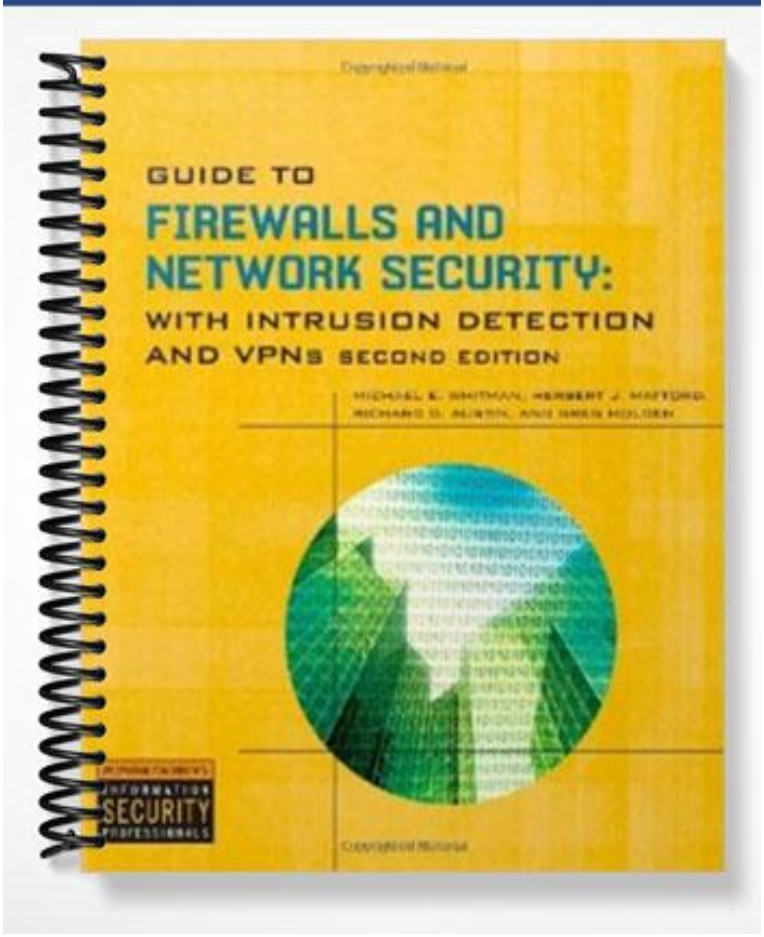
TEST BANK


GUIDE TO
FIREWALLS AND NETWORK SECURITY:
WITH INTRUSION DETECTION AND VPNS SECOND EDITION
SECURITY

ch02

True/False
Indicate whether the statement is true or false.

____ 1. Errors are most commonly corrected by retransmission of the damaged segment.

____ 2. Collision avoidance differs from collision detection in that before a client transmits it sends a short “intent to transmit” message warning other clients not to transmit.

____ 3. Static routing requires an administrator to manually enter the routing table information, while dynamic routing is accomplished by a router capable of updating its own table.

____ 4. The Data Link layer (DLL) is the last networking support layer.

____ 5. One of the most common methods of categorizing networks is by size.

____ 6. Data communications is the exchange of messages across a medium, and networking is the interconnection of groups or systems with the purpose of exchanging information.

____ 7. The Session layer is responsible for establishing,maintaining, and terminating communications sessions between two systems.

____ 8. PAT, a network layer mechanism that helps systems manage addresses, uses a device like a router to segregate the external Internet from an internal intranet or network.

____ 9. Networks categorized by components include peer-to-peer (P2P) networks, server-based networks, and distributed multi-server networks.

____ 10. The less dominant protocol for local area networking is Ethernet for wired networks and Wi-Fi for wireless networks.

____ 11. Any communications medium may be subject to various types of interference, which is commonly called noise.

____ 12. The second responsibility of the DLL is converting the Network layer packet into a DLL frame.

____ 13. Addressing at the Data Link layer is accomplished with a number embedded in the network interface card (NIC) by the manufacturer.

____ 14. The primary function of the Physical layer is to place the transmission signal carrying the message onto the communications media—that is, to put “bits on a wire.”

____ 15. WDM, used exclusively in fiber-optic communications, uses different frequencies (colors) of laser light to allow multiple signals to travel on the same fiber-optic cable.

____ 16. Along with the error correction schemes, the Transport layer also provides for flow control for end-to-end transfers.

____ 17. Error control is the process of handling problems with the transfer process, which might result in modified or corrupted segments.

____ 18. Impulse noise is unwanted noise due to a signal coming across the medium at multiple frequencies; also referred to as static noise.

____ 19. Networks can be categorized by components, size, layout or topology, or media.

____ 20. The Application layer is also responsible for the assignment of ports, which identify the service requested by the user.

____ 21. The Network layer is the primary layer for communications between networks. This layer has three key functions: packetizing, addressing, and routing.

____ 22. Routers work at the Presentation layer to receive packets and direct them toward their ultimate destination.

____ 23. Multiplexing combines several circuits for a high-bandwidth stream to carry multiple signals long distances.

____ 24. Wired media networks typically use radio or infrared electromagnetic energy to transmit messages.

____ 25. The primary function of the Network layer is to provide reliable end-to-end transfer of data between user applications.

____ 26. Jitter is a sudden, short-lived increase in signal frequency or amplitude, also known as a spike.

____ 27. Addresses are maintained by the Internet Assigned Numbers Authority (IANA) and issued on an as-needed basis.

____ 28. The Network layer takes the segments sent from the transport layer and organizes them into one or more packets for transmission across a network.

____ 29. Topology can be physical or logical.

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 30. A ____ is a network that typically covers a region the size of a municipality, county, or district.
a. MAN
b. Servant Model
c. WAN
d. LAN

____ 31. ____ is a suite of protocols used to facilitate communications across the Internet.
a. TCP/IP
b. HTML
c. XML
d. WWW

____ 32. The ____ layer is responsible for the basic capacity of transferring messages, including resolution of errors, managing necessary fragmentation, and the control of message flow, regardless of the underlying network.
a. Network
b. Transport
c. Session
d. Application

____ 33. ____ is the process of handling problems with the transfer process, which might result in modified or corrupted segments.
a. Error Layer
b. Error Control
c. Error Transport
d. Error Level

____ 34. ____ is another wide area network protocol that is used to encapsulate voice and data between LANs.
a. Frame relay
b. Token ring
c. ATM
d. FDDI

____ 35. In ____ networks, the individual users or clients directly interact and share resources, without benefit of a central repository or server.
a. local area
b. metropolitan area
c. peer-to-peer
d. servant model

____ 36. The primary function of the ____ layer is to provide reliable end-to-end transfer of

data between user applications

a. internal
b. transport
c. routing
d. network

____ 37. ____, a network layer mechanism that helps systems manage addresses, uses a device like a router to segregate the external Internet from an internal intranet or network.

a. Transport Layer
b. WAN
c. NAT
d. Internal routing

____ 38. A ____ is the geometric association of components of a network in relation to each other.

a. router
b. topology
c. network layer
d. ethernet

____ 39. An extension of the peer-to-peer network is the ____ where a client shares part of its resources, serving as a pseudo-server.

a. Servant model
b. MAN
c. LAN
d. WAN

____ 40. The ____ layer is responsible for establishing,maintaining, and terminating communications sessions between two systems.

a. Control
b. Session
c. Transport
d. Network

____ 41. The ____ serves to reinforce the position of the U.S. government and industry while helping to ensure the safety and the health of consumers and ensuring environmental protection.

a. International Telecommunication Union
b. Institute of Electrical and Electronics Engineers
c. American National Standards Institute
d. Telecommunications Industry Association

____ 42. Any communications medium may be subject to various types of interference, which is commonly called ____.

a. crosstalk
b. noise
c. echo
d. jitter

____ 43. ____ is the unintentional variation of the communication over the media.

a. Crosstalk
b. Distortion
c. Jitter
d. Attenuation

____ 44. ____ is the effect of one communications channel upon another. Crosstalk occurs when one transmission “bleeds” over to another.

a. Crosstalk
b. Jitter
c. Echo
d. Distortion

____ 45. ____ is the reflection of a signal due to equipment malfunction or poor design.

a. Jitter
b. Echo
c. White noise
d. Noise

____ 46. ____ is the process of moving a Network layer packet across multiple networks.

a. Transporting
b. Controlling
c. Routing
d. Layering

____ 47. A(n) ____ network uses a logical ring topology and require stations to possess a token — essentially a data frame with no data — prior to being allowed to transmit data.

a. frame relay
b. token ring
c. ATM
d. FDDI

____ 48. ____ is the loss of signal strength as the signal moves across media. Both wired and wireless communications suffer from attenuation.

a. Crosstalk
b. Attenuation
c. Distortion
d. Impulse noise

____ 49. ____ is a sudden, short-lived increase in signal frequency or amplitude, also known as a spike.
a. White Noise
b. Noise
c. Echo
d. Impulse Noise

____ 50. The combination of Network layer address and port is referred to as a ____.
a. router
b. control
c. socket
d. layer

____ 51. The ____ layer is responsible for data translation and encryption functions.
a. Presentation
b. Network
c. Application
d. Transport

____ 52. The purpose of ____ is to prevent a receiver from being overwhelmed with segments preventing effective processing of each received segment.
a. port control
b. buffer control
c. control layer
d. flow control

____ 53. The ____ is the primary layer for communications between networks. This layer has three key functions: packetizing, addressing, and routing.
a. Network layer
b. NAT
c. Transport layer
d. Internal routing

____ 54. The ____ layer addresses the problem of moving packets in a single network.
a. Subnet
b. Internetwork
c. Application
d. Transport

____ 55. The Web works via a(n) ____, an application that takes the requested information from the user or a Web resource, and presents it by integrating text, video, graphics, and sound through hyperlinks.
a. URI
b. web browser
c. xml
d. IP address

____ 56. The TCP/IP ____ layer consists of the utility protocols that provide value to the end user.
a. Session
b. Transport
c. Network
d. Application

____ 57. At the ____ layer, the user is provided with a number of services, perhaps most aptly called application protocols.
a. Network
b. Session
c. Transport
d. Application

____ 58. ____ is signal modification caused by malfunctioning equipment, such as a faulty Network Interface Card or hub.
a. Distortion
b. Jitter
c. Crosstalk
d. Echo

____ 59. ____ is a wide area network packet-switching DLL protocol that uses fixed cell (frame) sizes of 53 bytes
a. ATM
b. token ring
c. Frame Relay
d. FDDI

____ 60. A ____ is a very large network that covers a vast geographic region like a state, a country, or even the planet.
a. Servant Model
b. MAN
c. WAN
d. LAN

____ 61. ____ is unwanted noise due to a signal coming across the medium at multiple frequencies; also referred to as static noise.
a. Noise
b. Echo
c. Impulse Noise
d. White Noise

____ 62. ____ is a network containing a dedicated server that connects systems within or between a few buildings, over a small geographic space.

a. MAN
b. WAN
c. LAN
d. Servant Model

____ 63. ____ uses two counter directional fiberoptic loops to provide network connections over large areas—up to about 120 miles.

a. Token Ring
b. FDDI
c. Frame Relay
d. ATM

Completion

Complete each statement.

64. The _____ serves to reinforce the position of the U.S. government and industry while helping to ensure the safety and the health of consumers and ensuring environmental protection.

65. _____ is the unintentional variation of the communication over the media.

66. _____ is a wide area network packet-switching DLL protocol that uses fixed cell (frame) sizes of 53 bytes

67. _____, a network layer mechanism that helps systems manage addresses, uses a device like a router to segregate the external Internet from an internal intranet or network.

68. In _____ networks, the individual users or clients directly interact and share resources, without benefit of a central repository or server.

69. _____ is the unintentional variation of the communication over the media.

70. _____ is unwanted noise due to a signal coming across the medium at multiple frequencies; also referred to as static noise.

71. _____ is a network containing a dedicated server that connects systems within or between a few buildings, over a small geographic space.

72. A _____ is a very large network that covers a vast geographic region like a state, a country, or even the planet.

73. _____ is the process of moving a Network layer packet across multiple networks.

74. _____ uses two counterdirectional fiberoptic loops to provide network connections over large areas—up to about 120 miles.

75. The _____ layer is responsible for data translation and encryption functions.

76. An extension of the peer-to-peer network is the _____ where a client shares part of its resources, serving as a pseudo-server.

77. A _____ is the geometric association of components of a network in relation to each other.

78. A(n) _____ network uses a logical ring topology and require stations to possess a token — essentially a data frame with no data — prior to being allowed to transmit data.

79. _____ is the loss of signal strength as the signal moves across media. Both wired and wireless communications suffer from attenuation.

80. _____ is the effect of one communications channel upon another. Crosstalk occurs when one transmission “bleeds” over to another.

81. At the _____ layer, the user is provided with a number of services, perhaps most aptly called application protocols.

82. Any communications medium may be subject to various types of interference, which is commonly called _____.

83. The _____ is the primary layer for communications between networks. This layer has three key functions: packetizing, addressing, and routing.

84. A _____ is a network that typically covers a region the size of a municipality, county, or district.

85. _____ is another wide area network protocol that is used to encapsulate voice and data between LANs.

86. _____ is signal modification caused by malfunctioning equipment, such as a faulty Network Interface Card or hub.

87. _____ is a sudden, short-lived increase in signal frequency or amplitude, also known as a spike.

88. The _____ layer addresses the problem of moving packets in a single network.

ch02
Answer Section

TRUE/FALSE

1.	ANS: T	PTS: 1	REF: 60
2.	ANS: T	PTS: 1	REF: 56
3.	ANS: T	PTS: 1	REF: 58-59
4.	ANS: F	PTS: 1	REF: 53
5.	ANS: T	PTS: 1	REF: 41
6.	ANS: T	PTS: 1	REF: 39-40
7.	ANS: T	PTS: 1	REF: 64
8.	ANS: F	PTS: 1	REF: 58
9.	ANS: T	PTS: 1	REF: 40
10.	ANS: F	PTS: 1	REF: 53
11.	ANS: T	PTS: 1	REF: 39
12.	ANS: F	PTS: 1	REF: 54
13.	ANS: T	PTS: 1	REF: 55
14.	ANS: T	PTS: 1	REF: 45
15.	ANS: T	PTS: 1	REF: 52
16.	ANS: T	PTS: 1	REF: 62
17.	ANS: T	PTS: 1	REF: 60
18.	ANS: F	PTS: 1	REF: 39
19.	ANS: T	PTS: 1	REF: 40
20.	ANS: F	PTS: 1	REF: 63
21.	ANS: T	PTS: 1	REF: 56
22.	ANS: F	PTS: 1	REF: 58
23.	ANS: T	PTS: 1	REF: 51
24.	ANS: F	PTS: 1	REF: 42
25.	ANS: F	PTS: 1	REF: 59
26.	ANS: F	PTS: 1	REF: 39
27.	ANS: T	PTS: 1	REF: 57
28.	ANS: T	PTS: 1	REF: 56
29.	ANS: T	PTS: 1	REF: 41

MULTIPLE CHOICE

30.	ANS: A	PTS: 1	REF: 41
31.	ANS: A	PTS: 1	REF: 67
32.	ANS: B	PTS: 1	REF: 68
33.	ANS: B	PTS: 1	REF: 60
34.	ANS: A	PTS: 1	REF: 54
35.	ANS: C	PTS: 1	REF: 40
36.	ANS: B	PTS: 1	REF: 59
37.	ANS: C	PTS: 1	REF: 58

38. ANS: B PTS: 1 REF: 41
39. ANS: A PTS: 1 REF: 40
40. ANS: B PTS: 1 REF: 64
41. ANS: C PTS: 1 REF: 43
42. ANS: B PTS: 1 REF: 39
43. ANS: B PTS: 1 REF: 39
44. ANS: A PTS: 1 REF: 39
45. ANS: B PTS: 1 REF: 39
46. ANS: C PTS: 1 REF: 58
47. ANS: B PTS: 1 REF: 54
48. ANS: B PTS: 1 REF: 39
49. ANS: D PTS: 1 REF: 39
50. ANS: C PTS: 1 REF: 63
51. ANS: A PTS: 1 REF: 64
52. ANS: D PTS: 1 REF: 62
53. ANS: A PTS: 1 REF: 56
54. ANS: B PTS: 1 REF: 69
55. ANS: B PTS: 1 REF: 67
56. ANS: D PTS: 1 REF: 68
57. ANS: D PTS: 1 REF: 64
58. ANS: B PTS: 1 REF: 39
59. ANS: A PTS: 1 REF: 54
60. ANS: C PTS: 1 REF: 41
61. ANS: D PTS: 1 REF: 39
62. ANS: C PTS: 1 REF: 41
63. ANS: B PTS: 1 REF: 54

COMPLETION

64. ANS: American National Standards Institute

    PTS: 1 REF: 43
65. ANS: Distortion

    PTS: 1 REF: 39
66. ANS: ATM

    PTS: 1 REF: 54
67. ANS: NAT

    PTS: 1 REF: 58
68. ANS: peer-to-peer

    PTS: 1 REF: 40
69. ANS: Distortion

    PTS: 1 REF: 39

70. ANS: White Noise

PTS: 1 REF: 39

71. ANS: LAN

PTS: 1 REF: 41

72. ANS: WAN

PTS: 1 REF: 41

73. ANS: Routing

PTS: 1 REF: 58

74. ANS: FDDI

PTS: 1 REF: 54

75. ANS: Presentation

PTS: 1 REF: 64

76. ANS: Servant Model

PTS: 1 REF: 40

77. ANS: topology

PTS: 1 REF: 41

78. ANS: token ring

PTS: 1 REF: 54

79. ANS: Attenuation

PTS: 1 REF: 39

80. ANS: Crosstalk

PTS: 1 REF: 39

81. ANS: Application

PTS: 1 REF: 64

82. ANS: noise

PTS: 1 REF: 39

83. ANS: Network layer

PTS: 1 REF: 56

84. ANS: MAN

PTS: 1 REF: 41

85. ANS: Frame Relay

PTS: 1 REF: 54

86. ANS: Jitter

PTS: 1 REF: 39

87. ANS: Impulse Noise

PTS: 1 REF: 39

88. ANS: Internetwork

PTS: 1 REF: 69