

**Exam Code:** 642-414

**Exam Name:** Cisco IP Telephony Design

**Vendor:** CISCO

**Version:** DEMO

## Part: A

1: This area is intentionally left blank

From the following list of customer attributes, choose the correct IP telephony call processing model:

- A large campus that spans multiple PSAP areas.
- A single group of buildings each with its own computer room.
- A.single-site call processing
- B.centralized call processing
- C.hybrid call processing
- D.distributed call processing

**Correct Answers: A**

2: From the following list, select the information that is relevant to choosing an IP telephony centralized call processing model.

- A.a single 6-story building with an IDF on each floor and an MDF in the computer room on the second floor
- B.three small regional sales offices located in the three Western time zones
- C.centralized order processing, shipping, and billing for all customer products
- D.connectivity to a single service provider that hosts the company web site and provides for Internet access
- E.multiple PRIs to the PSTN
- F.a campus of six buildings connected via an ATM backbone

**Correct Answers: B**

3: Form the following list, select the information that is relevant to choosing an IP telephony single-site call processing model. (Choose two.)

- A.VPN connectivity to contractors and suppliers
- B.dual connectivity to service providers for Internet access and multiple PRLs to the PSTN
- C.no remote offices or campuses
- D.all external calls use the PSTN
- E.corporate HQ with multiple regional sales offices
- F.a single 6-story building with an IDF on each floor and an MDF in the computer room on the second floor

**Correct Answers: C F**

4: AMFAB Environmental Consulting (AMFAB), an environmental consulting company, based near Atlanta, Georgia, uses a PBX for its campus phone system. The PBX cannot support all the new features that AMFAB requires, so the company has decided to change its system from traditional TDM to IP telephony. The campus currently has approximately 922 users in three four-story office buildings, a single story R&D facility, and a scale building. It will be your job to determine what information is needed for the proper design of the company's converged network. Which of these pieces of information must be addressed in the design of the IP telephony system for AMFAB? (Choose three)

- A.The network is running at 45% of capacity at peak times.
- B.They were given a cost estimate of \$83,000.00 to upgrade their existing PBX to support IP.
- C.They have entered into negotiations to purchase a small, 45 person consulting engineering firm that specializes in designing and installing lined lagoons and ponds.
- D.The monthly cost of long distance is \$14,000.00
- E.Users complain that they receive a fast busy when trying to dial out to the PSTN during the middle of the day.

**Correct Answers: A C E**

5: You are in a meeting with the AMFAB telephony services manager and the data network manager.

What information do you need to obtain to assist you in the design of the IP telephony solution? (Choose four.)

- A.bandwidth available to connect to the Internet
- B.the number of phones that have DID
- C.the number of servers supporting the R&D facility
- D.what type of dialing plan is deployed at AMFAB
- E.which group of users contributes the most traffic to the network
- F.which group of users spends the most time on their phones
- G.how the PBX is cabled from each MDF to each IDF and to each desk location
- H.the measures AMFAB has implemented to secure the network

**Correct Answers: B D F G**

6: You are in a meeting with the AMFAB telephony services manager and the data network manager.

What four pieces of information will be important for you to capture from this meeting? (Choose four.)

- A.the manufacturer, type and number of devices in the network
- B.the IP addressing scheme
- C.the type of network design currently in place
- D.the current integration of voice and data in the AMFAB network
- E.the capacity of the link to the Internet
- F.the type and size of the power circuits in each MDF and IDF

**Correct Answers: A B C F**

7: You are doing a physical site survey of the AMFAB campus.

You noticed on the site map that the facility is divided by County Line Road. This is actually the boundary between Cobb and Fulton counties. What issue needs to be addressed for the IP telephony design?

- A.if calls from the AMFAB buildings in Cobb County will incur a toll change when calling the AMFAB buildings in Fulton County.
- B.if the tax rate for telephony is different between Cobb County and Fulton County.
- C.if separate call data information needs to be kept for both counties

D.if a PSTN connection in bldg C can route emergency calls to the correct PSAP for the buildings in Cobb County

E.if the phones in each county require overlapping extension numbers

**Correct Answers: D**

8: You are doing a physical site survey of the AMFAB campus.

What four issues are related to the physical placement of network hardware?(chose four.)

A.physical security

B.adequate rack space

C.a dust-free environment

D.access to building distribution cabling

E.sufficient HVAC

F.adequate lighting

**Correct Answers: A B D E**

9: Which of these pieces of information must be addressed in the design of the IP telephony system for AMF AB? (Choose three.)

A.AMF AB is using a public IP addressing scheme. They have four contiguous Class C addresses

B.AMF AB has seen a 15% increase in traffic to their website with the announcement of a new methane monitoring solution

C.The active internet gateway is running at 55% of peak capacity

D.The current PBX has a proprietary connection to the current voice-mail system.

E.The property that houses the AMF AB R&D facility, scale house, and test lagoons has recently been annexed by a neighboring city

**Correct Answers: A D E**

10: You are in a meeting with the AMF AB telephony services manager and the data network manager.

What four of the following are questions you would ask to obtain the information needed for the design of the IP telephony network? (Choose four.)

A.What network access method and topology is deployed?

B.How many cable paths are available to each IDF?

C.Can additional servers or additional domains be added to the existing AMF AB domain?

D.What COR is deployed in the existing network?

E.Who is responsible for moving telephones within AMB AB?

F.What is the current traffic level and distribution of applications on the network?

**Correct Answers: A B C F**

11: You are in a meeting with the AMF AB telephony services manager and the data network manager.

You need information on the PBX and the voice-mail system. What four pieces of information will be of benefit? (Choose four.)

A.the manufacturer, model, and capacity of the PBX and voice mail systems

B.the person who performs the adds, moves, and changes at AMF AB

C.the number of PBX outages in the last year and if that number violated their uptime expectations

D.the current PBX vendors response time for service

E.the connection type between the PBX and the PSTN

F.how the voice mailboxes are deployed in the telephone system

G.the power requirements for the PBX and voice mail systems

**Correct Answers: A C E F**

12: You are doing a physical site survey of the AMF AB campus.

What questions will need to be answered about each network closet to insure that the physical network devices can be deployed successfully? (Choose two.)

A.Is each cable run to the closet within the maximum distance specification?

B.Is enough electrical power available for each network closet?

C.Are the IDF stacked on top each other or are they offset in each building?

D.Are any of the cable runs shared between voice and data two-pairs for voice and two-pairs for data)?

E.Does AMF AB have an office numbering scheme?

F.Are there any extra cable runs pulled to each office that are not terminated?

**Correct Answers: A B**

13: You are doing a physical site survey of the AMF AB campus.

You noticed that the facility is divided by County Line Road, which is the boundary between Cobb and Fulton counties. What issue needs to be addressed for the IP telephony design?

A.whether separate call data information will need to be kept for both counties

B.whether the phones in each county require overlapping extension numbers

C.whether calls from the AMF AB buildings in Cobb County incur a toll charge when calling the AMF AB buildings in Fulton County.

D.whether the tax rate for telephony in Cobb County is different from what it is in Fulton County

E.whether a PSTN connection in bldg C can route emergency calls to the correct PSAP for the buildings in Cobb County

**Correct Answers: E**