: B Section: (none) Explanation
Explanation/Reference:
QUESTION 48 A Synchronization Ethernet (SyncE)/Synchronization Status Message (SSM)-capable node is configured to support the ITU-T G.781 SONET mode. Which SSM code indicates that the node has gone into holdover?
A. QL-DUS B. QL-EEC2 C. QL-STU D. QL-PRS
Correct Answer: B Section: (none) Explanation
Explanation/Reference:
QUESTION 49 Which IEEE 1588v2 two-step clock message allows the slave to calculate a more accurate master-slave offset value than is possible with a one-step clock?
A. Announce B. Delay_Resp C. Follow_Up D. Sync
Correct Answer: C Section: (none) Explanation
Explanation/Reference:

QUESTION 50

Click on the exhibit.

```
ql-selection
ref-order external ref1 ref2
ref1
    source-port 1/1/1
    no shutdown
exit
ref2
    source-port 1/2/7
    no shutdown
    ql-override prs
exit
external
    input-interface
        shutdown
        impedance high-impedance
    exit
```

Considering the configuration shown, and given the following conditions:

- * The 7705 Service Access Router (SAR) is a Precision Time Protocol (PTP) v2 master on domain 1
- * It is configured for the ITU-T G.8265.1 profile
- * ref1 is an Extended Superframe (ESF) DS1 and is qualified
- * The DS1 source indicates in its SSM messages that it is synchronized to a Stratum 3 clock
- * ref2 is a Synchronous Ethernet (SyncE) port and traces its source to a Stratum 1 reference

Which Quality Level will the 7705 SAR master announce to its slave routers?

- A. QL-DUS
- B. QL-EEC2
- C. QL-STU
- D. QL-PRS

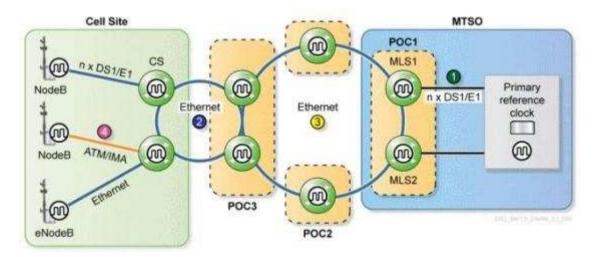
Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 51

Click on the exhibit.

Given the topology shown:



The nodes on ring 3 are Ethernet connected via Point-to-Point links. No external timing sources are available. Which two timing techniques can be used to delivery frequency timing over these Ethernet links? (Choose two.)

- A. IEEE 1588v2/Precision Time Protocol (PTP)
- B. Time Division Multiplexing (TDM) line timing
- C. Synchronous Ethernet (SyncE)

- D. Global Positioning System (GPS)
- E. Adaptive Clock Recovery (ACR)

Correct Answer: AC Section: (none) Explanation

Explanation/Reference:

QUESTION 52

In IEEE 1588v2 two-way synchronization operating mode, which Precision Time Protocol (PTP) message does the slave send to request that the master take and send a second timestamp?

- A. Delay_Req
- B. Delay_Resp
- C. Sync_Req
- D. Follow_Up

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 53

```
ql-selection
ref-order external ref1 ref2
ref1
    source-port 1/1/1
    no shutdown
exit.
ref2
    source-port 1/2/7
    no shutdown
    gl-override prs
exit
external
    input-interface
        shutdown
        impedance high-impedance
    exit
exit
```

Given the configuration shown, and the following conditions:

- The 7705 Service Access Router (SAR) is a PTP master on domain 1
- It is configured for the ITU-T G.8265.1 profile
- ref1 is an Extended Superframe (ESF) DS1 and is qualified
- The DS1 source indicates in its SSM messages that it is synchronized to a Stratum 1 clock
- ref2 is a SyncE port and is qualified

Which Quality Level will the 7705 SAR master announce to its slave routers?

- A. QL-DUS
- B. QL-EEC2
- C. QL-STU
- D. QL-PRS

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 54

A Synchronization Ethernet (SyncE)/Synchronization Status Message (SSM)-capable node is configured to support the ITU-T G.781 SDH mode. Which SSM code indicates that the node has gone into holdover?

A. GL-DNU

B. QL-EEC1

C. QL-SSU-A

D. QL-PRC

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 55

Click on the exhibit.

Given the show command results and the configuration shown:

```
A: POC3-1# show router mpls bypass-tunnel protected-lsp
MPLS Bypass Tunnels
Legend : m - Manual
            d - Dynamic p - P2mp
State Out I/F Out Label Reserved Protected Type
To
                            BW (Kbps) LSP Count
192.0.2.3 Up 1/2/7 131071 0 0
 Protected LSPs -
 No protected LSPs
Bypass Tunnels : 1
path "bypass POC3-2"
        hop 1 192.0.2.0 strict
        no shutdown
      exit
      path "loose"
        no shutdown
      exit
      1sp "bypass POC3-2" bypass-only
        to 192.0.2.3
        primary "bypass POC3-2"
        exit
        no shutdown
      lsp "PoC3-1 PoC3-2"
        to 192.0.2.3
        capf
        fast-reroute one-to-one
        primary "loose"
          include "LOWER"
        exit
        no shutdown
      exit
```

Why did the head end router fail to protect the Label Switch Path (LSP) between POC3-1 and POC3-2 with the configured manual bypass tunnel?

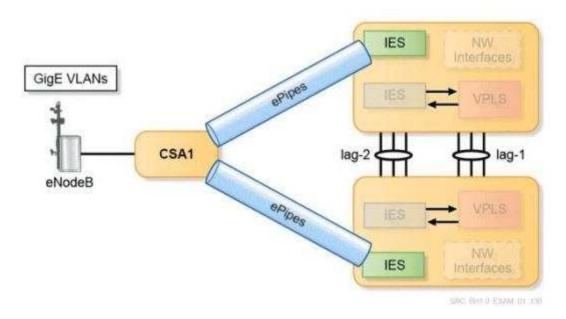
- A. The protected LSP must specify manual bypass required
- B. The bypass tunnel path must explicitly specify each hop to the tail end
- C. The manual bypass LSP must terminate on the bypass path last hop entry
- D. The protected LSP must specify fast reroute facility

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 56

Click on the exhibit.



Given the diagram shown and the following information:

- CSA1 originates a redundant ePipe service
- The ePipe spoke Service Distribution Points (SDPs) terminate on Internet Enhanced Services (ES) configured on each of the two remote PEs.
 The ePipe service Maximum Transmission Unit (MTU) is set to 1518

How must you configure the IES MTUs to ensure that the spoke SDPs become operational on all bound services?

- A. configure the IES service MTU to 1500 bytes
- B. configure the IES interface IP-MTUs to 1504 bytes

- C. configure the IES spoke SDP path MTUs to 1518 bytes
- D. configure the remote PE SDP path MTUs to 1518 bytes

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 57

Click on the exhibit.

Given the local Provider Edge (PE) router configuration shown:

Assuming equal status on both spoke Service Distribution Points (SDPs), how does the local PE router choose the active SDP?

- A. It chooses the first operational spoke SDP
- B. It forwards traffic over both spoke SDPs simultaneously
- C. It chooses the spoke SDP with the lowest numeric SDP ID

D.	It chooses the	spoke SDP	with the	lowest	numeric	VC	ID
----	----------------	-----------	----------	--------	---------	----	----

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 58

Which SAP port and identifier format is correct for use in a cPipe service configured for Structure Agnostic over Packet (SAToP) operation?

- A. 1/1/3.1
- B. 1/2/1:100/200
- C. bundte-ppp-1.1/100
- D. 2/1/4:300

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 59

```
epipe 1 customer 1 create

description "3G_BTS01"
endpoint "epipe1" create
revert-time 1
standby-signaling-master
exit
sap 1/2/1:1 create
exit
spoke-sdp 1:1 endpoint "epipe1" create
precedence 2
exit
spoke-sdp 2:1 endpoint "epipe1" create
exit
no shutdown
```

Given the local Provider Edge (PE) router configuration shown and the following condition:
• All Service Access Points (SAPs) and spoke Service Distribution Points (SDPs) are operational

Which pseudowire status will the local PE router signal for the standby spoke SDP?

A. 0x00, Pseudowire forwarding

B. 0x01, Pseudowire not forwarding

C. 0x20, Pseudowire forwarding Standby

D. 0x21, Pseudowire in standby and not forwarding

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 60

Given the error message shown:

A:NodeA# configure service cpipe 400 customer I create

*A:NodeA>config>service>cpipe\$ spoke-sdp 2:400 create

*A:NodeA>config>service>cpipe>spoke-sdp\$ back

*A:NodeA>config>service>cpipe\$ spoke-sdp 3:400 create

MINOR: SVCMGR #1954 The service cannot support any more SDP bindings

*A:NodeA>config>service>cpipe\$

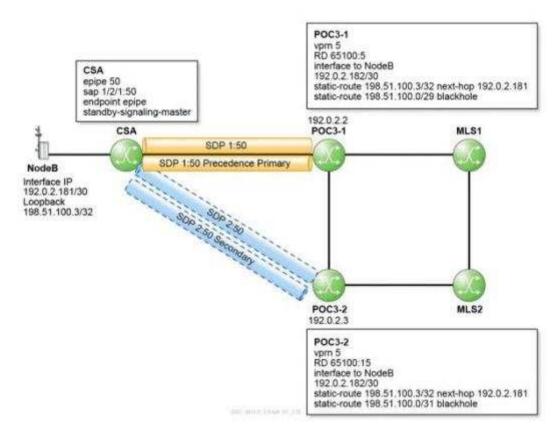
While configuring cPipe 400 on the Switching Provider Edge (S-PE) router, you see the error message shown. What must you do to correct this error?

- A. Delete the service and recreate it using the vc-switching keyword
- B. Delete the spoke-SDP and place it in an explicit endpoint
- C. Delete the spoke-SDP and configure it as type vc-switching when you recreate it
- D. Delete the service and recreate it with Interchassis Backup Pseudowires (ICB-PW)

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 61



Given the diagram and the following information:

- Virtual Private Routed Network (VPRN) 5 spans the routers Point of Concentration (POC) 3-1 and 3-2 and the Multilevel Switch (MLS) routers MLS1 and MLS2
- Multiprotocol Border Gateway Protocol (MP-BGP) is configured and operational



- Pseudowire status is signaled, as shown, on the ePipe/VPRN spoke Service Distribution Points (SDPs)
 Spoke SDP 1:50 has failed and recovered

What command verifies that the two CSA router pseudowires are operational?

- A. show service id 50 active
- B. show service id 50 endpoint
- C. show service id 50 revert-time
- D. show service id 50 sdp

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 62

Service Basic Info	rmation		1042-015 N. P. S.	ALVALOUS HIP-TON			XIIII
Service Id Service Type Description Customer Id Last Status Change	: Epipe : (Not Speci : 1						-
Last Mgmt Change Admin State	: 12/01/2011 : Up : 1514		Oper State	: U	p		
SAP Count	: faise : 1		SDP Bind Co	unt : 3			
Service Access & D	estination P	oints					***
Identifier			Туре	AdmMTU	OprMTU	Adm	Opr
sap:1/2/1:250 sdp:2:250 s(192.0.2.1) sdp:3:250 s(192.0.2.3) sdp:4:250 s(192.0.2.4)			q-tag n/a n/a n/a		1518 1550 1550 1550	Up Up Up	up up

Given the command example shown, and the following information:

- * CSA1 originates a switched ePipe service
- * Each spoke SDP transports traffic to an S-PE
- * Each spoke SDP uses the default spoke precedence value

Which would cause the error message shown when you try to create another spoke SDP binding?

- A. A service can have a total of four endpoint objects across all endpoints
- B. The spoke SDP cannot be added since it would preempt the active spoke SDP
- C. The spoke binding must include the endpoint name as part of its configuration
- D. The new spoke SDP Virtual Circuit (VC)-ID must match the service ID

Correct Answer: A Section: (none)

Explanation

Explanation/Reference:

QUESTION 63

Which SROS aPipe feature transports the entire cell payload and header for a single ATM Virtual Channel (VC)?

- A. N+1 cell mode
- B. vc-type atm-vcc
- C. vc-type atm-vpc
- D. ATM Adaptation Layer (AAL) 5 Service Distribution Unit (SDU) frame mode

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 64

Click on the exhibit

Given the configuration shown:

```
A:NodeA>config>service>apipe# info

description "3G_BTS02"
spoke-sdp 1:200 create
no shutdown
exit
spoke-sdp 3:200 create
no shutdown
exit
no shutdown
exit
no shutdown
```

Which statement correctly describes the aPipe service configuration shown?

- A. Spoke SDP 1:200 is the active pseudowire in normal operations
- B. The service uses the explicit endpoint name "3G_BTS02"
- C. The service needs a SAP to operate
- D. The service switches service traffic between spoke SDPs

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 65

Click on the exhibit.

Given the configuration shown:

```
A:CSA1>config>port>tdm# info

ds1

channel-group 1

encap-type atm

no shutdown

exit

no shutdown

exit
```

Which statement correctly describes the port configuration shown?

- A. All 32 timeslots belong to the channel group
- B. The port is configured for loop timing
- C. The port can host more than one channel group
- D. The channel group is configured for access mode

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 66

Which statement describes a 3rd Generation Partnership Project (3GPP) provided service?

- A. It sets standards for CDMA voice and data communications techniques
- B. It develops the specifications for current LTE network designs and enhancements
- C. It maintains RFCs for Internet applications, protocols, and network management techniques
- D. It sets recommendations for telecom network operations and design

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 67

Which statement describes a Cell Site Aggregator (CSA) function?

- A. It provides control functions for multiple base station technologies
- B. It delivers 2G, 3G, and AG user and control traffic for aggregation at the BTP gateway
- C. It provides the highest aggregation level in the MSP network
- D. It presents a routed interface to the MSP Gateway (MG) router

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 68

How does a Multilink Point-to-Point (ML-PPP) endpoint indicate its desire to implement the Multilink Protocol (MP)?

- A. It sends an endpoint discriminator during the Internet Protocol-Control Protocol (IPCP) negotiations
- B. It sets the Short Sequence Number (SSN) flag in its Link Control Protocol (LCP) messages
- C. It sets the Maximum Received Reconstructed Unit (MRRU) option in its link LCP messages
- D. It sends protocol identifier 0x003d (MP) in its Network Control Protocol (NCP) messages

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 69

Click on the exhibit.

Bundle Summary							
Bundle Id	Type	Admin State	Oper State	Port State	Min Links	Total/ Active	Links
bundle-ppp-1/2.1	mlppp	Up	Down	Link Up	1	3/2	

Upon initial configuration and turn up, what does this show result indicate about the Multilink Point-to-Point (ML-PPP) bundle's current state?

- A. The local or remote Layer 3 interface is operationally down
- B. The number of bundle links has dropped below the minimum threshold
- C. The remote bundle is administratively shut down
- D. PPP Link Control Protocol (LCP) negotiations failed

Correct Answer: A Section: (none)

Explanation

Explanation/Reference:

QUESTION 70

Click on the exhibit.

```
A:MLS1# show port 1/2/1.1.1.1.1
TOM DSG Chan Group
: DSOGRP
Description
Interface
             : 1/2/1.1.1.1.1
TimeSlots
             : 2-32
             : 64
                                                    : 16
Speed
Admin Status : up
                                   Oper Status
                                                    : down
BER SF Link Down : disabled
Last State Change : 11/15/2011 12:26:39
                                   Chan-Grp IfIndex
                                                    : 574652503
Configured mode : access
                                   Encap Type
                                                    : ipcp
                                                    : 1502
Admin MTU
             : 1502
                                   Oper MTU
             : false
Scramble
Physical Link : yes
                                   Bundle Number
                                                    : none
Idle Cycle Flags : flags
                                   Load-balance-algo : Default
Payload Fill Type : n/a
                                   Payload Pattern
                                                   : N/A
Signal Fill Type : n/a
                                   Signal Pattern
                                                    1 N/A
Ing. Pool % Rate : 100
                                   Egr. Pool % Rate
                                                   : 100
Egr. Sched. Pol : N/A
... output truncated
```

Given the following:

- On the OC-3 port, each provisioned channel group contains all available timeslots. The command result illustrates which circuit status?
- A. The DS1 channel group is administratively turned down
- B. The E1 circuit physical link is operationally down
- C. The multilink bundle has no operational member links
- D. The associated Layer 3 interface is operationally down

Correct Answer: D

Section:	(none)
Explanat	tion

Explanation/Reference:

QUESTION 71

Which statement describes the operation of the ITU-T Ethernet Synchronization Messaging Channel (ESMC)?

- A. The ESMC transports time stamped packets for time of day and phase synchronization
- B. The ESMC provides the bit stream upon which the slave clocks set their frequency
- C. The ESMC provides a logical channel through which the slave traces its clock source
- D. The ESMC describes the slave clock's quality and stratum level

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 72

Which IEEE 1588v2/Precision Time Prolocol (PTP) v2 message carries the master clock's characteristics for Best Master Clock Algorithm (BMCA) use?

- A. Sync
- B. Sync__grant
- C. Announce
- D. Delay_Response

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 73

A 7750 Service Router (SR) receives BITS clocking over a Superframe (SF) framed DS1 circuit. Assume SONET mode operation, which quality level does the router associate with this circuit?

- A. QL-DUS
- B. QL-EEC2
- C. QL-SMC
- D. QL-STU



Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 74

As which clock type must an IEEE 1588v2 node operate in order to slave to the Primary Reference Clock (PRC) and serve as a master to downstream nodes?

- A. Boundary
- B. Ordinary Master
- C. Ordinary Slave
- D. Peer-to-peer transparent clock
- E. End-to-end transparent clock

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 75

Which statement correctly describes the IEEE 1588v2 two-way synchronization operating mode?

- A. The slave nodes send Follow_up messages after each Sync message
- B. The slave sets its clock offset based on a pair of received Sync messages
- C. The slave uses two sets of timestamps to calculate its clock offset
- D. The slave verifies the Sync messages with associated Follow_up messages

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 76

Click on the exhibit.

```
ref-order external ref1 ref2
ref1
source-ptp-clock 1
no shutdown
exit
ref2
source-port 1/2/7
no shutdown
exit
external
input-interface
impedance high-impedance
no shutdown
exit
exit
```

Given the configuration shown and the following conditions:

- The external reference is offline
- Reference 1 receives Quality Level (QL) EEC2
 Reference 2 receives QL STU

Which quality level will the SAR router advertise to its Synchronous Ethernet (SyncE) peers?

- A. QL-DUS
- B. QL-EEC2
- C. QL-STU
- D. QL-PRS
- E. QL-UNC

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 77

```
............
echo "IP Configuration"
       interface "CSA1 MLS1"
           address 192.0.2.17/31
           ldp-sync-timer 45
           post 1/2/7
           bfd 500 receive 500 multiplier 3
       exit
       interface "CSA1 MLS2"
           address 192.0.2.19/31
           ldp-sync-timer 60
           port 1/2/8
           bfd 500 receive 500 multiplier 3
       exit
       interface "system"
           address 192.0.2.2/32
       exit
echo "Static Route Configuration"
       static-route 192.0.2.0/32 next-hop 192.0.2.18 preference 10
       static-route 192,0.2.0/32 next-hop 192.0.2.16 bfd-enable ldp-sync
       static-route 192.0.2.1/32 next-hop 192.0.2.16 preference 10
       static-route 192.0.2.1/32 next-hop 192.0.2.18 bfd-enable 1dp-sync
395.50
```

Given the configuration shown, and the following condition:

- The preferred route to prefix 192.0.2.1/32 failed and recovered
- Label Distribution Protocol (LDP) is enabled on the interfaces

Once the primary path recovers, how long will the router hold down the preferred route to prefix 192.0.2.1/32?

- A. 45 seconds
- B. 60 seconds
- C. 35 seconds
- D. 180 seconds

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 78

A Versatile Services Module (VSM) Cross Connect ID (CCID) can bind which service set?

- A. An ePipe and Virtual Private LAN Service (VPLS)
- B. An iPipe and an Internet Enhanced Service (IES)
- C. An ePipe and a Routed-VPLS (R-VPLS)
- D. An iPipe and an R-VPLS

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 79

```
A:MLS1>config>service>vprn# info
   description "3G Voice VPRN"
   router-id 198.51.100.0
   route-distinguisher 65100:2
   interface "L3 VLAN402" create
       description "Cross connect to 3G SM Inner VPLS"
       address 198.51.100.65/27
       vrrp 1
           backup 198.51.100.67
           priority 230
           ping-reply
       exit
       sap 1/1/9:2 create
           exit
A:MLS2>config>service>vprn# info
   description "3G Voice VPRN"
   router-id 198.51.100.1
   route-distinguisher 65100:2
   interface "L3 VLAN402" create
       description "Cross connect to 3G SM Inner VPLS"
       address 198.51.100.66/27
       vrrp 1
           backup 198.51.100.67
           priority 220
           ping-reply
       exit
       sap 1/1/9:2 create
           exit
            exit
```

Given the configurations shown and the following information:

- Multilayer Switch (MLS) 1 and 2 host duplicate Virtual Private Routed Network (VPRN) services.
- Configured on the interfaces L3_VLAN402 is Virtual Router ID (VRID) 1

• All connected Network Control (NC) elements support Address Resolution Protocol (ARP)

Based on the configuration shown, which statement describes the VRIDs expected behavior in normal operations?

- A. MLS2 interface L3 VLAN402 will normally be the VRID's master interface
- B. All traffic egressing the current master interface uses the VRID virtual IP address
- C. The current master will answer ping requests for both its own and the VRID virtual IP address
- D. The current master responds to ARP requests for the virtual IP address with its own Media Access Control (MAC) address

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 80 Click on the exhibit

```
A:MLS1>config>service# info
       vprn 2 customer 1 create
          description "3G Voice VPRN"
           router-id 198.51.100.0
           route-distinguisher 65100:2
           interface "ipipe200" create
               description "MLPPP_BTS02_URC01"
               address 198.51.100.25/30
               san 1/1/9:200 create
               exit
           exit
           no shutdown
       ipipe 200 customer 1 create
           sap 1/1/8:200 create
               ce-address 198.51.100.25
               mac 00:00:00:02:00:01
           exit
           spoke-sdp 1:200 create
               ce-address 198.51.100.24
               no shutdown
           exit
           no shutdown
       exit
```

Given the configuration shown and the following information:

- The Virtual Private Routed Network (VPRN) service 2 interface "ipipe200" cross-connects the VPRN with the IP Interworking Pipe ((Pipe) service 200 SAP 1/1/8:200.
- The iPipe 200 spoke-SDP 1:200 transports traffic to and from the Cell Site Aggregator (CSA) router
- The CSA hosts the far-end iPipe service on which a Multilink Point-to-Point (ML-PPP) bundle SAP is configured

Under the ipipe 200 context, what purpose does the Media Access Control (MAC) "mac 00:00:00:00:01" entry serve?

- A. The iPipe assigns this destination MAC address to all frames exiting on the SAP and targeting the VPRN "ipipe200" interface Internet Protocol (IP) address
- B. The iPipe service verifies that all tunneled frames received from the CE device 198.51.100.24 use the correct source MAC address 00:00:00 02:00:01
- C. The iPipe service verifies and accepts on SAP ingress those unicast frames targeting the destination MAC address 00:00:00:02:00:01
- D. The iPipe assigns destination MAC 00:00:00:02:00:01 to all frames traveling through the service and targeting the CE device destination IP address 198.51.100.24

Correct Answer: C

Section:	(none)
Explanat	ion

Explanation/Reference:

QUESTION 81

Which SAP port and identifier format is correct for use in an aPipe service configured for N=1 cell mode operation?

- A. 1/1/7:2.1
- B. 1/2/1:100/200
- C. 1/2/2.1
- D. 1/1/10:200

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 82

Click on the exhibit

Given the configuration shown:

```
A:NodeA>config>service>cpipe# info

description "2G_BTS03"
endpoint "cpipe" create
exit
sap 1/1/7.1 create
exit
spoke-sdp 1:300 endpoint "cpipe" create
precedence primary
exit
spoke-sdp 2:300 endpoint "cpipe" create
exit
no shutdown
```

What must you configure in the cPipe service to allow it to set the service's payload and jitter buffer sizes?

- A. Configure CEM on the TDM port channel group
- B. Configure CEM on the SAP
- C. Configure the jitter buffer in the base service context
- D. Set the service Maximum Transmission Unit (MTU)

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 83

```
A:POC3-1>config>service>epipe# show router ldp bindings service-id 258 detail
INP ISR IN: 192 8 2 8
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
    S - Status Signaled Up, D - Status Signaled Down
    E - Epipe Service, V - VPLS Service, M - Mirror Service
    A - Apipe Service, F - Fpipe Service, I - IES Service, R - VPRN service
    P - Ipipe Service, WF - Label Withdraw Pending, C - Cpipe Service
    BU - Alternate Next-hop for Fast Re-Route, TLV - (Type, Length: Value)
LDP Service Binding
No. of VC Labels: 2
```

Given the show result shown, and the following information:

• A switched ePipe Virtual Private Wire Service (VPWS) transits the Switching Provider Edge (S-PE) router POC3-1

What condition might cause the spoke Service Distribution Point (SDP) 1 status shown?

- A. The SDP 1 Virtual Circuit (VC-ID) doesn't match that configured on peer 192.0.22
- B. The peer 192.0 2.2 service Maximum Transmission Unit (MTU) is set too

- C. The peer 192.0.2.2 Targeted Label Distribution Protocol (T-LDP) session is down
- D. The two S-PE spoke SDP VC-IDs must match

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 84

You are configuring an ePipe 250 service on the Switching Provider Edge (S-PE) router. After you try to add the second spoke Service Distribution Point (SDP) binding, the router displays the following error message:

A:MLS1>config>service>epipe\$ spoke-sdp 2:250 create MINOR: SVCMGR #1954 The service cannot support any more SDP bindings

How must you correct this error to complete the S-PE configuration?

- A. Change the spoke SDP virtual circuit (VC)-ID and bind it to the service
- B. Create an explicit vc-switching endpoint and add the spoke SDPs to it
- C. Delete the service and recreate it using the vc-switching keyword
- D. Delete the spokes and recreate them using the vc-switching keyword

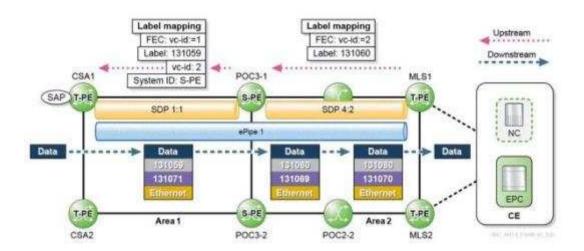
Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 85

Click on the exhibit.

Given the diagram shown:



Which statement correctly describes how the Switching Provider Edge (S-PE) handles Targeted Label Distribution Protocol (T-LDP) messages sent on behalf of the ePipe 1 service?

- A. As soon as the S-PE receives a label from the downstream T-PE it returns its own label to the source
- B. The S-PE appends to T-PE Forwarding Equivalence Class (FEC) messages a pseudowire switching Type-Length-Value (TLV)
- C. The S-PE replaces the T-PE signaled FEC with its own System ID before relaying messages upstream to CSA1
- D. The S-PE adds a label to the stack to indicate to the upstream T-PE that it is an S-PE

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 86

What function does a Backhaul Transport Provider (BTP) Aggregation Gateway (BG) perform in the backhaul transport?

- A. It originates and terminates mobile operator service tunnels
- B. It provides Automatic Protection Switching (APS) protected interfaces to the MTSO NC elements
- C. It presents Layer 3 interfaces to the MG and CSA devices

D. It delivers point-to-point Ethernet or TDM transport to the MSPs

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 87

In a mobile backhaul network, which component belongs to the Backhaul Transport Provider (BTP)?

A. The Metro Ethernet Network (MEN)



- B. The User Network Interface (UNI)-NC
- C. The UNI-BS
- D. The base station access links

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 88

Which payload type set in a SONET-framed OC-3 port creates individual DS1 virtual tributaries?

- A. Virtual Tributary (VT) 1.5
- B. VT2
- C. Virtual Container (VQ-11
- D. VC-12

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 89

Given the following:

• A 3G base station connects to an aPipe service via an Inverse Multiplexing over ATM (IMA) bundle SAP

Which timing technique can deliver a frequency reference from the Cell Site Aggregator (CSA) router to the base station?

- A. Synchronous Ethernet (SyncE)
- B. Adaptive Clock Recovery (ACR)
- C. IEEE 1588v2/Precision Time Protocol (PTP)
- D. Time Division Multiplexing (TDM) line timing

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 90

Which field included in the IEEE 802.3 Organization Specific Slow Protocol (OSSP) message header indicates that the clock quality level has changed?

- A. Quality Level Type-Length-Value (TLV) field
- B. The version field
- C. The ITU subtype field
- D. The Event Flag field

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

