CCIE SP Written Exam, V3.0

1. Which statement about OSPFv3 is true?
A. OSPFv3 neighbor discovery messages can be sourced only from link-local addresses.
B. OSPFv3 authentication is performed using the authentication field in the OSPFv3 packet header.
C. OSPFv3 instance ID is only locally significant.
D. OSPFv3 runs on per subnet basis instead of per-link.
Answer(s): A
2. Which option is the ATM Cell Relay feature that enhances throughtput and uses bandwidth more efficiently?
A. MPLS experimental bit
B. EXP marking match QoS LLD PHB
C. RSVP bandwidth reservation
D. preferred-interface
E. cell packing
Answer(s): E
3. What are the benefits of using TCAM technology in high-end routing products? (Choose two.)
A. Lower power consumption
B. Longer uptime

C. Deterministic performance
D. Lower maintenance cost
E. Simplified configuration
Answer(s): B,C
1. The ASBR-summary LSA is:
A. Generated by the ABR and describes reachabilty to the ASBR for routers in a different area from the ASBR
B. Generated by the ASBR and describes reachabilty to the ABR
C. Generated by the ASBR and describes reachability to itself
D. Generated by the ABR and describes reachabilty to the ASBR for routers in the same area with the ASBR
Answer(s): A
5. Which two IOS commands are equivalents for putting a Cisco 7500 OC-12 RPR interface card nto wrapped mode? Select all that apply
A. srp ips request manual-switched [a b]
B. srp shutdown [a b]
C. shutdown [a b]
Answer(s): A,B
6. A customer is connected to a service provider by a low-speed link and wants to increase the

bandwidth of this connectivity without creating additional IP addresses. Multiple physical links with the same bandwidth value are already available between the customer and the service provider.

Which technology can be used to achieve these requirements?

A. PPTP
B. Frame Relay
C. HDLC
D. Multilink PPP
Answer(s): D
7. What is the default BGP scanner time?
A. 10 minutes
B. 5 minutes
C. 120 seconds
D. 60 seconds
E. 30 minutes
Answer(s): D
8. What protocol is used for Path Setup in MPLS traffic engineering?
A. PIM
B. OSPF
C. BGP
D. ISIS
E. RSVP

Answer(s): E
9. Which two statements best describe EtherChannel? (Choose two).
A. EtherChannel technology helps aggregate traffic grouping multiple, full-duplex point-topoint links together
B. EtherChannel can aggregate up to 800 Mbps,8 Gbps,or 80Gbps of aggregate bandwidth for a Fast EtherChannel, Gigabit EtherChannel,or 10 Gigabit EtherChannel connection respectively.
C. EtherChannel is defined for Rapid Spanning Tree for faster convergence.
D. EtherChannel technology is based on the 802.1 IEEE stand
Answer(s): A,B
10. Which three modes are the operating of HDLC? (Choose three)
A. asynchronous balanced mode (ABM)
B. normal response mode (NRM)
C. normal peer mode (NPM)
D. asynchronous client mode (ACM)
E. asynchronous response mode (ARM)

11. Which statement about MPLS TE Fast Reroute (FRR) link protection operation is not true?

Answer(s): A,B,E

A. It requires a next-hop backup tunnel.
B. The backup tunnel terminates on the same tail-end router as the primary tunnel.
C. The point of local repair (PLR) swaps the label and pushes the backup label.
D. The restoration time is expected to be under 50 ms.
E. The backup tunnel can have associated bandwidth capacity
Answer(s): B
12. A router is unable to route packets over a PPPoE link. What could be the cause of this issue?
A. incorrect IPCP connection for the agreed-upon IP address
B. incorrect dialer map profile
C. incorrect access list
D. incorrect username of the PPP connection
Answer(s): B
13. Which configuration prevents traffic that is sourced from the unique local address scope to be sent out of the link to the upstream service provider?
A. interface ethernet0/0 ipv6 traffic-filter NoULA out! ipv6 access-list NoULA deny ipv6 FC00::/8 any permit ipv6 any any
B. interface ethernet0/0 ipv6 traffic-filter NoULA out! ipv6 access-list NoULA deny ipv6 FC00::/7 any permit ipv6 any any
C. interface ethernet0/0 ipv6 access-group NoULA out! ipv6 access-list NoULA deny ipv6 FC00::/8 any permit ipv6 any any

D. interface ethernet0/0 ipv6 access-group NoULA out! ipv6 access-list NoULA deny ipv6 FC00::/7 any permit ipv6 any any
Answer(s): B
L4. Which two statements about 6RD are true? (Choose two.)
A. Packets between 6RD customer edge devices in the same 6RD domain do not need to traverse the 6RD border relay.
B. The 6RD customer edge device forwards all packets to the 6RD border relay.
C. The 6RD customer edge device can forward packets destined to other 6RD customer edge devices outside the local 6RD domain without traversing the 6RD border relay.
D. Packets received from a 6RD domain can easily be identified as such on the IPv6 Internet.
E. The entry point into the local 6RD domain is deterministic.
Answer(s): A,E
L5. A router is able to assign labels to the prefixes and MPLS is enabled on all of the router nterfaces. However, this router is unable to establish an LDP session with its LDP neighbors. What could be the cause of this problem?
A. ip cef is not enabled.
B. LIB has no label.
C. The LDP router ID is unreachable.
D. mpls ip is missing in the global configuration mode.
Answer(s): C
L6. SONET's three layers arE. (Choose three.)

A. DS1
B. Frame
C. Path
D. Line
E. Section
Answer(s): C,D,E
17. Which E3 alarm indicates that there could be an issue with the transmit signal with the local equipment?
A. txLoF
B. rxRAI
C. rxLoF
D. rxLoS
E. txRAI
F. txLoS
Answer(s): B
18. Which statement is FALSE concerning Concatenation?
A. Concatenation activity on an interface can be checked by the show controller counters command
B. It reduces upstream data throughput.
C. It can be enabled/disabled from CMTS on per upstream port basis if desired

D. It allows ITCM to send multiple upstream packets in one single large burst.
Answer(s): B
19. In the Apache Web Server configuration, the command KeepAlive ON is used to
A. Allow the use of HTTP HEAD request
B. Allow a connection to be closed with a TCP RESET
C. Allow a CSS to probe the server
D. Allow persistent connections
Answer(s): D
20. Which two statements about a backup tunnel to avoid the SRLGs of its protected interface are true? (Choose two.)
A. If it is not possible to avoid SRLG of the protected interface, backup tunnel will be created anyways.
B. Tunnel is not created unless it avoids SRLGs on the protected interface.
C. If it is not possible to avoid SRLG of the protected interface, backup tunnel will not be created.
D. Manually created backup tunnel do automatically avoid SRLG of protected interfaces.
E. Backup tunnel can be created between IGP areas as long as SRLG is configured along the path.
Answer(s): A,B