

Exam : Cisco 642-453

Title : Cisco Gateway Gatekeeper Exam

Update : Demo

1. Bob's Bicycles wants to route inbound faxes directly to the recipient's e-mail. Which gateway fax protocol will support this?

- A. Fax Pass-Through
- B. Fax Relay
- C. T.37
- D. T.38

Answer: C

2. You have a client who is planning to implement a toll bypass service for the PBXs. The organization has four locations and the PBXs are a mixture of QSIG- and non-QSIG-capable devices. Which type of services will be available between a QSIG and a non-QSIG PBX?

- A. The supplementary services on the non-QSIG PBX will be available to both devices.
- B. Only basic calls that do not require supplementary services are supported.
- C. The supplementary services supported by the QSIG PBX will be terminated by the gateway and translated to the non-QSIG PBX.
- D. The gateway will translate all the supplementary services for both PBXs.

Answer: B

3. A gateway is connected to the PSTN via eight analog circuits. Which two methods can be used to route calls across all eight circuits? (Choose two.)

- A. For each destination pattern, configure eight dial peers pointing to each port and use the preference command to select which port is used.
- B. Assign each port to a trunk group. For each destination pattern, configure a single dial peer pointing to the trunk group.
- C. Assign each port to a hunt list. For each destination pattern, configure a single dial peer pointing to the hunt list.
- D. For each destination pattern, configure a single dial peer. Use the port range command to select which port is used.
- E. For each destination pattern, configure eight dial peers pointing to each port and use the huntstop command to select which port is used.

Answer: AB

4. A Cisco voice gateway is connected to the PSTN via an analog line. How can the gateway be configured to support caller ID?

- A. using MGCP and an FXO port to the PSTN
- B. using H.323 and an FXO port to the PSTN
- C. using MGCP and an FXS port to the PSTN
- D. using H.323 and an FXS port to the PSTN

Answer: B

5. A gateway is going to provide media resources useable by three different Cisco Unified CallManager clusters. Which Cisco IOS structure makes this possible?

- A. applications

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- B. service types
 - C. port numbers
 - D. profiles

Answer: D

6. You have a client who is designing a gateway solution for an IP communications network. The T1 needs to support ANI for both incoming and outgoing calls. How should the gateway be configured?

- A. Configure an MGCP gateway so that there are two DS-0 groups on the T1 from the PSTN, one to send ANI and one to receive ANI.
- B. Configure an H.323 gateway so that there are two DS-0 groups on the T1 from the PSTN, one to send ANI and one to receive ANI.
- C. Configure an MGCP gateway so that there is a single DS-0 group on the T1 to the PSTN, to both send and receive ANI.
- D. Configure an H.323 gateway so that there is a single DS-0 group on the T1 to the PSTN, to both send and receive ANI.

Answer: B

7. You need to provide support for 30 simultaneous calls from an offshore oil platform. The only circuit type available is an E1 R2 over a satellite link. Which type of signaling should be configured?

- A. DTMF
- B. r2-digital
- C. r2-analog
- D. r2-pulse

Answer: D

8. Which statement best describes FGD signaling?

- A. FGD uses a variant of E&M wink-start signaling with two winks. Address information is delivered after the initial wink and is acknowledged with a second wink.
- B. FGD uses FXS/FXO loop-start signaling. Caller ID is provided between the first and second ring and is sent as ASCII-encoded text.
- C. FGD uses FXS/FXO ground-start signaling. Caller ID is provided using DTMF.
- D. FGD uses E&M wink-start signaling. ANI delivery is supported by defining a CAS custom class to specify the delimiter used to distinguish DNIS and ANI.

Answer: A

9. Which analog trunk type configuration should be used for a connection to a PSAP for E911 services?

- A. FXO
- B. FXS
- C. FXS-DID
- D. E&M
- E. CAMA

Answer: E

10. ACME Appliances has several offices used only by field technicians. Since the offices are frequently unmanned, they require a DNIS to route inbound calls to technicians' mailboxes. Which option describes how their analog interfaces should be configured to support both inbound and outbound calling?

- A. FXO ports should be configured to support both inbound and outbound calling.
- B. FXO ports should be configured to support inbound calling through the DNIS and FXS ports should be configured to support outbound calling.
- C. FXS ports should be configured to support inbound calling through the DNIS and FXO ports should be configured to support outbound calling.
- D. Since inbound DNIS is only supported for digital circuits, ACME needs to upgrade their analog circuits to digital T1 circuits.

Answer: C

11. Which codec complexity should be configured to maximize the number of simultaneous voice calls that can be supported by a PVDM2-16?

- A. Flex
- B. Low
- C. Medium
- D. High

Answer: A

12. Which codec complexity should be configured to maximize the number of simultaneous voice calls that can be supported by a PVDM-12?

- A. Flex
- B. Low
- C. Medium
- D. High

Answer: C

13. An ISR 2811 has two PVDM2-32s installed on its mainboard. What is the maximum number of simultaneous voice calls the router can support if voice card 0 is configured for the default codec complexity?

- A. 16
- B. 24
- C. 32
- D. 48
- E. 64
- F. 128

Answer: E

14. An ISR 2811 has two PVDM-32s installed on its mainboard. What is the maximum number of simultaneous voice calls the router can support if voice card 0 is configured for high codec complexity?

- A. 16
- B. 24

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- C. 32
 - D. 48
 - E. 64
 - F. 128

Answer: B

15. You need to direct inbound faxes to a third party fax server. Which fax protocol should be configured on your gateways?

- A. Cisco fax relay
- B. T.38 fax relay
- C. T.37 store and forward
- D. fax passthrough

Answer: B

16. Which statement accurately describes the amount of bandwidth required for a fax call using fax pass-through when packet redundancy is not enabled?

- A. The fax call uses the same amount of bandwidth as a G.711 voice call.
- B. The fax call uses the same amount of bandwidth as a G.729 voice call.
- C. The fax call uses 20% more bandwidth than a G.711 voice call because the fax sample size is smaller.
- D. The fax call uses 20% more bandwidth than a G.729 voice call because the fax sample size is smaller.
- E. The fax call uses 20% more bandwidth than a G.711 voice call because the fax sample size is larger.
- F. The fax call uses 20% more bandwidth than a G.729 voice call because the fax sample size is larger.

Answer: C

17. Which IOS mechanism is used to restrict calling based on the device initiating the call? A. RAI

- B. COR
- C. NBAR
- D. RSVP

Answer: B

18. Which three mandatory functions of H.323 networks are associated with a gatekeeper? (Choose three.)

- A. zone management
- B. call authorization
- C. call management
- D. admission control
- E. bandwidth management
- F. bandwidth control

Answer: ADF

19. Which two statements are correct descriptions of bandwidth management and bandwidth control? (Choose two.)

- A. Bandwidth management is an H.323 optional function and bandwidth control is a mandatory function.

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- B. Bandwidth management manages endpoint bandwidth requirements and bandwidth control provides call admission control.
- C. Both bandwidth management and bandwidth control are H.323 mandatory functions.
- D. Bandwidth management provides call admission control and bandwidth control manages endpoint bandwidth requirements.
- E. Bandwidth management manages endpoint bandwidth and provides intrazone call admission control, while bandwidth control provides interzone call admission control.
- F. Bandwidth management is an H.323 mandatory function and bandwidth control is an optional function.
- Answer: AD

20. Which three statements accurately describe gatekeepers? (Choose three.)

- A. Gatekeepers may be logically combined with other H.323 endpoints.
- B. Gatekeepers are optional devices in H.323 networks.
- C. The primary functions of gatekeepers are address translation, CAC, and zone management.
- D. Gatekeepers are mandatory devices in an H.323 network.
- E. The primary functions of gatekeepers are NAT translation, protocol interworking, and bandwidth management.
- F. Gatekeepers are logically separated from H.323 endpoints.

Answer: BCF

21. When using gatekeeper clusters, which type of RAS message is responsible for providing a gateway with an ordered list of alternate gatekeepers?

- A. GUP messages
- B. RCF messages
- C. RRQ messages
- D. IRQ messages
- E. RSIP messages

Answer: B

22. Which statement best describes the difference between a gatekeeper cluster and the use of alternate gatekeepers?

- A. Configuring an alternate gatekeeper in a gateway can provide the same number of alternate gatekeepers as a gatekeeper cluster, but requires more configuration overhead.
- B. A gatekeeper cluster can provide an ordered list of up to five alternate gatekeepers, but a gateway using the priority command can only support two alternate gatekeepers.
- C. Configured alternate gatekeepers are equivalent to a gatekeeper cluster in capabilities, but use the priority command to provide support for non-Cisco gatekeeper devices.
- D. A gatekeeper cluster provides better endpoint scalability because it provides an ordered list of alternate gatekeepers by means of GUP messages; a gateway using the priority command can only support two statically configured alternate gatekeepers.

23. When a gatekeeper cluster is deployed, how does a gatekeeper in the cluster indicate to a gateway that it should register with an alternate gatekeeper?

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- A. It sends an ARJ or RRJ message containing instructions to use the first member of the alternate gatekeeper list provided by the gatekeeper.
 - B. It sends an ARJ or RRJ message containing the IP address of the alternate gatekeeper that the gateway should attempt to register with to complete the call.
 - C. It sends an ARJ or RRJ message accompanied by an ordered list of alternate gatekeepers the gateway should attempt to register with.
 - D. It sends an ARJ or RRJ, which triggers the automatic re-registration of the gateway with the first gatekeeper in the alternate gatekeeper list.

Answer: B

24. You are adding a gatekeeper to an H.323 network to provide Call Admission Control. You need to be able to support three concurrent G.711 calls from a specified zone to any other zone. How much interzone bandwidth should be configured in the gatekeeper?

- A. 192 Kbps
- B. 240 Kbps
- C. 384 Kbps
- D. 480 Kbps

Answer: C

25. You are adding a gatekeeper to an H.323 network to provide Call Admission Control. You need to be able to support three concurrent G.729 calls from the SJ zone to any other zone. Which bandwidth statement should be added to the gatekeeper configuration?

- A. bandwidth zone local SJ 48
- B. bandwidth session 48
- C. bandwidth total 48
- D. bandwidth interzone zone SJ 48

Answer: D

26. Which describes a proper CAC implementation in an H.323 network that uses directory gatekeepers?

- A. The bandwidth commands for each zone that is registered with the directory gatekeeper are included in the directory gatekeeper configuration.
- B. The zone gatekeepers maintain the bandwidth commands and the directory gatekeeper is only responsible for dial plan resolution.
- C. The zone gatekeeper negotiates bandwidth requirements with the target zone gatekeeper by means of an LRQ message forwarded by the directory gatekeeper.
- D. The directory gatekeeper controls call bandwidth usage between the zones.

Answer: B

27. You need to configure a gatekeeper to limit the number of voice calls between any local zone and any other zone to five simultaneous G.729 calls. Which bandwidth command would you enter into the gatekeeper configuration?

- A. bandwidth interzone zone SJ 80
- B. bandwidth total default 80

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- C. bandwidth interzone default 80
 - D. bandwidth total interzone default 80

Answer: C

28. If an endpoint sends the digit string "2125551212" to a gatekeeper that contains the following configuration, what will happen next?

- A. The call will be routed to the gateway registered with the gatekeeper for the SJ zone.
- B. An ACF will be returned to the endpoint instructing it to set up a call with the endpoint that uses the IP address contained in the ACF.
- C. An ARJ will be returned to the endpoint because the gatekeeper is unable to match all the digits.
- D. The call will be routed to the gateway registered with the gatekeeper that controls the NY zone.
- E. The call will be routed to the PSTN.
- F. The gatekeeper will send an LRQ to the gatekeeper that controls the NY zone and return a RIP RAS message to the endpoint.

Answer: F

29. The SJ local zone controls a gatekeeper that contains two gateways, SJ1 and SJ2. Both gateways provide access to area code 408. Which two command strings should be entered into the gatekeeper to give the SJ2 gateway priority over the SJ1 gateway? (Choose two.)

- A. zone prefix SJ 408 gw-priority 6 SJ1, 10 SJ2
- B. zone prefix SJ 408 gw-priority 10 SJ2
- C. zone prefix SJ 408 gw-priority 6 SJ1
- D. zone prefix SJ 408 gw-priority 10 SJ1
- E. zone prefix SJ 408 gw-priority 6 SJ2
- F. zone prefix SJ 408 gw-priority 0 SJ2, 10 SJ1

Answer: BC

30. The Acme Corporation network contains gateways, gatekeepers, and a directory gatekeeper. If a gatekeeper containing the following configuration receives the digit string "2125551212" from an endpoint, what will the gatekeeper do next?

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- A. send an ACF back to the endpoint instructing it to set up a call with the gateway registered with the SJ gatekeeper
 - B. send a call setup message to the gateway registered with DGK
 - C. send an ARJ message to the endpoint because the gatekeeper is unable to match all the digits
 - D. send a call setup message to the gateway registered with the gatekeeper that controls the NY zone
 - E. send an LRQ message to DGK to resolve the call routing

Answer: E