

## H12-221 Dumps

### HCNP-R&S-IERN (Huawei Certified Network Professional- Implementing Enterprise Routing Network)

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#### NEW QUESTION 1

Which statements about OSPF packets are true? (Select 3 answers)

- A. Hello packets can be sent after OSPF is enabled on an interface.
- B. LS Request packets are sent only after an adjacency is established.
- C. LS Update packets contain detailed LSA information for LSDB synchronization.
- D. LS Update packets are sent only after an adjacency is established.

**Answer:** ABC

#### NEW QUESTION 2

Which of the following statements regarding multicast MAC addresses are true (Select 3 answers)

- A. The high-order 24 bits of a multicast MAC address are 0x01005e while the low-order 23 bits of a multicast MAC address are the low-order 23 bits of a multicast IP address.
- B. One multicast MAC address can map 32 different IP multicast addresses.
- C. Multicast MAC addresses are used in the link layer to identify receivers that are in the same multicast group.
- D. One multicast MAC address can map only one IP multicast address.

**Answer:** ABC

#### NEW QUESTION 3

Which of the following are OSPF message types? (Select 4 answers)

- A. Hello
- B. Database Description
- C. Link-State Request
- D. Link-State Update
- E. Link-State Advertisement

**Answer:** ABCD

#### NEW QUESTION 4

Which of the following connection types can a Router LSA describe? (Select 3 answers)

- A. Point-to-point
- B. Star
- C. Transit
- D. Virtual link

**Answer:** ACD

#### NEW QUESTION 5

What is the maximum number of hosts that a network segment 192.168.2.16/28 can support?

- A. 16
- B. 8
- C. 15
- D. 14
- E. 7

**Answer:** D

#### NEW QUESTION 6

How many multicast IP addresses can be represented by an IP multicast MAC address?

- A. 1
- B. 23
- C. 32
- D. 24

**Answer:** C

#### NEW QUESTION 7

Which of the following elements are used to describe a single link in OSPF routing protocol? (Select 3 answers)

- A. Link ID
- B. Data
- C. Network Mask
- D. Metric

**Answer:** ABD

**NEW QUESTION 8**

Which of the following statements are true? (Select 3 answers)

- A. The neighbor state can transition from "Down" to "Exchange".
- B. The neighbor state can transition from "Down" to "Init".
- C. The neighbor state can transition from "Init" to "Exstart".
- D. The neighbor state can transition from "Init" to "2-Way".

**Answer:** BCD

**NEW QUESTION 9**

Which of the following statements are correct regarding OSPF intra-area route calculation?(Select 2 answers)

- A. Each OSPF router uses only one Router LSA to describe the local active link state for an area.
- B. Each OSPF router uses more than one Router LSA to describe local active link state for an area.
- C. One Router LSA describes only one link,
- D. One Router LSA describes more than one link.

**Answer:** AD

**NEW QUESTION 10**

Which of the following BGP attributes are well known mandatory attributes? (Select 3 answers)

- A. ORIGIN
- B. AS\_PATH
- C. NEXT\_HOP
- D. MED
- E. LOCAL\_PREF
- F. COMMUNITY

**Answer:** ABC

**NEW QUESTION 10**

Which of the following BGP attributes cannot be advertised to other neighboring AS?

- A. LOCAL\_PREF
- B. AS\_PATH
- C. COMMUNITY
- D. ORIGIN

**Answer:** A

**NEW QUESTION 11**

Which of the following is a private AS number?

- A. 65410-65535
- B. 1-64511
- C. 64512-65535
- D. 64511-65535

**Answer:** C

**NEW QUESTION 14**

Routes 172.1.12.0/24, 172.1.13.0/24, 172.1.14.0/24, and 172.1.15.0/24 can be summarized into route 172.1.8.0/21.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 19**

Which statement regarding BGP is false?

- A. BGP runs over TCP.
- B. BGP is an enhanced distance-vector routing protocol.
- C. BGP uses port number 189.
- D. BGP is an inter-AS routing protocol.

**Answer:** C

**NEW QUESTION 24**

Which of the following BGP filters can be used to set route attributes?

- A. Ip-prefix
- B. Route-policy

- C. As-path-filer
- D. Community-filter

**Answer:** B

**NEW QUESTION 25**

According to BGP route selection rules, a local route that is automatically summarized takes precedence over a local route that is manually summarized.

- A. TRUE
- B. FALSE

**Answer:** B

**NEW QUESTION 26**

A OSPF network may be structured, or subdivided into routing areas. Such routing areas are a set of network segments.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 29**

Whenever changes occur in the BGP routing table, a BGP Speaker advertises all the optimal routes in the BGP routing table to its peers.

- A. TRUE
- B. FALSE

**Answer:** B

**NEW QUESTION 30**

A company reserves the network segment 172.29.100.0/26 for some remote small-scale sites. Each site has 5 IP devices to connect to this network segment. Which of these Variable Length Subnet Masks (VLSMs) can be used to accommodate the need for minimum number of hosts?

- A. /27
- B. /28
- C. /29
- D. /30

**Answer:** C

**NEW QUESTION 33**

Which of the following statements about a neighbor state machine is true?

- A. The Attempt state appears only on an NBMA network or a broadcast network.
- B. The Attempt state appears only on an NBMA network or a P2MP network.
- C. LSR packets can be sent in the Exchange state.
- D. The Full state indicates that LSDB synchronization is complet
- E. No LSDB information will be exchanged.

**Answer:** C

**NEW QUESTION 36**

BGP speakers sends which type of message to identify its peer's AS number information?

- A. Route-refresh
- B. Open
- C. Keepalive
- D. Update

**Answer:** B

**NEW QUESTION 37**

ACL rules are matched based on the configured order only.

- A. TRUE
- B. FALSE

**Answer:** B

**NEW QUESTION 38**

Route filtering can filter not only routing information but also link-state information.

- A. TRUE
- B. FALSE

**Answer:** B

**NEW QUESTION 41**

Why is BGP run by core routers in transit AS?

- A. To eliminate route loops
- B. To ensure the transmission of data packets to the external destination addresses
- C. To optimize network within an AS
- D. To ensure only one export

**Answer:** B

**NEW QUESTION 46**

To which attribute type does the BGP AS-Path attribute belong?

- A. Well -known Mandatory
- B. Well-known Discretionary
- C. Optional Transitive
- D. Optional Non-transitive

**Answer:** A

**NEW QUESTION 51**

The most remarkable characteristic of OSPF is that it can support the link-state algorithm.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 54**

Which of the following parameters are optional when configuring a BGP peer? (Select 2 answers)

- A. IP address
- B. Description
- C. Password
- D. AS-number

**Answer:** BC

**NEW QUESTION 58**

By default, the cost of an OSPF interface is calculated based on the bandwidth. The formula to calculate the cost is reference bandwidth/interface bandwidth.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 60**

A router can be configured to run only one BGP routing process.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 62**

Which statement about OSPF is false?

- A. Hello messages are used as a form of greeting to discover other routers on its networks and establish relationships between neighboring device
- B. On broadcast or NBMA networks, Hello messages can also be used to elect a DR or a BDR.
- C. DD packets describe the summary LSDB information by carrying LSA headers.
- D. The intervals at which two routers send Hello messages must be consistent; otherwise, cannot be established relationships between neighboring devices.
- E. DD packets contain headers of all LSAs for periodic LSDB synchronization between OSPF neighbors.

**Answer:** D

**NEW QUESTION 64**

The Internet Group Management Protocol (IGMP) runs between hosts and their immediately neighboring multicast routers.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 65**

What does the IP-prefix-filter "ip ip-prefix test index 10 deny 0.0.0.0 0 less-equal 32" mean?

- A. Matching only default routes
- B. Matching all routes
- C. Denying only default routes
- D. Denying all routes

**Answer:** D

**NEW QUESTION 68**

An IP address 192.168.13.175 with the subnet mask 255.255.255.240 can be assigned to a device.

- A. TRUE
- B. FALSE

**Answer:** B

**NEW QUESTION 69**

Which command triggers the advertisement of BGP routes without interrupting a BGP connection?

- A. Reset bgp
- B. Refresh bgp all external
- C. Refresh bgp all internal
- D. RR-filter

**Answer:** B

**NEW QUESTION 72**

Which of the following statements regarding an AS-external-LSA are true? (Select 3 answers)

- A. The Link State ID field specifies the network segment address of an advertised destination.
- B. The Advertising Router field specifies the Router ID of an ASBR.
- C. The Net mask field specifies the network mask of an advertised destination.
- D. The Link State ID together with Advertising Router fields are used to uniquely identify an AS-external-LSA.

**Answer:** ABC

**NEW QUESTION 73**

How does community attribute of the BGP route set by routing policies affect route selection?

- A. The Community attribute directly affects route selection because it must be compared during the route selection process.
- B. The Community attribute does not affect route selection because it is non-transitive and cannot be transmitted between routers.
- C. Routes are classified by the Community attribute which indirectly affects route selection
- D. Different route attributes such as the Local-Preference and MED values can be set for routes in different communities.

**Answer:** C

**NEW QUESTION 74**

The bandwidth-reference parameter is measured in Mbit/s.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 75**

Which of the following conditions must be met for importing routes into BGP using the network command? (Select 2 answers)

- A. The routes must be optimal in the IP routing table.
- B. The routes do not need to match the specified mask length.
- C. The routes must match the specified mask length.
- D. The routes must be IGP routes.

**Answer:** AC

**NEW QUESTION 79**

BGP peers are automatically discovered by exchanging multicast packets.

- A. TRUE
- B. FALSE

**Answer:** B

**NEW QUESTION 83**

The ABR in a Totally Stubby area will not advertise Type-3, Type-4, and Type-5 LSAs into the Totally Stubby area. Instead, the ABR will advertise a default route to the Totally Stubby area enabling packet forwarding to other destinations.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 88**

Which of the following are well-known communities attributes? (Select 3 answers)

- A. NO\_EXPORT (0xFFFFFF0)
- B. NO\_ADVERTISE (0xFFFFFF02)
- C. NO\_EXPORT\_SUBCONFED
- D. AS (2Byte): Number (2Byte)

**Answer:** ABC

**NEW QUESTION 89**

Which of the following commands is used to display check information about the IGMP enabled interface?

- A. [Quidway]show ip igmp interface
- B. [Quidway]display igmp interface
- C. [Quidway]show ip igmp
- D. [Quidway]display ip interface

**Answer:** B

**NEW QUESTION 94**

Which of the following statements regarding stub areas is false?

- A. An AS-external-LSA cannot be advertised into a stub area.
- B. The ABR in the stub area generates a default route to enable packet forwarding destined for other areas.
- C. Transit area cannot be a stub area.
- D. Any area can be configured as a Stub area.

**Answer:** D

**NEW QUESTION 95**

Which of the following statements is false?

- A. The Type-1 external metric is the sum of the external metric and the internal cost to reach an ASBR.
- B. The Type-2 external metric uses only the AS external metric.
- C. The metric of an external route is the sum of the AS external metric and the AS internal metric.
- D. The effects of setting Forwarding Address to a non-zero value is that the next hop of the external route imported into OSPF is within the OSPF routing area.

**Answer:** C

**NEW QUESTION 99**

The route selection tool route-policy" can set and filter BGP attributes based on pre-defined conditions. Therefore, this tool is often used to define policies towards a BGP peer or during route generation.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 101**

Policy-based routing and routing policies implements the forwarding of data packets in different ways: A routing policy mainly controls packet forwarding. According to the routing policy, packets can be forwarded without a routing table; Policy-based routing mainly controls the importing, advertising, and receiving of routing information.

- A. TRUE
- B. FALSE

**Answer:** B

**NEW QUESTION 105**

Which of the following tools cannot be used for route filtering?

- A. Filter-policy
- B. IP-prefix
- C. Route-policy
- D. Policy-based-route

**Answer:** D

**NEW QUESTION 106**

<Quidway>dis igmp group verbose IGMP interface group report information Ethernet6/1/0(10.1.1.1):

Total 1 IGMP Group reported Group: 225.0.0.1

Uptime: 00:09:03

Expires: 00:02:09

Last reporter: 10.1.1.30

Last-member-query-counter: 0

Last-member-query -timer-expiry: off Group mode: exclude

Version1-host-present-timer-expiry: off Version2-host-present-timer-expiry: 00:02:09

The preceding information is generated after a router receives a Report message from group 225.0.0.1 through Ethernet 6/1/0. Which type of Report message will not be processed by the router?

- A. IS\_IN
- B. ALLOW
- C. BLOCK

**Answer:** C

**NEW QUESTION 107**

Which of these addresses are reserved for use by multicast applications?

- A. Class A
- B. Class B
- C. Class E
- D. Class D

**Answer:** D

**NEW QUESTION 112**

Which of the statements describes how BGP updates routes?

- A. Broadcasts all routes periodically
- B. Update all routes periodically using multicast addresses
- C. Updates only changed and new routes
- D. Updates routes on BGP peer requests

**Answer:** C

**NEW QUESTION 116**

Which of the following statements are incorrect regarding Link ID of Router LSA in an OSPF routing protocol? (Select 2 answers)

- A. The Link ID of point-to-point links are the neighbors Interface IP address.
- B. The Link ID of TransNet links are the network address of TransNet network segment.
- C. The Link ID of StubNet links are the network address of stub network.
- D. The Link ID of virtual links are the neighbor's Router ID of virtual link.

**Answer:** AB

**NEW QUESTION 119**

BGP is an exterior gateway protocol which runs between ASs. It focuses on the control of route propagation and selection of optimal routes rather than discovery and calculation of routes.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 123**

Which of the following statements about OSPF neighbor state transition are true? (Select 3 answers)

- A. The neighbor state transitions from "Loading" to "Full" when a LoadingDone event occurs.
- B. The neighbor state transitions from the "Exstart" to "full" when a Negotiation Done event occurs.
- C. The neighbor state transitions from the "Exchange" to "Full" when an ExchangeDone event occurs.
- D. The neighbor state transitions from "Exchange" to "Loading when an ExchangeDone event occurs.

**Answer:** ACD

**NEW QUESTION 128**

Which of the following messages exist only in PIM-SM? (Select 2 answers)

- A. Join/Prune
- B. Assert
- C. Bootstrap

D. Register

**Answer:** CD

**NEW QUESTION 133**

How many Class C networks does the summarized route 192.168.134.0/22 cover?

- A. 2
- B. 4
- C. 8
- D. 16

**Answer:** B

**NEW QUESTION 135**

Which of the following route entries matches ACL 2001 that is defined below? 1.0.0.0/8 , 1.2.0.0/16, 1.2.3.0/24, 1.2.4.0/24, 1.2.5.0/24, 1.2.6.0/24, 1.2.7.0/24, 1.2.8.0/24 ACL 2001:

Basic ACL 2001, 1 rule Ad's step is 5

rule 0 permit source 1.2.1.0 0.0.254.255

- A. 1.2.3.0/24, 1.2.4.0/24, 1.2.5.0/24, 1.2.6.0/24, 1.2.7.0/24, 1.2.8.0/24
- B. 1.0.0.0/8, 1.2.0.0/16, 1.2.3.0/24, 1.2.4.0/24, 1.2.5.0/24, 1.2.6.0/24, 1.2.7.0/24, 1.2.8.0/24
- C. 1.2.3.0/24, 1.2.5.0/24, 1.2.7.0/24
- D. 1.2.0.0/16, 1.2.4.0/24, 1.2.6.0/24, 1.2.8.0/24

**Answer:** C

**NEW QUESTION 140**

Assume that the following commands are run to configure BGP

timer keepalive 30 hold 90

peer 1.1.1.2 timer keepalive 10 hold 30

Which statements regarding the configuration are true?(Select 2 answers)

- A. A global configuration is preferred
- B. Therefore, the timer values for peer 1.1.1.2 are "keepalive 30 hold 90."
- C. A peer configuration is preferred
- D. Therefore, the timer values for peer 1.1.1.2 are "keepalive 10 hold 30."
- E. The smaller value between the global and peer timer values is chosen
- F. Therefore, the timer values for peer 1.1.1.2 are "keepalive 10 hold 30".
- G. The default configuration is "timer keepalive 60 hold 180." Therefore, peer 1.1.1.2 can detect connection faults faster than the default configuration.

**Answer:** BD

**NEW QUESTION 145**

If the subnet mask for Class A address is 255.255.240.0, how many bits are used for subnetting?

- A. 4
- B. 5
- C. 9
- D. 12

**Answer:** D

**NEW QUESTION 148**

Which of the following is used to avoid routing loops in BGP?

- A. Use ORIGIN attribute to record the origin of the route.
- B. Use AS\_PATH attribute to record all AS areas that a route passes.
- C. Use NEXT\_HOP attribute to record next hop path
- D. Use MED attribute to influence export selection of other ASs

**Answer:** B

**NEW QUESTION 152**

Which parameters are carried in a BGP Open message? (Select 3 answers)

- A. Local AS number
- B. BGP ID
- C. Keepalive timer
- D. Hold timer
- E. Current peer status

**Answer:** ABD

**NEW QUESTION 156**

Which of the following statements is false?

- A. An ABR maintains a separate LSDB for each area it is attached to
- B. ABRs have multiple LSDBs.
- C. Metric, an ASE LSA parameter, can be specified when an external route is imported with 1 as its default value.
- D. The externally-derived routing information carries a tag for transmitting additional information of the route which is commonly used in a routing policy
- E. The default value of the Tag label is 0.
- F. The Link State ID is the Router ID of the ASBR for type 4 LSAs.

**Answer:** C

#### NEW QUESTION 159

What is the link-state ID of an ASBR-Summary-LSA?

- A. The OSPF Router ID of an LSA's originator
- B. The Interface IP address of the DR on the described network segment
- C. The address of the described network segment
- D. The Router ID of the described ASBR

**Answer:** D

#### NEW QUESTION 161

Which of the following is not supported by policy-based routing for specifying the data forwarding path?

- A. Source address
- B. Port number
- C. Destination address
- D. Packet length

**Answer:** B

#### NEW QUESTION 166

In VRP, by default, a BGP router does not automatically send a refresh packet to its BGP peers for retransmitting an Update packet after the inbound routing policy of the BGP peers changes.

- A. TRUE
- B. FALSE

**Answer:** B

#### NEW QUESTION 170

Which of the following statements regarding RPs are true? (Select 3 answers)

- A. Different group addresses on a PIM-SM network corresponds to different RPs.
- B. An RP is the root of an RFT
- C. An RP is elected out of BSRs.
- D. All routers on a PIM-SM network must automatically discover the location of RPs.

**Answer:** ABD

#### NEW QUESTION 171

Which of the following statements regarding comparison between ACL and IP-Prefix are true? (Select 2 answers)

- A. Both ACL and IP-Prefix can perform route filtering
- B. Both ACL and IP-Prefix can perform data packet filtering
- C. ACL can perform data packet filtering and route filtering, but IP-Prefix can only perform route filtering
- D. IP-Prefix can perform data packet filtering and route filtering, but ACL can only perform route filtering

**Answer:** AC

#### NEW QUESTION 176

Which of the following statements regarding DR in PIM protocol are true? (Select 3 answers)

- A. In DR election, the router with the lowest IP address is elected among the routers of the same DR priority..
- B. A source's DR sends Register messages to an RP.
- C. A receiver's DR sends Join messages to a multicast source or an RP.
- D. An Assert winner on a shared network segment may not be a DR.

**Answer:** BCD

#### NEW QUESTION 180

Which of the following route entries match the IP-Prefix defined below?

```
ip ip-prefix test index 10 permit 192.168.0.0 16 greater-equal 24 less-equal 28
```

(Select 2 answers)

- A. 192.168.1.0/24
- B. 192.10.2.0/24
- C. 192.168.3.0/25
- D. 192.168.4.0/30

**Answer:** AC

**NEW QUESTION 185**

Which of the following statements are correct regarding OSPF Network LSAs? (Select 2 answers)

- A. Network LSAs are generated by ABR.
- B. Only the router which is connected to NBMA or Broadcast Network may generate Network LSAs.
- C. DR uses Network LSAs to describe routers that have established adjacency with it in the network,
- D. Network LSAs are flooded in the entire AS.

**Answer:** BC

**NEW QUESTION 189**

What are the differences between the IGMP versions 1, 2 & 3? (Select 2 answers)

- A. IGMPv1/v2 cannot elect devices which may send queries but IGMPv3 can.
- B. IGMPv2/v3 members can actively leave groups, whereas in IGMPv1 members cannot
- C. IGMPv1/v2 do not support the SSM service model but IGMPv3 does.
- D. IGMPv1/v2 do not support group-specific queries but IGMPv3 does.

**Answer:** BC

**NEW QUESTION 190**

Which is the origin attribute of the BGP routes redistributed using the import-route command?

- A. IGP
- B. EGP
- C. Incomplete
- D. Unknown

**Answer:** C

**NEW QUESTION 195**

Which of the following routers can initiate SFT switchover on a PIM-SM network? (Select 2 answers)

- A. Last-hop router
- B. Intermediate router
- C. RP
- D. Source's DR

**Answer:** AC

**NEW QUESTION 199**

Which of the following multicast protocols can generate multicast distribution trees?

- A. MBGP
- B. MSDP
- C. IGMP
- D. PIM

**Answer:** D

**NEW QUESTION 203**

If there are two BGP routes with the same destination address but different next hops in a BGP routing table, then which statement regarding the two BGP routes is true?

- A. Both BGP routes are advertised to other BGP peers.
- B. Only the optimal route between the two is advertised to other BGP peers.

**Answer:** B

**NEW QUESTION 208**

Which of these statements is false when using the import-route command to import routes into BGP?

- A. The import-route command can import IGP routes, direct routes, and static routes into BGP.
- B. A process ID must be specified if OSPF routes or RIP routes are imported into BGP.
- C. By default, the origin attribute of imported routes is IGP.
- D. Routing policies filters the routes imported from other routing protocols.

**Answer:** C

**NEW QUESTION 211**

Which of the following statements regarding a multicast distribution tree are true? (Select 3 answers)

- A. Multicast distribution trees are classified into two types: SFT and RPT.
- B. The PIM-SM protocol can generate both RFTs and SPTs.
- C. The PIM-55M protocol can generate only SFTs.
- D. The PIM-DM protocol can generate both RFTs and SFTs.

**Answer:** ABC

**NEW QUESTION 212**

What is the mask value for the network 175.25.128.0/19?

- A. 255.255.0.0
- B. 255.255.224.0
- C. 255.255.24.0
- D. Different based on the address type

**Answer:** B

**NEW QUESTION 216**

What is the default LOCAL\_PREF and PREFERRED-VALUE assigned to routes in a VRP system?

- A. 0,32768
- B. 100,0
- C. 255,100
- D. 32768,0

**Answer:** B

**NEW QUESTION 217**

An OSPF neighbor relationship fails to establish and the OSPF error information is displayed as follows. Which of the following is most likely the cause?

```
[RTB]display ospf error
      OSPF Process 1 with Router ID 2.2.2.2
      OSPF error statistics:
General packet errors:
0   : IP: received my own packet    0   : Bad packet
0   : Bad version                  0   : Bad checksum
0   : Bad area id                  0   : Drop on unnumbered interface
0   : Bad virtual link             0   : Bad authentication type
0   : Bad authentication key       0   : Packet too small
0   : Packet size > ip length      0   : Transmit error
0   : Interface down              0   : Unknown neighbor
HELLO packet errors:
0   : Netmask mismatch            0   : Hello timer mismatch
0   : Dead timer mismatch        0   : Extern option mismatch
9   : Router id confusion        0   : Virtual neighbor unknown
0   : NBMA neighbor unknown
DD packet errors:
0   : Neighbor state low          0   : Router id confusion
0   : Extern option mismatch      0   : Unknown LSA type
0   : MTU option mismatch
LS ACK packet errors:
0   : Neighbor state low          0   : Bad ack
0   : Duplicate ack              0   : Unknown LSA type
LS REQ packet errors:
0   : Neighbor state low          0   : Empty request
0   : Bad request
LS UPD packet errors:
0   : Neighbor state low          0   : Newer self-generate LSA
0   : LSA checksum bad           0   : Received less recent LSA
0   : Unknown LSA type
Opaque errors:
0   : 9-out of flooding scope     0   : 10-out of flooding scope
0   : 11-out of flooding scope
Retransmission for packet over Limitation errors:
0   : Number for DD Packet        0   : Number for Update Packet
0   : Number for Request Packet
Receive Grace LSA errors:
0   : Number of invalid LSAs      0   : Number of policy failed LSAs
0   : Number of wrong period LSAs
Configuration errors:
0   : Tunnel cost mistake
0   : The network type of the neighboring interface is not consistent.
```

- A. Router IDs conflict.
- B. Area IDs are mismatched.
- C. Network masks are inconsistent.
- D. Authentication types are inconsistent.

**Answer:** A

#### NEW QUESTION 219

Which of the following situations will occur when the command "multicast load balancing" is configured? (Select 3 answers)

- A. If there exists no unicast equal-cost routes, multicast load balancing fails.
- B. If group address-based load splitting is employed, balanced distribution of entries over equal-cost routes cannot be ensured due to hash function limitations.
- C. Balanced distribution of entries over equal-cost routes can be ensured as long as multicast load balancing is performed.
- D. During multicast load splitting, traffic may not be balanced among equal-cost routes because multicast load balancing is based on multicast entries not multicast data packets.

**Answer:** ABD

#### NEW QUESTION 223

Which of the following statements are correct regarding how OSPF detects old or duplicate LSAs? (Select 3 answers)

- A. The lower the sequence number, the more recent the LSA.
- B. The smaller the LS age, the more recent the LSA.
- C. A router uses 0x80000001 as the sequence number when it generates the first LSA.
- D. An LSA can be flushed from the routing domain by setting its LS age to equal the MaxAge.

**Answer:** BCD

**NEW QUESTION 225**

Based on BGP route selection rules, how are Origin attributes listed in descending order of priority?

- A. EGP > IGP > Incomplete
- B. IGP > Incomplete > EGP
- C. Incomplete > EGP > IGP
- D. IGP > EGP > Incomplete

**Answer:** D

**NEW QUESTION 229**

Which of the following protocols support the multicast ASM service model? (Select 2 answers)

- A. PIM-SM and IGMFV2
- B. PIM-SSM and IGMPv3
- C. BGPandOSPF
- D. PIM-DM and IGMPv2

**Answer:** AD

**NEW QUESTION 231**

Given a Class B network 155.16.0.0 with the mask 255.255.255.192, what is the maximum number of subnets that can be created, and what is the maximum number of hosts available within each created subnet?

- A. 512 126
- B. 1024 64
- C. 1024 62
- D. 256 254
- E. 192 254

**Answer:** C

**NEW QUESTION 236**

What is the network address for the IP address 190.233.27.13/16?

- A. 190.0.0.0
- B. 190.233.0.0
- C. 190.233.27.0
- D. 190.233.27.1

**Answer:** B

**NEW QUESTION 237**

Which of the following statements regarding the features of VLSM are true? (Select 2 answers)

- A. VLSM supports both IPv4 and IPv6.
- B. VLSM supports overlapping address ranges.
- C. VLSM allows for summarization of routes
- D. VLSM can divide a subnet into smaller subnets.

**Answer:** CD

**NEW QUESTION 242**

How many hosts can the network 154.27.0.0 support, if not subnetted?

- A. 254
- B. 1024
- C. 65,534
- D. 16,777,206

**Answer:** C

**NEW QUESTION 243**

The defined route-policy set-cost configurations are: ip ip-prefix 1 permit 10.1.0.0 16  
route-policy Set-cost permit node 10 if-match ip-prefix 1  
apply cost 300  
route-policy Set-cost permit node 20 apply cost 200  
Which of the following statements is true?

- A. The route 10.1.0.0/16 matches node 10 and its cost is set to 300.
- B. The route 10.1.0.0/16 matching node 10 also matches node 20 and its final cost is set to 200.
- C. Costs of all routes will be set to 200.
- D. All routes that fail to match node 10 will be denied.

**Answer:** A

**NEW QUESTION 247**

Which of the following elements are used by Network LSA to describe broadcast or NBMA network segments in OSPF routing protocol? (Select 3 answers)

- A. Link ID
- B. Net mask
- C. Attached Router list
- D. Metric

**Answer:** ABC

**NEW QUESTION 249**

OSPF directly runs over the IP protocol as protocol number 89.

- A. TRUE
- B. FALSE

**Answer:** A

**NEW QUESTION 250**

Which session is established between BGP peers?

- A. Telnet
- B. Send Hello packet
- C. UDP
- D. TCP

**Answer:** D

**NEW QUESTION 255**

Which of the following network link type is not the basic network link type defined in OSPF?

- A. P2P
- B. P2MP
- C. Broadcast
- D. Virtual link

**Answer:** D

**NEW QUESTION 258**

The default-route originate command in the RIP protocol advertises a default RIP route to the peers. When using this command, which of the following attributes can be set for the default route?

- A. Tag
- B. Cost
- C. Interface
- D. Nexthop

**Answer:** B

**NEW QUESTION 259**

Which of the following statements is false? [RTA]display ospf peer  
OSPF Process 1 with Router ID 1.1.1.1 Neighbors  
Area 0.0.0.0 interface 10.1.1.1(Ethernet0/0)'s neighbor(s) RouterID: 2.2.2.2 Address: 10.1.1.2  
State: Full Mode: Nbr is Master Priority: 1 DR: 10.1.1.1 BDR: 10.1.1.2  
Dead timer expires in 35s Neighbor has been up for 04:35:02

- A. The OSPF Router ID of the local router is 1.1.1.1.
- B. The OSPF Router ID of the neighbor is 2.2.2.2.
- C. The OSPF Router ID of the neighbor is larger and thus the neighbor acts as a DR.
- D. The local router acts as slave.

**Answer:** C

**NEW QUESTION 260**

What is the function of well-known community attribute NO\_EXPORT\_SUBCONFED in BGP?

- A. Routes received carrying this value cannot be advertised outside of the confederation.
- B. Routes received carrying this value cannot be advertised to any BGP peers.
- C. Routes received carrying this value cannot be advertised to any EBGP peers.
- D. All above statements are wrong

**Answer:** C

**NEW QUESTION 263**

Which statements regarding BGP well-known mandatory attributes are true? (Select 3 answers)

- A. Well-known mandatory attributes must be recognized by all BGP routers.
- B. Well-known mandatory attributes impacts the path decision process.
- C. Well-known mandatory attributes are optional in an Update packet, and can be included in an Update packet as needed.
- D. Well-known mandatory attributes must be included in all Update packets.

**Answer:** ABD

#### NEW QUESTION 264

A company has four departments. Department A has 80 PCs, Departments B and C both have 20 PCs, and Department D has 30 PCs. Assuming the IP address 192.168.1.0/x is used, which of the following statements are true if the VLSM technology is employed for subnetting? (Select 2 answers)

- A. Plan subnet 192.168.1.0/25 for Department
- B. The range of host addresses is 1 to 126.
- C. Plan subnet 192.168.1.128/27 for Department
- D. The range of host addresses is 129 to 159.
- E. Plan subnet 192.168.1.160/27 for Department
- F. The range of host addresses is 161 to 190.
- G. Plan subnet 192.168.1.192/27 for Department
- H. The range of host addresses is 192 to 222.

**Answer:** AC

#### NEW QUESTION 266

Only Router-LSAs and Network-LSAs are involved in intra-area route calculations.

- A. TRUE
- B. FALSE

**Answer:** A

#### NEW QUESTION 269

ABR of a Stub area does not flood Type-5 and Type-4 LSAs into the area. Therefore, the Stub area does not have the external AS routing capability. ABRs of the Stub area generate a default route into the area which enables packet forwarding to external destinations.

- A. TRUE
- B. FALSE

**Answer:** A

#### NEW QUESTION 270

Which of the following situations will occur when the command "multicast bad balance" is configured? (Select 3 answers)

- A. If there exists no unicast equal-cost routes, multicast load balancing fails.
- B. If group address-based load splitting is employed, balanced distribution of entries over equal-cost routes cannot be ensured due to hash function limitations.
- C. Balanced distribution of entries over equal-cost routes can be ensured as long as multicast load balancing is performed.
- D. During multicast load splitting, traffic may not be balanced among equal-cost routes because multicast load balancing is based on multicast entries not multicast data packets.

**Answer:** ABD

#### NEW QUESTION 272

Which of the following route prefixes match the IP-prefix-filter given below?

"ip ip-prefix test index 10 permit 10.0.0.0 16 greater-equal 24 less-equal 28" (Select 3 answers)

- A. 10.0.1.0/23
- B. 10.0.1.0/24
- C. 10.0.1.0/25
- D. 10.0.1.0/28

**Answer:** BCD

#### NEW QUESTION 277

Which of the following routes match the ACL filter given below? (Select 2 answers) "acl number 2001 rule 0 permit source 1.1.1.0 0.0.254.255"

- A. 1.1.1.1/32
- B. 1.1.2.1/32
- C. 1.1.3.1/32
- D. 1.1.4.1/32

**Answer:** AC

#### NEW QUESTION 280

Which of the following BGP attributes is an optional transitive attribute?

- A. ORIGIN
- B. AS\_PATH
- C. NEXT\_HOP
- D. MED
- E. LOCAL\_PREF
- F. COMMUNITY

**Answer:** F

#### NEW QUESTION 281

Which of the following BGP attributes can prevent routing loops? (Select 3 answers)

- A. Originator\_ID
- B. Aggregator
- C. Cluster\_List
- D. AS-Path

**Answer:** ACD

#### NEW QUESTION 283

A router receives a packet whose destination address is 195.26.17.4. Which of these subnets does this address belong to?

- A. 195.26.0.0/21
- B. 195.26.16.0/20
- C. 195.26.8.0/22
- D. 195.26.20.0/22

**Answer:** B

#### NEW QUESTION 284

Which of the following statements are false? (Select 3 answers)

- A. ASBR-Summary-LSAs describe the route to an ASBR and are flooded within an AS.
- B. ASE-LSAs describe the route to an external AS and are flooded to an external AS.
- C. AS-external-LSAs do not belong to any particular OSPF area,
- D. The Type-1 external metrics include only the AS external metric.

**Answer:** ABD

#### NEW QUESTION 287

Which of the following attributes must exist in the BGP update messages? (Select 3 answers)

- A. LOCAL\_PREF
- B. NEXT\_HOP
- C. ORIGIN
- D. AS\_PATH

**Answer:** BCD

#### NEW QUESTION 288

Which of the following BGP attributes are optional in a BGP Update packet? (Select 2 answers)

- A. Origin
- B. Nexthop
- C. Local-Preference
- D. MED

**Answer:** CD

#### NEW QUESTION 289

If both the ospf cost and reference-bandwidth are configured on an interface, the value set by the ospf cost command is used as the cost of the interface.

- A. TRUE
- B. FALSE

**Answer:** A

#### NEW QUESTION 293

Which of following BGP attributes is used to define a set of prefixes with same properties?

- A. Origin
- B. Nexthop
- C. Community

D. MED

**Answer:** C

#### NEW QUESTION 297

The BGP community attribute is a well-known mandatory attribute.

- A. TRUE
- B. FALSE

**Answer:** B

#### NEW QUESTION 302

Which of the following statements regarding the IP address 224.0.0.1 are correct? (Select 2 answers)

- A. It is a multicast IP address
- B. It is a private IP address
- C. It represents all the hosts and routers
- D. It represents all the routers

**Answer:** AC

#### NEW QUESTION 305

In the process of calculating SPF tree, the cost from a given node to its root node is equal to the metric listed in the Router LSA generated by the node.

- A. TRUE
- B. FALSE

**Answer:** B

#### NEW QUESTION 307

OSPF uses SPF algorithm to compute the SPF tree based on the topology. What is the node of the 5PF tree?

- A. Router
- B. Router and network segment
- C. Port and network segment
- D. Router and port

**Answer:** B

#### NEW QUESTION 312

Which of the following IP addresses are network addresses? (Select 2 answers)

- A. 64.104.3.7/28
- B. 192.168.12.64/26
- C. 192.135.12.191/26
- D. 198.18.12.16/28

**Answer:** BD

#### NEW QUESTION 314

One route-policy may have several nodes with each node containing a node ID. Each node may also have multiple "if-match" and "apply" clauses. Which of the following statements are true? (Select 2 answers)

- A. Different nodes are in an OR relationship.
- B. Different nodes are in an AND relationship.
- C. If-match clauses of a node are in an AND relationship,
- D. If-match clauses of a node are in an OR relationship.

**Answer:** AC

#### NEW QUESTION 315

What are the functions of an IGMFV2 Query message? (Select 3 answers)

- A. A router sends IGMPv2 Query messages to collect group memberships of receiver hosts.
- B. A router sends IGMPv2 Query messages to elect a querier.
- C. A working router sends Query messages periodically.
- D. Based on IGMPv2 Query messages, receiver hosts can unicast Report messages to the querier by obtaining its address.

**Answer:** ABC

#### NEW QUESTION 316

RTA is a source's DR and RTB is an RP. A multicast source sends multicast data to RTA but RTB cannot find any information about the multicast source (registered by using the PIM Register message). Why? (Select 3 answers)

- A. RTB has no unicast routes to RTA,
- B. RTA fails to learn RP information.
- C. RTA has no unicast routes to RTB.
- D. The RPlearned by RTA is not RTB.

**Answer:** BCD

#### NEW QUESTION 321

Which of the following are multicast routing protocols? (Select 3 answers)

- A. DVMRP
- B. PIM-DM
- C. OSPF
- D. PIM-SM

**Answer:** ABD

#### NEW QUESTION 324

Which port number is used by BGP to establish a TCP connection?

- A. 520
- B. 89
- C. 179
- D. 180

**Answer:** C

#### NEW QUESTION 326

InVRP, by default, a BGP router automatically retransmits an update packet to its peers after the outbound routing policy for the BGP peers changes.

- A. TRUE
- B. FALSE

**Answer:** A

#### NEW QUESTION 331

Which of the following statements regarding ACL type are true? (Select 3 answers)

- A. ACL consists of basic ACL, advanced ACL and interface-based ACL
- B. ACL ranging from 2000 to 2999 belongs to advanced ACL
- C. ACL ranging from 3000 to 3999 belongs to advanced ACL
- D. Advanced ACL can be used to match either destination address or source address

**Answer:** ACD

#### NEW QUESTION 336

Which of the following messages needs to be sent out by a downstream interface when recovering from the pruned state to the forwarding state in PIM DM?

- A. Join
- B. Assert
- C. Prune
- D. Graft

**Answer:** D

#### NEW QUESTION 337

Which of the following statements regarding the Reverse Path Forwarding (RPF) mechanism are true?(Select 2 answers)

- A. Multicast RPF does not depend on unicast routing.
- B. All multicast protocols adopt the RPF mechanism.
- C. A router discards the received multicast packets if the RPF check fails.
- D. The RPF mechanism has two functions: It prevents multicast routing loops and the forwarding of redundant multicast packets.

**Answer:** CD

#### NEW QUESTION 341

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