**Chapter 1 - QUIZ – Introduction to WANs**

1. Which three items are considered to be WAN devices? (Choose three.)
2. Bridges
3. Modems
4. Routers
5. Layer 2 switches
6. Communication servers
7. Repeaters
8. Which layer of the hierarchical network design model is often referred to as the backbone?
9. Access
10. Distribution
11. Network
12. Core
13. Workgroup
14. WAN
15. Match the description on the left to the associated term on the right.

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| --- | --- | --- | --- | --- |
| A. | A switching technology where each switch must evaluate the address of the packet to determine where to send it. | 🡺 |  | Connectionless Packet Switching |
| B. | A switching technology where a virtual circuit is only physically in existence while a packet is traveling through it. | 🡺 |  | Connection-oriented Packet Switching |
| C. | A switching technology that establishes routes through the switches for particular end-to-end connections. | 🡺 |  | Packet Switching |
| D. | A switching technology that has a pre-established dedicated circuit (or channel) between nodes and terminals. | 🡺 |  | Circuit Switching |

1. Match the description of the packet-switched technology on the left to the associated term on the right.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A. | Provides a high-bandwidth Layer 2 network capable of managing data, voice, and video all on the same infrastructure. | 🡺 |  | Metro Ethernet |
| B. | Built on a cell-based architecture in which the cell has a fixed length of 53 bytes. | 🡺 |  | ATM |
| C. | Operates at the Data Link Layer, and the PVC is identified by a DLCI. | 🡺 |  | Frame Relay |
| D. | Operates at the network layer, and the SVC is identified by a channel number. | 🡺 |  | X.25 |

1. Which device is commonly used as Data Terminal Equipment?
2. ISDN
3. Modem
4. Router
5. CSU/DSU
6. Which type of WAN connection should be chosen when a dedicated point-to-point WAN communications path from the customer premises through the provider network to a remote destination is required?
7. ISDN
8. Analog dialup
9. ATM
10. Frame Relay
11. Leased line
12. How are Frame Relay virtual circuits identified?
13. CIR
14. DLCI
15. VPI
16. MAC
17. SPID
18. What WAN technology is designed for delivering data, voice, and video simultaneously over a TDM infrastructure?
19. ATM
20. Cable
21. Frame Relay
22. ISDN
23. Which Cisco architecture enables enterprises to offer important network services, such as security, new communication services, and improved application performance to every office regardless of its size or proximity to headquarters?
24. Enterprise Campus Architecture
25. Enterprise Data Center Architecture
26. Enterprise Branch Architecture
27. Enterprise Teleworker Architecture
28. At which layer of the hierarchical design model do users connect to the network?
29. Application
30. Access
31. Distribution
32. Network
33. Core
34. ISDN PRI is composed of how many B channels in North America?
35. 2
36. 16
37. 23
38. 30
39. 64
40. ISDN PRI is composed of how many B channels in Europe?
41. 2
42. 16
43. 23
44. 30
45. 64
46. The ability to connect securely to a private network over a public network is provided by which WAN technology?
47. DSL
48. Frame Relay
49. ISDN
50. PSTN
51. VPN
52. Which hierarchical design model layer is responsible for containing network problems to the workgroups in which they occur?
53. Application
54. Access
55. Distribution
56. Network
57. Core
58. Which term describes the cabling that connects the customer site to the nearest exchange of the WAN service provider?
59. CPE
60. CO
61. Local loop
62. DCE
63. DTE
64. Which goal can be accomplished by the implementation of the Cisco Enterprise Teleworker Architecture?
65. It allows the enterprise to add large branch sites that span large geographic areas.
66. It allows the enterprise to deliver secure voice and data services to workers no matter where or when they work.
67. To reduce remote security threats, it forces users who are located at main sites to log on to the resources.
68. It satisfies telephony requirements for users who are located at medium to large enterprise sites.