NOKIA

4A0-102

Nokia Border Gateway Protocol

for Internet Routing

Question No : 1
What is the function of the Cluster_List attribute?

A. It is used for loop detection within the same cluster.

B. It is used for loop detection between clusters.

C. It is used for loop detection in a confederation.

D. It is used to identify the route reflectors within an AS.

Answer: B

Question No : 2
Click the exhibit.
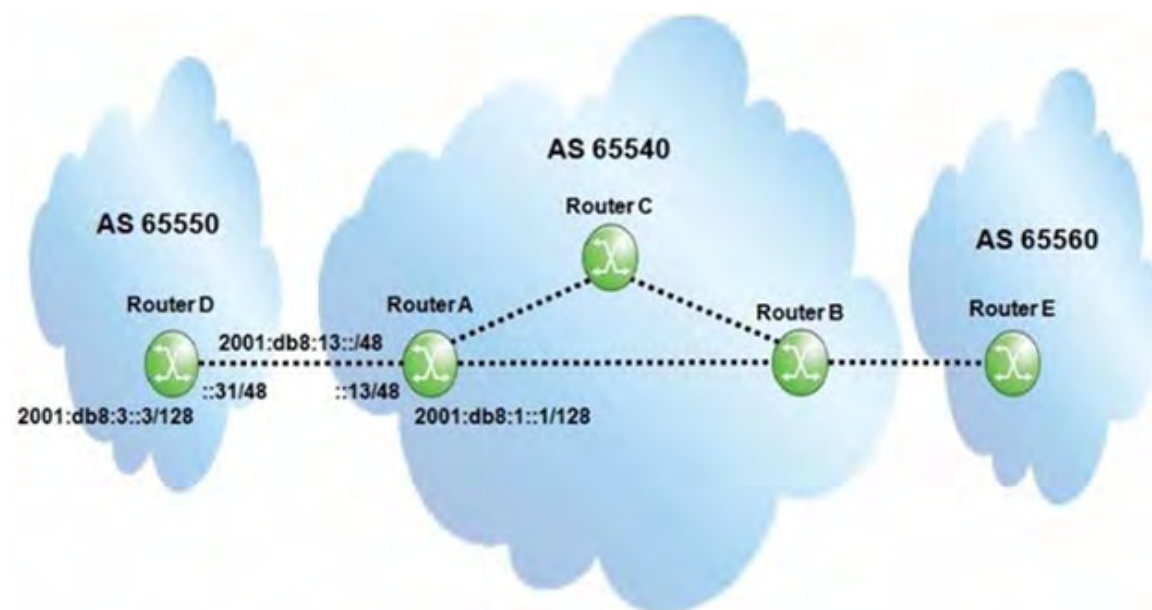
Assume all router-IDs are properly configured. Which of the following configurations is required on the Alcatel-Lucent 7750 SR router A to establish an IPv6 BGP session to router D?

A. group "IPv6_eBGP"
        family ipv6
        type external
        peer-as 65550
        neighbor 2001:DB8:3::3
        exit
    exit

B. group "IPv6_eBGP"
        type external
        peer-as 65550
        neighbor 2001:DB8:3::3
        exit
    exit

C. group "IPv6_eBGP"
        family ipv6
        peer-as 65550
        neighbor 2001:DB8:13::31
        exit
    exit

D. group "IPv6_eBGP"
        type external
        peer-as 65550
        neighbor 2001:DB8:13::31
        exit
    exit

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Question No : 3
Consider two Alcatel-Lucent 7750 SRs in AS 65540. Router R1 has system address 10.10.10.1,and router R2 has system address 10.10.10.2. Which of the following configurations on router R2can establish a BGP session with router R1?

A. R2>config>router>bgp# info
----
            group "iBGP"
             family ipv4
             peer-as 65540
             neighbor 10.10.10.1
                 peer-as 65550
             exit
            exit

B. R2>config>router>bgp# info
----
            group "iBGP"
             family ipv6
             peer-as 65540
             neighbor 10.10.10.1
                 family ipv4
             exit
            exit

C. R2>config>router>bgp# info
----
            group "iBGP"
             family ipv4
             peer-as 65540
             neighbor 10.10.10.1
                 family ipv4
                 local-address 10.10.10.1
             exit
            exit

D. R2>config>router>bgp# info
----
            group "iBGP"
             family ipv4
             local-as 65540
             local-address 10.10.10.2
             neighbor 10.10.10.1
             exit
            exit

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B

Question No : 4
What is the result of configuring the following policy statement as a BGP import policy on the Alcatel-Lucent 7750 SR?

```
policy-statement "Policy-1"
    entry 10
        from
            protocol bgp
            prefix-list "List-1" "List-2"
        exit
        action reject
            exit
    exit
    default-action accept
```

A. All BGP routes are accepted.

B. All routes matching prefix lists "List-1" and "List-2" are rejected.

C. BGP routes matching prefix lists "List-1" or "List-2" are rejected.

D. BGP routes matching prefix lists "List-1" and "List-2" are rejected.

Answer: C

Question No : 5
When implementing a BGP policy on an Alcatel-Lucent 7750 SR, which of the following types of address space would a typical address plan need to cover?

A. RIR assigned CIDR space.

B. External client address space.

C. Loopback or link addresses.

D. External link addresses.

E. All of the above.

Answer: E

Question No : 6
What is the default Alcatel-Lucent 7750 SR TTL of a BGP advertisement between confederation members?

A. 1
B. 32

C. 64

D. 255

Answer: A

Question No : 7
Click the exhibit.

Router R1 is a route reflector with clients R2, R5 and R6. Prefixes advertised by router R5 have a local preference of 200. Router R3 advertises the prefix 192.168.1.0/27 to routers R5 and R6.
Assuming that none of the routers in AS 65540 is configured with "advertise-external", what is the expected output of "show router bgp routes" on router R5?

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Question No : 8
An Alcatel-Lucent 7750 SR receives a route from an iBGP peer with a MED value of 500. What MED value is sent to eBGP peers?
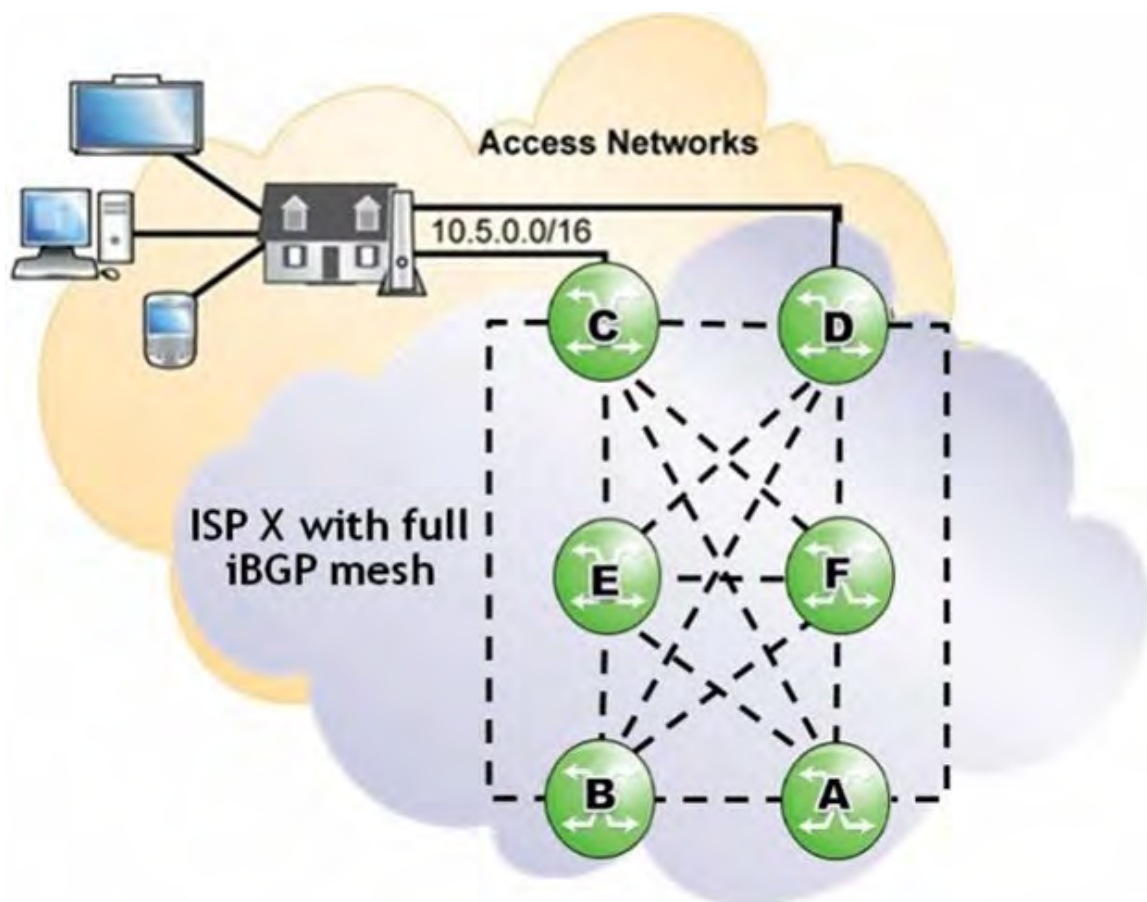
A. 100

B. The IGP cost

C. 500

D. None

Answer: D

Question No : 9
Click the exhibit.

Considering that both routers C and D are advertising the eBGP learned prefix 10.5.0.0/16 into ISP X, which of the following best describes the route advertisement within ISP X?

A. Router C sends the update to routers E and F only.

B. Router C sends the update to routers D, E and F.

C. Router C sends the update to routers A, B, E and F.

D. Router C sends the update to routers A, B, D, E and F.

Answer: D
Question No : 10
Router R1, in AS 65540, has the export policy shown below. It advertises an aggregate route toeBGP peer

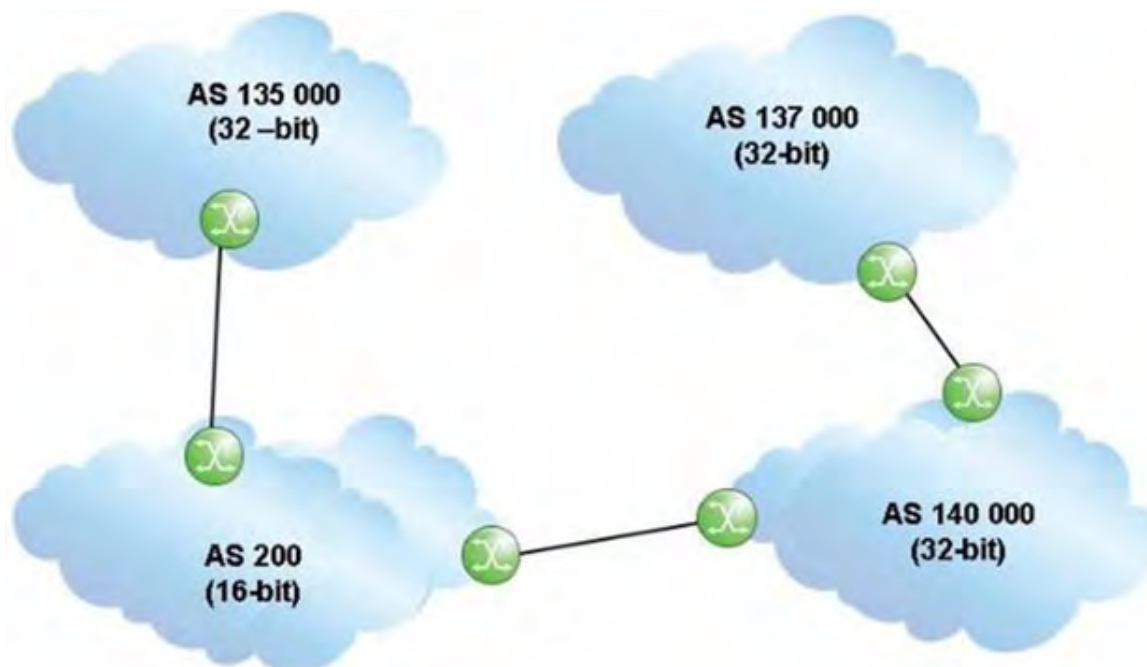router R2 in 65550. What is the AS Path of the aggregate route received by router R2?

```
*A:R1>config>router>policy-options# info
--------------------------------------------------
        policy-statement "advertise aggregate"
            entry 10
                from
                    protocol aggregate
                exit
                action accept
                    as-path-prepend 65540 1
                exit
            exit
        exit
```

A. 65540

B. 65540 1

C. 65540 65540

D. 65550 65540

Answer: C

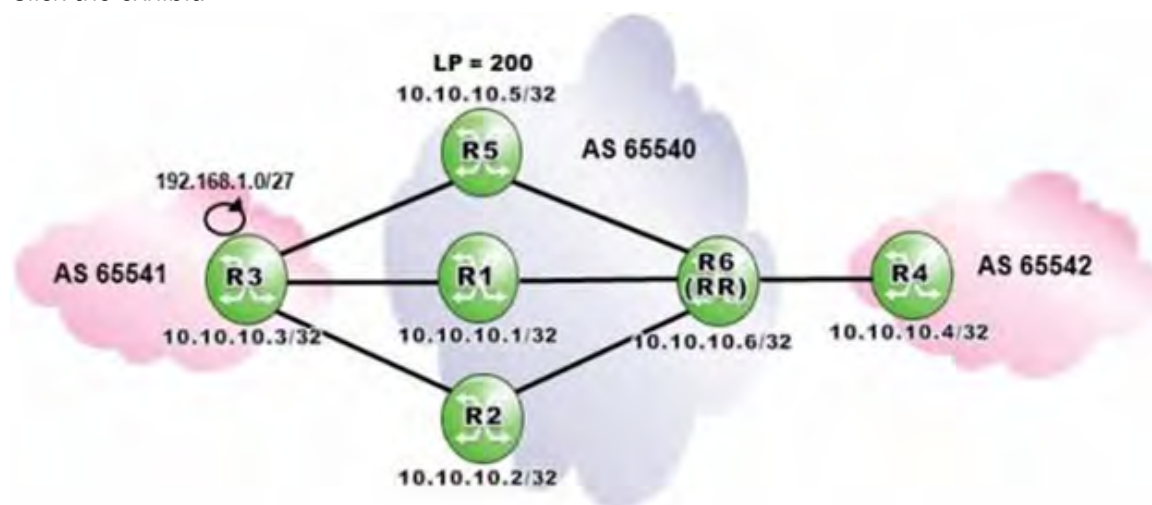Question No : 11
Click the exhibit.

An update travels from AS 135000 to AS 137000, traversing both 32-bit and 16-bit AS paths. What will the AS Path be when the update reaches AS 137000?

A. 140000 200 135000

B. 137000 140000 200 135000

C. 140000 23456 135000

D. 135000 200 140000

Answer: A

Question No : 12
Click the exhibit.

Router R6 is a route reflector for clients R1, R2 and R5. Router R5 is configured with a local preference of 200. On which routers is "advertise-external* needed for router R6 to receive exactly two distinct routes for prefix 192.168.1.0/27?

A. On router R5 only.

B. On either router R1or R2.

C. On both routers R1and R2.

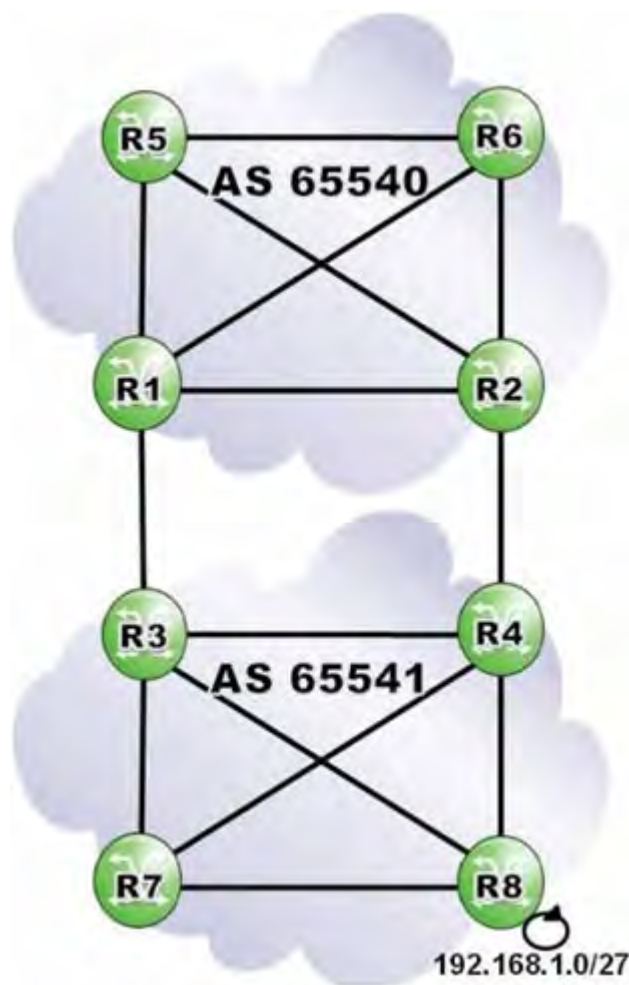D. On all routers R1, R2 and R5.

Answer: B

Question No : 13
Which of the following prefix-lists is the most specific match for prefixes 192.168.64.1/20 and 192.168.32.5/19?

A. Prefix 192.168.0.0/17 longer.

B. Prefix 192.168.0.0/19 longer.

C. Prefix 192.168.96.0/19 longer.

D. Prefix 192.168.0.0/18 longer.

Answer: A

Question No : 14
Click the exhibit.

192.168.1.0/27

Router R2 receives a route to 192.168.1.0/27 from router R4, and sets the local preference to 110.Router R1 receives a route to 192.168.1.0/27 from router R3, and sets the local preference to 80.Both ASs have a full iBGP mesh. What path does traffic destined to 192.168.1.0/27 take fromrouter R1?

A. R1-R3-R8

B. R1-R2-R4-R8

C. R1-R3-R4-R8

D. R1-R2-R4-R3-R8

Answer: B

Question No : 15
Which of the following AS Paths will match the regular expression "65100."?

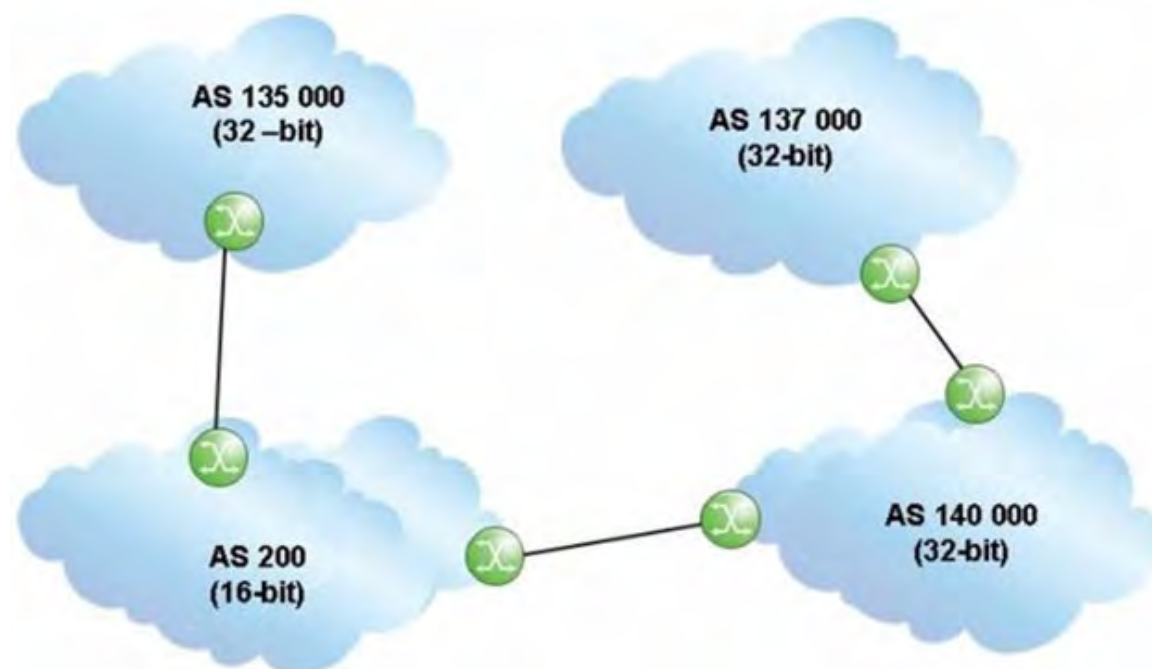A. "65100"

B. "65100 65200"

C. "65200 65100"

D. "65100 65250 65200"

Answer: B

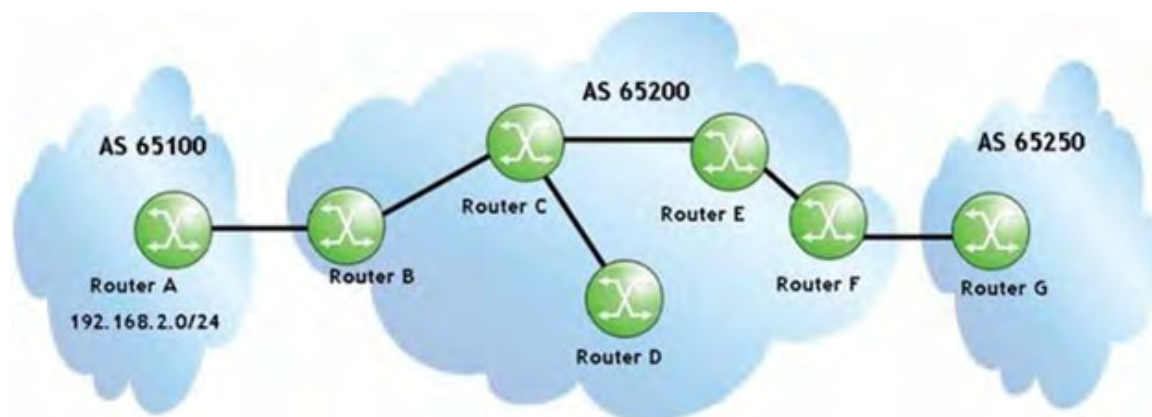Question No : 16
Click the exhibit.

An update travels from AS 137000 to AS 135000, traversing both 32-bit and 16-bit AS Paths.
What AS Path is seen by AS 200?

A. 140000 137000

B. 137000 140000

C. 23456 23456

D. 200 140000 137000

Answer: C

Question No : 17
Click the exhibit.

Routers C and E are route reflectors. When the update for prefix 192.168.2.0/24 is received atrouter F, what will be the Originator_ID attribute?

A. The router ID of router A.

B. The router ID of router B.

C. The router ID of router C.

D. It will not be set.

Answer: B

Question No : 18
What kind of BGP attribute is the Multi_Exit_Disc?

A. Optional transitive attribute.

B. Optional non-transitive attribute.

C. Well-known mandatory attribute.

D. Well-known discretionary attribute.

Answer: B

Question No : 19
Click the exhibit.

AS 65100 is advertising 192.168.1.0/27 into BGP. Which of the following AS Paths would the prefix 192.168.1.0/27 contain when viewed on router R7?

A. 65206 65202 65100

B. (65206 65202)65100

C. (65204 65206 65202) 65100

D. (65200) 65100

Answer: B

Question No : 20
The user of an Alcatel-Lucent 7750 SR wants to see the effect of changing an import policy immediately. What is the best command to force re-evaluation of the import policy with minimal impact?

A. Configure router bgp shutdown

B. Clear router bgp neighbor <ip-address> soft

C. Clear router bgp neighbor <ip-address> soft-inbound

D. Clear router bgp protocol

Answer: C

Question No : 21
An Alcatel-Lucent 7750 SR receives a route from an eBGP peer with a MED value of 500. What MED value is sent to iBGP peers?
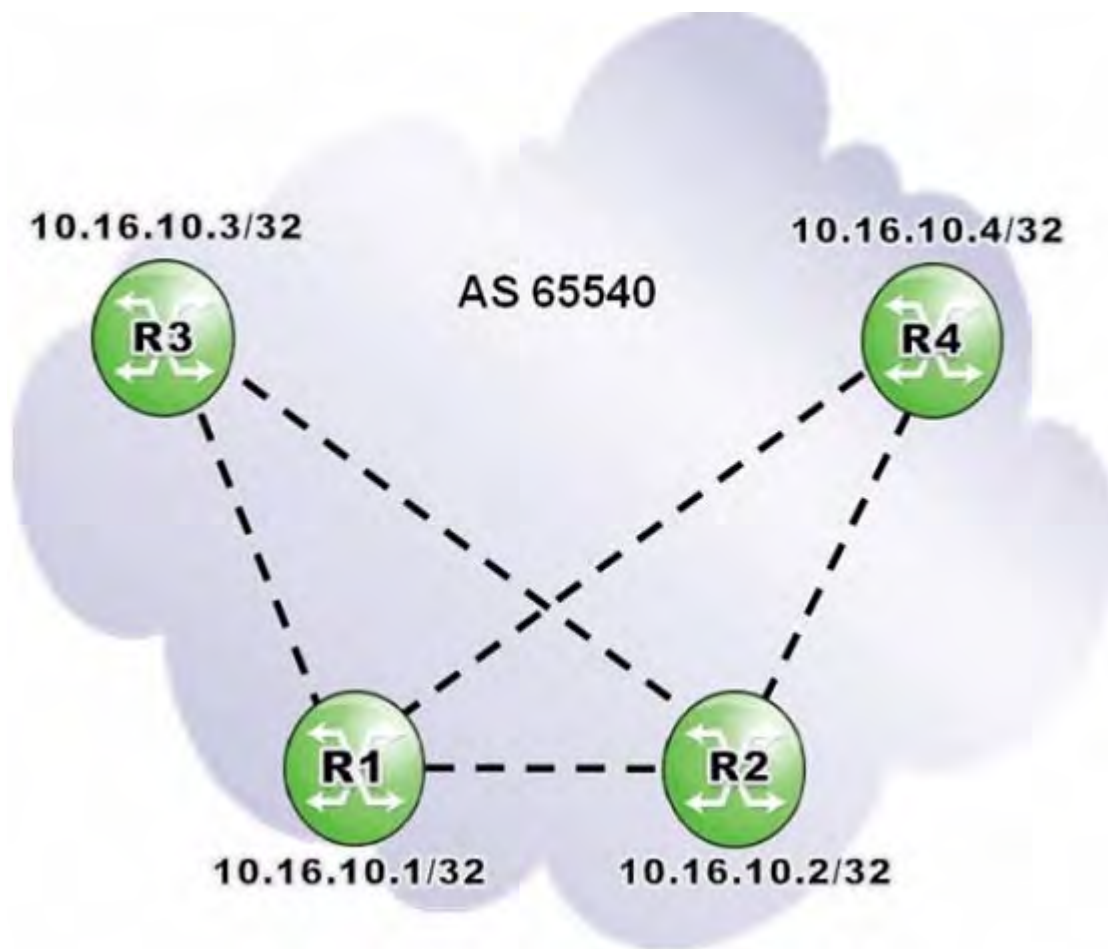
A. 100

B. The IGP cost

C. 500

D. None

Answer: C

Question No : 22
Click the exhibit.

10.16.10.3/32

AS 65540

R3

10.16.10.4/32

R4

10.16.10.1/32

R1

R2

10.16.10.2/32

Given the following configuration of router R1, what can be said about the function of each of AS65540s routers?

```
R1>config>router>bgp# info
-------------------------------------
    group "AS 65540 iBGP"
        peer-as 65540
        neighbor 10.16.10.2
        exit
        neighbor 10.16.10.3
            cluster 10.16.10.1
        exit
        neighbor 10.16.10.4
            cluster 10.16.10.1
        exit
    exit
```

A. Routers R1 and R2 are redundant route reflectors with clients R3 and R4.

B. Routers R3 and R4 are route reflectors with clients R1 and R2.

C. Router R1 is a route reflector with clients R2, R3 and R4.

D. Router R1 is a route reflector with clients R3 and R4.

Answer: D

Question No : 23
Which of the following is considered a best practice for BGP address planning?

A. Advertising external networks into IGP.

B. Using system addresses for setting up iBGP sessions.

C. Exporting the networks associated with the external links of eBGP peers into BGP.

D. Optimizing BGP route table by exporting IGP routes into BGP.

Answer: B

Question No : 24
Click the exhibit.

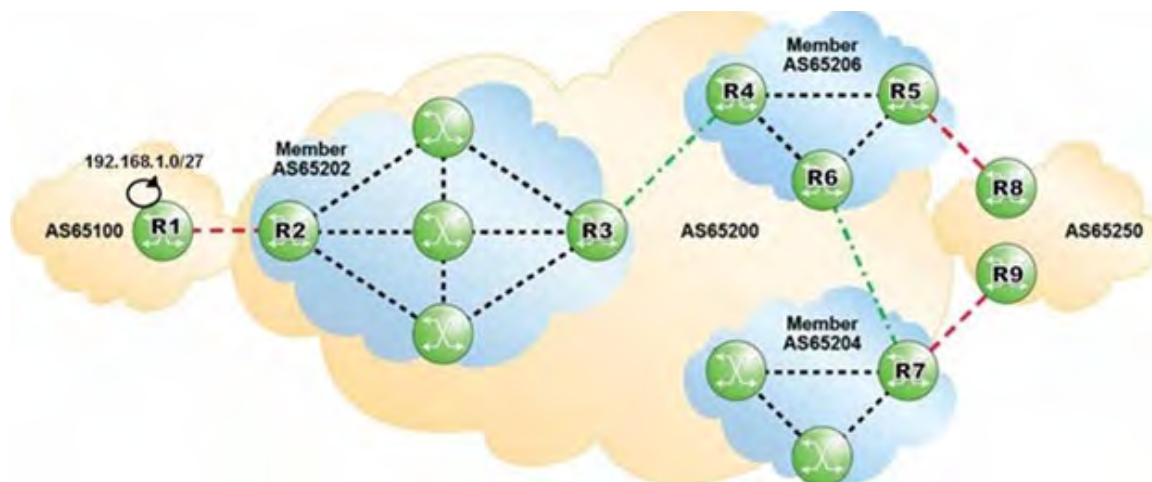If router A originates an update for prefix 192.168.0.1/27, what will the update contain when it reaches router B?

A. AS Path of 65200, local-preference of 100.

B. AS Path of 65200, local-preference of None.

C. Null AS Path, local-preference of 100.

D. Null AS Path, local-preference of None.
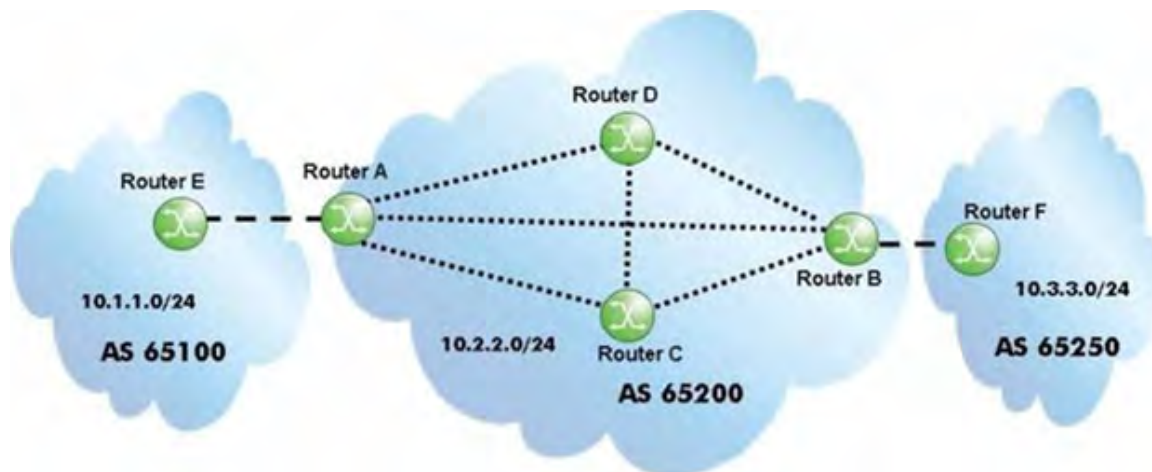
Answer: C

Question No : 25
Click the exhibit.

AS 65100 is advertising 192.168.1.0/27 into BGP. Which of the following AS Paths would theprefix 192.168.1.0/27 contain when viewed on router R8?

A. 65200 (65206 65202) 65100

B. (65206 65202)65100

C. 65250 (65206 65202) 65100

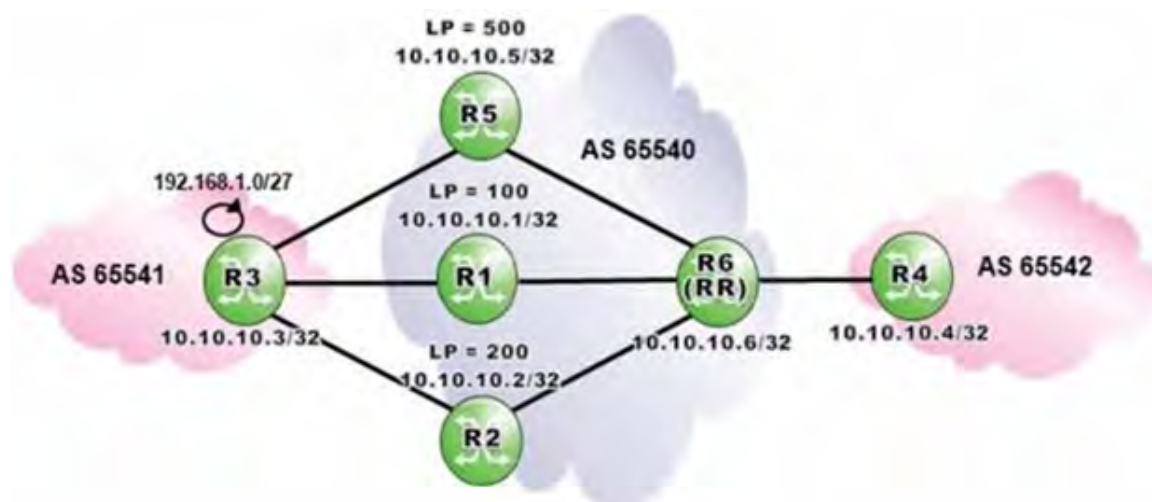D. 65200 65100

Answer: D

Question No : 26
Click the exhibit.

After router A receives the BGP update for the 10.3.3.0/24 prefix, which routers will the route be propagated to?

A. All routers with which it has a BGP session.

B. All routers with which it has a BGP session, except the router it received the update from, which his router B.

C. All routers with which it has a BGP session, except the router it received the update from, which is router C.

D. All routers with which it has a BGP session, except the router it received the update from, which is router D.

E. Only eBGP neighbors.

Answer: E

Question No : 27
Click the exhibit.

LP = 500
10.10.10.5/32
R5
AS 65540
192.168.1.0/27
LP = 100
10.10.10.1/32
AS 65541   R3   R1   R6   R4   AS 65542
                                            (RR)
10.10.10.3/32   10.10.10.6/32   10.10.10.4/32
              LP = 200
              10.10.10.2/32
              R2

Router R6 is a route reflector for clients R1, R2 and R5 with local preferences 100, 200 and 500respectively. Router R3 advertises prefix 192.168.1.0/27 to routers R1, R2 and R5 which are configured with advertise-external. Routers R4 and R6 are both configured with "add-paths ipv4send 2 receive". Which routes to 192.168.0.1/27 is router R4 expected to have in its BGP routing table?

A. The routes from routers R1, R2 and R5.

B. The routes from routers R1and R2.

C. The routes from routers R2 and R5.

D. Two routes are chosen at random and advertised to router R4.

Answer: C

Question No : 28
A router receives two routes from its neighbors: a route from OSPF for 10.0.0.0/24, and a route from BGP for 10.0.0.0/8. Both routes have reachable next hops. Which of the following is TRUE?

A. Only the BGP route is in the route table.

B. Both routes are in the route table.

C. None of the routes is in the route table.

D. Only the OSPF route is in the route table.