Exam Code: 920-450
Exam Name: communication server (CS) 1000 rls.4.0
Vendor: Nortel
Version: DEMO
Part: A

1: A company has a Meridian 1 Option 81C Rls. 25.40 system that is supporting 2,000 users at their headquarters. They plan to install a Communication Server (CS)1000 Rls. 4.0 system in a second building to support 500 new employees. Both systems use Direct Inward Dialing (DID) for all stations. Some extensions numbers are duplicated in each system.

The new CS 1000 Rls. 4.0 system will network with the existing Meridian 1 at the headquarters building. They want to implement the shortest possible dialing sequence internally.

The company does not want to modify the existing Meridian 1 hardware configuration, but wants to implement location based dialing sequence between buildings.

Which two requirements should be combined to create a multi-site distributed system to meet the customer requirements? (Choose two.)

A. Implement a Unified Dialing Plan (UDP) system wide.
B. Use PSTN trunks to complete the calls between the sites.
C. Implement a Coordinated Dialing Plan (CDP) system wide.
D. Add a Signaling Server including an H.323 gateway at headquarters.
E. Enable IP Peer Networking between the CS 1000 and the Meridian 1.
F. Use H.323 and MCDN to implement telephony features transparently between the two systems.

Correct Answers: A B

2: A customer is acquiring two competitors' operations. Once the merger is completed, they will have three Communication Server (CS) 1000 Rls. 4.0 systems networked together through LAN and WAN connections. With a mix of SIP Redirect Servers and H.323 Gatekeepers within each organization, how can this customer provide network-wide feature transparency?

A. By duplicating services and installation configurations across each location.
B. The customer should concentrate on location specific features, not all features would be desired at all locations.
C. Migrate IP Peer Networking features to each group of SIP Servers and H.323 Gatekeepers over a period of time to expand feature similarity.
D. Migrate IP Peer Networking control to one Network Routing Service (NRS) managing all inter-Call Server IP telephone calls across the IP network with MCDN networking software.

Correct Answers: D

3: Within the Coordinated Dialing Plan (CDP) domain of a Campus Distributed Communication Server (CS) 1000 Rls. 4.0 systems a number of Call Servers are coordinated so five-digit dialing can be performed. The steering code allocation is as follows:

Call Server A: Steering codes 7 and 8 (that is, DNs in the range 7xxxx and 8xxxx)
Call Server B: Steering code 6 (that is, DNs in the range 6xxxx)

A digital set user with the DN 84563 is moving and will be connected to Call Server B at their new location.

Is this location setup to enable the user to keep their assigned number after the move?
A. Yes. But the user will no longer be reachable using five-digit dialing.
B. No. A Transferable Directory Numbers (TNDN) numbering plan must be implemented.
C. No. There is never a requirement for a user to move from one Call Server to another.
D. Yes. The CDP steering codes are setup to enable the user to keep their current number.

**Correct Answers: B**

4. A company has a Meridian 1 Option 81C Rls. 25.40 system that is supporting 2,000 users at their headquarters. They just acquired a second building to support 500 new employees and plan to install a Communication Server (CS) 1000 Rls. 4.0 system there. They plan to network it to the Meridian 1 system at the headquarters by installing IP Trunk 3.0 through a private IP network. They also require that the Trunk Anti-Tromboning (TAT) feature be implemented between the sites due to limited available bandwidth. Which trunking protocol should you propose?

A. MCDN  
B. ISDN PRI  
C. SIG and H.225  
D. 225 and Q.931  
E. 931 and Q.933  

**Correct Answers: A**

5. A company with an existing two-site Communication Server (CS) 1000 Rls. 4.0 system plans to open two small branch offices. Each one will have 40 station users and 10 analog voice-grade devices (analog telephones, fax terminals, and modems). Which items should you combine to create a CS 1000 Rls. 4.0 solution for each branch office that fully integrates them into the existing system with survivability that meets their needs? (Choose three.)

A. One Call Server  
B. One Signaling Server  
C. 50 analog or IP telephones  
D. One Media Gateway 1000B  
E. 40 IP Phone 200x telephones  

**Correct Answers: B D E**

6. Click on the exhibit button.
A customer has two sites (site A and B) and wants to deploy a Communication Server (CS) 1000 Rls. 4.0 solution. The customer has 500 employees and needs 275 telephones to meet the system cut-over. They also require a Poisson 1% blocking GoS (see exhibit). The estimated trunk CCS/T is 1.14 for a DID trunk group.

What is the total number of DID trunks required for cut-over?

<table>
<thead>
<tr>
<th>Poisson 1% blocking GoS</th>
<th>Trunks</th>
<th>CCS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>320</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>590</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>618</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>1322</td>
</tr>
</tbody>
</table>
7: A company with a Communication Server (CS) 1000 Rls. 4.0 system with 700 users wants to open a call center with 200 agents using Symposium Call Center Server 4.2. These new call center agents will use IP Phone 2004 telephones and the site will be set up as a branch office. For a call center application, non-blocking at the Media Cards (MC) is recommended. What is the condition to ensure non-blocking at the Media Cards?
A. The number of PRI channels must be greater than the number MC ports.
B. The number of PRI channels and the number of ports on a MC must be the same.
C. The number of registered active IP Phone 2004 agents on a MC must exceed the number of ports on the card.
D. The number of registered active IP Phone 2004 agents on a MC must not exceed the number of ports on the card.

Correct Answers: B

8: A customer wants to deploy a Communication Server (CS) 1000E Rls. 4.0 in a campus environment with maximum redundancy (separated Call Servers). The two Call Servers will be connected via fiber using dedicated Layer 2 Virtual LANs and 802.1q tagging on the BayStack 470 switches. How should the system be configured in order for this redundant configuration to work? (Choose two.)
A. BayStack 470 switches can be configured to carry other data traffic.
B. Two Call Servers can be separated up to 40 km depending on fiber quality.
C. Two Call Servers can be separated up to 60 km depending on fiber quality.
D. Two Call Servers can be separated up to 100 km depending on fiber quality.
E. Configure BayStack 470 switch uplinks with an ELAN and high-speed pipe VLANs.

Correct Answers: B E

9: A customer has two Communication Server (CS) 1000 Rls. 4.0 systems (sites A and B):
Site A has:
- 500 IP telephones
- six T1/E1 PRI cards
- five Media Cards
Site B has:
- 400 IP telephones
- two T1/E1 PRI cards
- two Media Cards
Assume that both sites will have the appropriate Signaling Server, Call Server, and Media Cards to accommodate these components.
Which solution best meets the customer's requirements, assuming 5% year after year growth over
the next five years?
A. Site A as a CS 1000 Rls. 4.0 system: Two Media Gateways and 500 IP Phone 200x Site B as a CS Branch Office: Two Media Gateways with two Media Gateway Expansions and 400 IP Phone 200x
B. Site A as a CS 1000 Rls. 4.0 system: Three Media Gateways and 500 Softphone 2050 Site B as a CS 1000 Rls. 4.0 system: Four Media Gateways with four Media Gateway Expansions and 400 IP Phone 200x
C. Site A as a Succession Branch Office: Three Media Gateways and 500 IP Phone 200x Site B as a CS 1000 Rls. 4.0 system: One Media Gateway with one Media Gateway Expansion and 400 M3903 digital telephones
D. Site A as a CS 1000 Rls. 4.0 system: Two Media Gateways with one Media Gateway Expansion and 500 IP Phone 200x Site B as a CS 1000 Rls. 4.0 system: One Media Gateway with one Media Gateway Expansion and 400 IP Phone 200x
Correct Answers: D

10: A customer has a Media Gateway (MG) 1000B implementation. If simultaneous conference traffic is expected to be significant between branch users with IP telephones, what effect would this have on the Virtual Trunk or LAN/WAN bandwidth requirements?
A. To control branch office conference traffic, users will have to be restricted to only 3-way conferencing only.
B. The number of Virtual Trunks would have to be increased for each branch office IP telephone connected to a conference.
C. Ensure there is sufficient LAN/WAN bandwidth to accommodate the required number of branch office IP telephones connected to a conference.
D. The impact of conference traffic is insignificant to the required bandwidth, since the number of branch users is smaller than the main office users.
Correct Answers: C