

<http://ccna-4.blogspot.com>

1

Which two statements about DSL are true? (Choose two.)

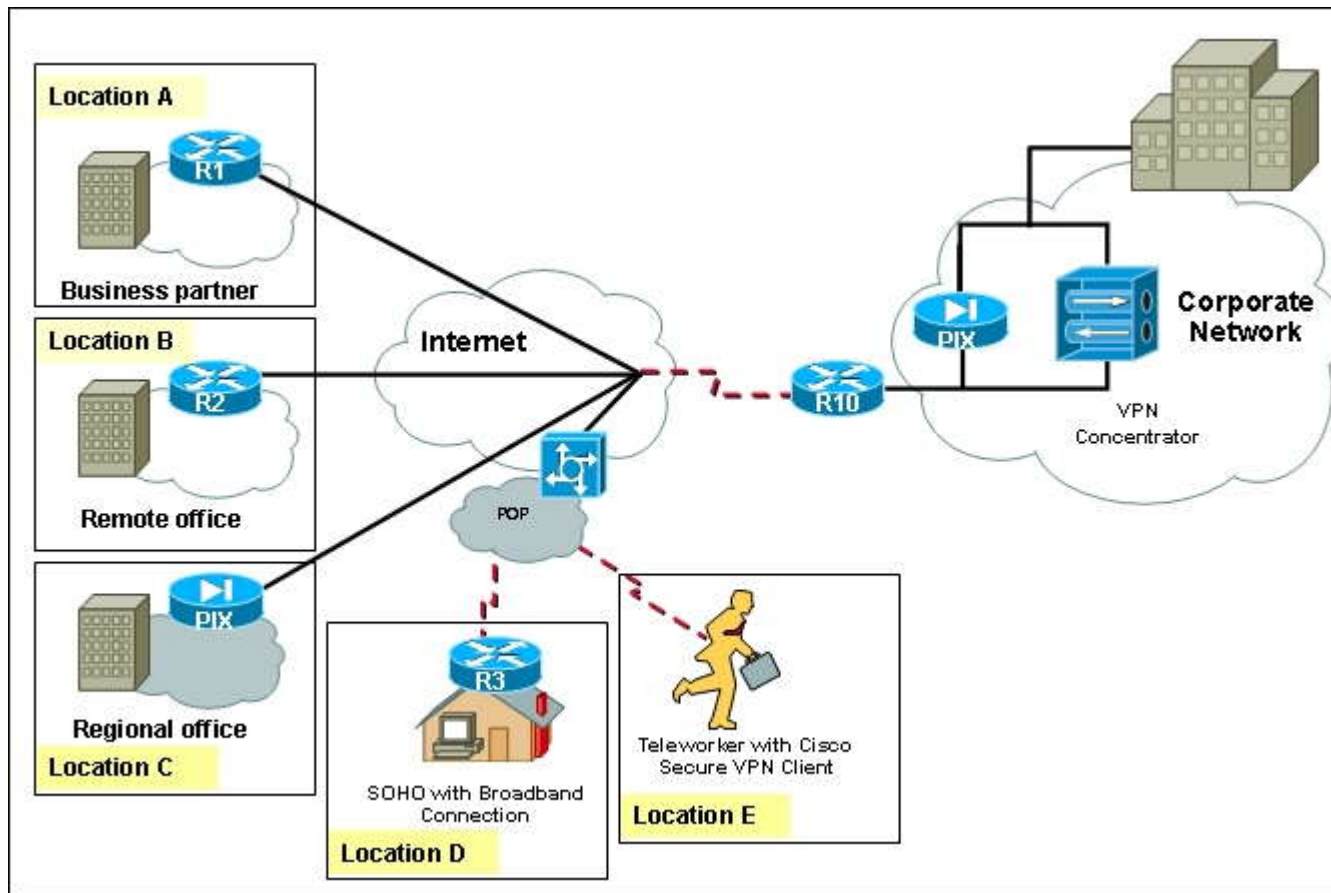
- ☐ users are on a shared medium
 - ☐ uses RF signal transmission
 - ☐ local loop can be up to 3.5 miles (5.5km)
 - ☐ physical and data link layers are defined by DOCSIS
 - ☐ user connections are aggregated at a DSLAM located at the CO
-

2

What are the three main functions of a secure VPN? (Choose three.)

- ☐ accounting
 - ☐ authentication
 - ☐ authorization
 - ☐ data availability
 - ☐ data confidentiality
 - ☐ data integrity
-

3



Refer to the exhibit. All users have a legitimate purpose and the necessary permissions to access the Corporate network. Based on the topology shown, which locations are able to establish VPN connectivity with the Corporate network?

- Locations C, D, and E can support VPN connectivity. Locations A and B require an additional PIX appliance installed on the edge of the network.
- Locations C and E can support VPN connectivity. Locations A, B, and D require an additional PIX appliance installed on the edge of the network.
- Locations A, B, D, and E can support VPN connectivity. Location C requires an additional router on the edge of the network.
- All locations can support VPN connectivity.

4 Data confidentiality through a VPN is achieved through which two methods? (Choose two.)

- ☐ digital certificates
- ☒ encryption
- ☒ encapsulation
- ☐ hashing
- ☐ passwords

- 5** After conducting research to learn about common remote connection options for teleworkers, a network administrator has decided to implement remote access over broadband to establish VPN connections over public Internet. What is the result of this solution?
- ☐ A reliable connection is established at greater speeds than what is offered from dialup over POTS. Speed is increased, but username and password information are sent in plain text.
 - ☐ The connection has increased security and reliable connectivity. Users need a remote VPN router or client software.
 - ☐ Security and reliability are increased at a substantial loss in throughput, which is considered acceptable when supporting a single user environment.
 - ☒ Reliability and security are increased without the need for additional equipment, when compared to connections using POTS.
-

- 6** What two protocols provide data authentication and integrity for IPsec? (Choose two.)
- ☒ AH
 - ☐ L2TP
 - ☒ ESP
 - ☐ GRE
 - ☐ PPTP
-

- 7** A network administrator needs a secure connection between a remote site and the company HQ site. Which three protocols could the administrator use to connect the two sites? (Choose three.)
- ☐ Diffie-Hellman
 - ☐ GRE
 - ☒ L2TP
 - ☒ PPTP
 - ☐ WPA2
 - ☐ 802.1x
-

- 8** Which is an example of symmetric-key encryption?
- ☐ Diffie-Hellman
 - ☐ digital certificate
 - ☒ pre-shared key
 - ☐ RSA signature
-

- 9** Which two methods could an administrator use to authenticate users on a remote access VPN? (Choose two.)
- ☒ digital certificates

- ☐ ESP
 - ☐ hashing algorithms
 - ☐ smart cards
 - ☐ WPA
-

10 While monitoring traffic on a cable network, a technician notes that data is being transmitted at 38 MHz. Which statement describes the situation observed by the technician?

- Data is being transmitted from the subscriber to the headend.
 - Data is flowing downstream.
 - Cable television transmissions are interfering with voice and data transmissions.
 - The system is experiencing congestion in the lower frequency ranges.
-

11 Which two statements are valid solutions for a cable ISP to reduce congestion for users? (Choose two.)

- ☐ use higher RF frequencies
 - ☐ allocate an additional channel
 - ☐ subdivide the network to reduce users on each segment
 - ☐ reduce the length of the local loop to 5.5 kilometers or less
 - ☐ use filters and splitters at the customer site to separate voice from data traffic
-

12 Which statement describes cable?

- Delivering services over a cable network requires downstream frequencies in the 50 to 860 MHz range and upstream frequencies in the 5 to 42 MHz range.
 - The cable subscriber must purchase a cable modem termination system (CMTS).
 - Each cable subscriber has dedicated upstream and downstream bandwidth.
 - Cable subscribers may expect up to 27 Mbps of bandwidth on the upload path.
-

13 Which two features can be associated with the Worldwide Interoperability for Microwave Access (WiMAX) telecommunication technology? (Choose two.)

- ☐ supports municipal wireless networks utilizing mesh technologies
 - ☐ covers areas as large as 7,500 square kilometers
 - ☐ supports point-to-point links, but not full mobile cellular-type access
 - ☐ connects directly to the Internet through high-bandwidth connections
 - ☐ operates at lower speeds than Wi-Fi, but supports many more users
-

14 A technician has been asked to configure a broadband connection for a teleworker. The technician has

instructed that all uploads and downloads for the connection must use existing phone lines. Which broadband technology should be used?

- ☐ cable
 - ☒ DSL
 - ☐ ISDN
 - ☐ POTS
-

15 Data confidentiality through a VPN can be enhanced through the use of which three encryption protocols? (Choose three.)

- ☒ AES
 - ☒ DES
 - ☐ AH
 - ☐ hash
 - ☐ MPLS
 - ☒ RSA
-

16 A company is using WiMAX to provide access for teleworkers. What home equipment must the company provide at the teleworker's site?

- ☐ a WiMAX tower
 - ☐ a one-way multicast satellite
 - ☒ a WiMAX receiver
 - ☐ an access point connected to the company WLAN
-

17 Which two statements accurately describe VPN connectivity? (Choose two.)

- ☐ Remote access VPNs provide remote users access to an internal network over a shared infrastructure using VPN client software.
 - ☐ Remote access VPNs provide remote users access to an internal network over a shared infrastructure using VPN client software. The connection requires a VPN router or PIX appliance.
 - ☒ Advanced encryption techniques and tunneling that are required to establish secure, end-to-end, private network connections over third-party networks are unnecessary when remote access VPNs are used.
 - ☐ Site-to-site VPNs link headquarters, remote offices, and branch offices to an internal network over a shared infrastructure using dedicated connections. The connection requires VPN client software.
 - ☒ Site-to-site VPNs link headquarters, remote offices, and branch offices to an internal network over a shared infrastructure using dedicated connections. The connection requires a VPN router or PIX appliance.
 - ☐ Advanced encryption techniques and tunneling, which are required to establish secure, end-to-end, private network connections over third-party networks, are unnecessary when site-to-site VPNs are used.
-

18 Which two Layer 1 requirements are outlined in the Data-over-Cable Service Interface Specification (DOCSIS)?

(Choose two.)

- ☐ channel widths
 - ☐ access method
 - ☐ maximum data rate
 - ☐ modulation techniques
 - ☐ compression techniques
-