

Business Data Networks and Security 11th edition
Panko Test Bank

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Business Data Networks and Security, 11e (Panko)

Chapter 2 Network Standards

1) Internet standards are published as _____.

- A) RFCs
- B) IETFs
- C) TCP/IPs
- D) Internet Protocols

Answer: A

Difficulty: Basic

Question: 1a

Objective: Explain how Internet standards are made.

AACSB: Applying Information Technology

2) IETF standards typically begin as simple protocols which _____.

- A) enhances development speed
- B) prevents longer-term development
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Difficult

Question: 1b

Objective: Explain how Internet standards are made.

AACSB: Applying Information Technology, Analytical Thinking

3) *Standards* mean the same thing as _____.

- A) semantics
- B) syntax
- C) rules
- D) protocols

Answer: D

Difficulty: Basic

Question: 2a

Objective: Provide definitions of network standards and protocols.

AACSB: Applying Information Technology

4) Network standards provide _____.

- A) strobing
- B) synchronization
- C) interoperability
- D) entanglement

Answer: C

Difficulty: Basic

Question: 2c

Objective: Provide definitions of network standards and protocols.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

5) Network standards _____.

- A) decrease equipment prices
- B) prevent the growth of new features
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Difficult

Question: 2d

Objective: Provide definitions of network standards and protocols.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

6) Which standards agency creates Internet standards?

- A) OSI
- B) TCP/IP
- C) ITU-T
- D) IETF

Answer: D

Difficulty: Basic

Question: 3a

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

7) Which of the following is a standards agency?

- A) OSI
- B) TCP/IP
- C) ITU-T
- D) all of the above

Answer: C

Difficulty: Basic

Question: 3b

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

8) Which standards agency is especially important for internet processes?

- A) ITU-T
- B) IETF
- C) Both A and B are about equally important.
- D) Neither A nor B are important.

Answer: B

Difficulty: Basic

Question: 3c

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

9) Which standards agency is especially important for physical transmission processes?

- A) ITU-T
- B) IETF
- C) Both A and B are about equally important.
- D) Neither A nor B are important.

Answer: A

Difficulty: Basic

Question: 3d

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Application of Knowledge

10) Which standards agency is especially important for data link processes?

- A) ISO and ITU-T
- B) IETF
- C) Both A and B are about equally important.
- D) Neither A nor B are important.

Answer: A

Difficulty: Basic

Question: 3e

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Application of Knowledge

11) Which standards agency is especially important for transport processes?

- A) ISO and ITU-T
- B) IETF
- C) Both A and B are about equally important.
- D) Neither A nor B are important.

Answer: B

Difficulty: Basic

Question: 3f

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Application of Knowledge

12) Which standards agency is especially important for Internet supervisory processes?

- A) ISO and ITU-T
- B) IETF
- C) Both A and B are about equally important.
- D) Neither A nor B are important.

Answer: B

Difficulty: Difficult

Question: 3g

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

13) Standards layers provide services directly to _____.

- A) the next-higher layer
- B) the next-lower layer
- C) all layers
- D) only themselves

Answer: A

Difficulty: Difficult

Question: 4b

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology

14) If you change a standard at one layer, you are not required to change standards at other layers.

Answer: TRUE

Difficulty: Basic

Question: 4c

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology

15) It is typically advantageous to change a standard if the layer _____ gets an upgraded standard.

- A) above it
- B) below it
- C) at least two layers away
- D) none of the above

Answer: B

Difficulty: Difficult

Question: 4d

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

16) A standards agency for OSI is _____.

- A) ITU-T
- B) IETF
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Basic

Question: 5a

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology

17) Which of the following is an architecture?

- A) ISO
- B) IETF
- C) both A and B
- D) neither A nor B

Answer: D

Difficulty: Basic

Question: 5b

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology

18) Which of the following is a standards agency for the Internet?

- A) IETF
- B) ISO
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Basic

Question: 5c

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology

19) From which standards architectures do organizations typically take their standards?

- A) OSI
- B) TCP/IP
- C) both A and B
- D) neither A nor B

Answer: C

Difficulty: Difficult

Question: 5d

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Application of Knowledge

20) IETF standards are dominant in the OSI-TCP/IP layered standards architecture at the _____ layer.

- A) data link
- B) transport
- C) both A and B
- D) neither A nor B

Answer: B

Difficulty: Basic

Question: 5e

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

21) ISO standards are dominant in the OSI-TCP/IP layered standards architecture at the _____ layer.

- A) transport
- B) Internet
- C) both A and B
- D) neither A nor B

Answer: D

Difficulty: Basic

Question: 5f

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

22) Only applications from the IETF are likely to be able to run over TCP.

Answer: FALSE

Difficulty: Difficult

Question: 5g

Objective: Explain standards agencies and architectures.

AACSB: Applying Information Technology, Application of Knowledge

23) Which layer governs wires?

- A) transport
- B) physical
- C) Internet
- D) none of the above

Answer: B

Difficulty: Basic

Question: 6a

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Application of Knowledge

24) Which standards layer governs e-mail?

- A) data link
- B) transport
- C) Internet
- D) none of the above

Answer: D

Difficulty: Difficult

Question: 6b

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

25) Which standards layer governs the World Wide Web?

- A) data link
- B) transport
- C) Internet
- D) none of the Above

Answer: D

Difficulty: Difficult

Question: 6b

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

26) Which standards layer governs peer-to-peer file sharing?

- A) data link
- B) transport
- C) Internet
- D) none of the Above

Answer: D

Difficulty: Difficult

Question: 6b

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

27) Which standards layer governs multiuser word processing programs?

- A) data link
- B) transport
- C) Internet
- D) none of the Above

Answer: D

Difficulty: Difficult

Question: 6b

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

28) Which layer(s) governs transmission through a single network?

- A) data link
- B) physical
- C) both A and B
- D) neither A nor B

Answer: C

Difficulty: Basic

Question: 6c

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology

29) Which layer(s) governs transmission through the Internet?

- A) data link
- B) physical
- C) both A and B
- D) neither A nor B

Answer: D

Difficulty: Basic

Question: 6d

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology

30) Which layer processes application message fragmentation?

- A) application
- B) transport
- C) Internet
- D) all of the above

Answer: B

Difficulty: Difficult

Question: 6e

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

31) The application layer processes application message fragmentation.

Answer: FALSE

Difficulty: Difficult

Question: 6e

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

32) At what layer will you find standards for routers?

- A) transport
- B) Internet
- C) both A and B
- D) neither A nor B

Answer: B

Difficulty: Difficult

Question: 7a

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Application of Knowledge

33) At what layer will you find standards for access points?

- A) physical
- B) data link
- C) both A and B
- D) neither A nor B

Answer: C

Difficulty: Basic

Question: 7b

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

34) At what layer will you find standards for packets?

- A) application
- B) data link
- C) transport
- D) Internet

Answer: D

Difficulty: Basic

Question: 7c

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Application of Knowledge

35) At what layer will you find standards for switches?

- A) application
- B) data link
- C) transport
- D) Internet

Answer: B

Difficulty: Basic

Question: 7d

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Application of Knowledge

36) At what layer will you find standards for frames?

- A) application
- B) data link
- C) transport
- D) Internet

Answer: B

Difficulty: Basic

Question: 7e

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Application of Knowledge

37) At what layer will you find standards for IP addresses?

- A) application
- B) data link
- C) transport
- D) Internet

Answer: D

Difficulty: Basic

Question: 7f

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

38) At what layer will you find standards for routes?

- A) application
- B) data link
- C) transport
- D) Internet

Answer: D

Difficulty: Basic

Question: 7g

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Application of Knowledge

39) At what layer will you find standards for EUI-48 addresses?

- A) application
- B) data link
- C) transport
- D) Internet

Answer: B

Difficulty: Basic

Question: 7h

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Application of Knowledge

40) If two hosts are connected by five networks, how many packets will there be when one host sends a packet to the other host?

- A) 1
- B) 2
- C) 5
- D) 7

Answer: A

Difficulty: Difficult

Question: 8a

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

41) If two hosts are connected by five networks, how many frames will there be when one host sends a packet to the other host?

- A) 1
- B) 2
- C) 5
- D) 6

Answer: C

Difficulty: Difficult

Question: 8b

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

42) If two hosts are connected by five networks, how many routers will there be when one host sends a packet to the other host?

- A) 1
- B) 2
- C) 4
- D) 5

Answer: C

Difficulty: Difficult

Question: 8c

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

43) If two hosts are connected by five point-to-point networks, how physical links will there be when one host sends a packet to the other host?

- A) 1
- B) 2
- C) 5
- D) 6

Answer: D

Difficulty: Difficult

Question: 8d

Objective: Explain the purpose of each standards layer in the TCP/IP-OSI standards architecture.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

44) In an HTTP, which one (browser or Webserver application program) transmits message first?

- A) browser
- B) Webserver application program
- C) They transmit simultaneously.
- D) It depends on the situation.

Answer: A

Difficulty: Basic

Question: 9a

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Application of Knowledge

45) In HTTP, which program may initiate communication?

- A) browser
- B) Webserver program
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Difficult

Question: 9a

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Application of Knowledge

46) HTTP is a connectionless protocol.

Answer: TRUE

Difficulty: Basic

Question: 9b

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology

47) HTTP is a reliable protocol.

Answer: FALSE

Difficulty: Basic

Question: 9c

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology

48) HTTP is _____.

A) connection-oriented.

B) reliable

C) both A and B

D) neither A nor B

Answer: D

Difficulty: Basic

Question: 9c

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology

49) TCP messages are called _____.

A) frames

B) packets

C) segments

D) fragments

Answer: C

Difficulty: Basic

Question: 10a

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology

50) Host P transmits a SYN segment to Host Q. If host Q is willing to open the connection, it will transmit a(n) _____ segment.

A) ACK

B) SYN

C) SYN/ACK

D) none of the above

Answer: C

Difficulty: Basic

Question: 10b

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

51) If a destination host does not receive a segment, it will _____.

- A) transmit an ACK segment
- B) transmit a NAC segment
- C) transmit an RSND segment
- D) none of the above

Answer: D

Difficulty: Basic

Question: 10c

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

52) If a destination host receives a TCP segment with an error, it will transmit _____.

- A) an ACK segment
- B) an NAC segment
- C) an RSND segment
- D) nothing

Answer: D

Difficulty: Basic

Question: 10c

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

53) TCP control segments normally have _____.

- A) headers
- B) headers and data fields
- C) headers, data fields, and trailers
- D) none of the above

Answer: A

Difficulty: Difficult

Question: 10d

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

54) TCP is a connection-oriented protocol.

Answer: TRUE

Difficulty: Basic

Question: 11a

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology

55) During a connection opening, how many TCP segments will the side that initiates the connection send?

- A) 1
- B) 2
- C) 3
- D) 4

Answer: B

Difficulty: Difficult

Question: 11c

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

56) If a destination host receives a correct segment, it will transmit _____.

- A) an ACK segment
- B) an NAC segment
- C) an RSND segment
- D) nothing

Answer: A

Difficulty: Basic

Question: 12a

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

57) If a destination host does not receive a segment, it will _____.

- A) transmit an ACK segment
- B) transmit an NAC segment
- C) transmit an RSND segment
- D) none of the above

Answer: D

Difficulty: Basic

Question: 12b

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

58) If a destination host receives an incorrect segment, it will _____.

- A) transmit an ACK segment
- B) transmit an NAC segment
- C) transmit an RSND segment
- D) none of the above

Answer: D

Difficulty: Basic

Question: 12c

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

59) A sending host will retransmit a TCP segment if it _____.

- A) receives an ACK segment
- B) receives an NAC segment
- C) receives an RPT segment
- D) none of the above

Answer: D

Difficulty: Basic

Question: 12d

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

60) In a four-step close, which side transmits a FIN segment?

- A) the side that initiates the close
- B) the side that does not initiate the close
- C) both A and B
- D) neither A nor B

Answer: C

Difficulty: Difficult

Question: 13a

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Application of Knowledge

61) After the side wishing to close a TCP connection sends a FIN segment, it will _____.

- A) not send any more segments
- B) only send ACK segments
- C) only send FIN segments
- D) none of the above

Answer: B

Difficulty: Difficult

Question: 13b

Objective: Explain message ordering in HTTP and TCP.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

62) Which of the following is NOT one of the three general parts of messages?

- A) address field
- B) header
- C) data field
- D) trailer

Answer: A

Difficulty: Difficult

Question: 14a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

63) The _____ contains the content being delivered by a message.

- A) address field
- B) header
- C) data field
- D) trailer

Answer: C

Difficulty: Basic

Question: 14b

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

64) A header is defined as everything that comes before the data field.

Answer: TRUE

Difficulty: Basic

Question: 14c

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

65) A message always has a _____.

- A) header
- B) data field
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Difficult

Question: 14c

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

66) There is always a data field in a message.

Answer: FALSE

Difficulty: Basic

Question: 14d

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

67) A trailer is defined as everything that comes after the data field.

Answer: TRUE

Difficulty: Basic

Question: 14e

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

68) Which part of a message is included less frequently when compared to the other two parts?

- A) header
- B) data field
- C) trailer
- D) All of the above are equally included in messages.

Answer: C

Difficulty: Basic

Question: 14f

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

69) "Header" means the same thing as "Header Field."

Answer: FALSE

Difficulty: Difficult

Question: 14g

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

70) In IP, the first bit in the second row is _____.

- A) 0
- B) 31
- C) 32
- D) none of the above.

Answer: C

Difficulty: Basic

Question: 15a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking

71) The internet process checks for errors.

Answer: TRUE

Difficulty: Difficult

Question: 15c

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

72) If the destination internet process detects an error, it _____.

- A) discards the packet
- B) sends back a segment notifying the sender
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Difficult

Question: 15d

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Application of Knowledge

73) IP is _____.

- A) reliable
- B) unreliable
- C) semi-reliable
- D) unreliable or reliable depending on the situation

Answer: B

Difficulty: Basic

Question: 15f

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

74) Which of the following is a connectionless protocol?

- A) IP
- B) TCP
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Difficult

Question: 15g

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Application of Knowledge

75) TCP has single-bit fields in its headers; these single-bit fields are called _____ fields.

- A) port
- B) flag
- C) ACK
- D) binary

Answer: B

Difficulty: Basic

Question: 16a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

76) If someone says that a 1-bit flag is set, it is given the value _____.

- A) 0
- B) 1
- C) either 0 or 1
- D) neither 0 or 1

Answer: B

Difficulty: Basic

Question: 16b

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

77) SYN segments have _____.

- A) headers
- B) headers and data fields
- C) headers, data fields, and trailers
- D) data fields only

Answer: A

Difficulty: Difficult

Question: 16f

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking

78) A TCP segment can both send information and acknowledge an earlier message sent to its host.

Answer: TRUE

Difficulty: Basic

Question: 16g

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

79) The UDP header has _____ fields.

- A) 4
- B) 8
- C) 16
- D) 32

Answer: A

Difficulty: Difficult

Question: 17a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Application of Knowledge

80) UDP _____.

- A) is unreliable
- B) has a checksum field
- C) both A and B
- D) neither A nor B

Answer: C

Difficulty: Difficult

Question: 17d

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

81) On a server, well-known port numbers indicate _____.

- A) applications
- B) connections with client computers
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Difficult

Question: 18a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Application of Knowledge

82) For every conversation, a client randomly generates an ephemeral port number for _____.

- A) applications
- B) conversations
- C) the server
- D) none of the above

Answer: B

Difficulty: Difficult

Question: 18b

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Application of Knowledge

83) The range of port 1024 to port 4999 is the usual range for _____ port numbers.

- A) well-known
- B) ephemeral
- C) both A and B
- D) neither A nor B

Answer: B

Difficulty: Difficult

Question: 18c

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

84) 2500 is in the range for _____ port numbers.

- A) well-known
- B) ephemeral
- C) both A and B
- D) neither A nor B

Answer: B

Difficulty: Difficult

Question: 18d

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

85) The source socket is 60.171.18.22:2707. The source is a(n) _____.

- A) client
- B) server
- C) well-known server
- D) ephemeral server

Answer: A

Difficulty: Difficult

Question: 19a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

86) The destination socket is 60.171.18.22:161. The destination host is a(n) _____.

- A) client
- B) server
- C) well-known server
- D) ephemeral server

Answer: B

Difficulty: Difficult

Question: 19a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

87) Which of the following is a socket?

- A) 80
- B) 21
- C) both A and B
- D) neither A nor B

Answer: D

Difficulty: Difficult

Question: 19a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

88) "Octet" is the same as _____.

- A) "bit"
- B) "byte"
- C) either A or B, depending on the context
- D) neither A nor B

Answer: B

Difficulty: Basic

Question: 20a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

89) Ethernet syntax is displayed 32 bits on a line.

Answer: FALSE

Difficulty: Difficult

Question: 20a

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Application of Knowledge

90) In the Ethernet II frame, the IP packet is carried in the _____ field.

A) source address

B) destination address

C) data

D) EtherType

Answer: C

Difficulty: Basic

Question: 20b

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

91) The IP standard calls for IP packets to be carried in the Ethernet II version of the Ethernet frame.

Answer: TRUE

Difficulty: Basic

Question: 20c

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

92) To know what kind of message is in the Ethernet II data field, the receiver must look in the _____ field.

A) source address

B) destination address

C) data

D) EtherType

Answer: D

Difficulty: Basic

Question: 20d

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology

93) Ethernet has a Frame Check Sequence Field to check for errors. Ethernet is _____.

- A) reliable
- B) unreliable
- C) both A and B
- D) neither A nor B

Answer: B

Difficulty: Difficult

Question: 20e

Objective: Explain message syntax in common network standards.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

94) Converting application messages into bits is called _____.

- A) encapsulation
- B) encryption
- C) encoding
- D) exchange

Answer: C

Difficulty: Difficult

Question: 21a

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology

95) At what layer is encoding done?

- A) application
- B) transport
- C) Internet
- D) none of the above

Answer: A

Difficulty: Difficult

Question: 21b

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

96) How many bytes will it take to transmit "Brain Dead" without the quotation marks?

- A) 2
- B) 3
- C) 9
- D) none of the above

Answer: D

Difficulty: Difficult

Question: 22b

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

97) Transmitting "Oh, My!" without the quotes in ASCII requires _____ octets.

- A) 2
- B) 4
- C) 6
- D) 7

Answer: D

Difficulty: Difficult

Question: 22c

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

98) Which of the following is an integer?

- A) 4,307
- B) 45.7
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Basic

Question: 23a

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Application of Knowledge

99) Which of the following is an integer?

- A) 5,280
- B) 98.6
- C) both A and B
- D) neither A nor B

Answer: A

Difficulty: Basic

Question: 23b

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Application of Knowledge

100) Convert decimal 8 to binary.

- A) 100
- B) 1000
- C) 10000
- D) 111

Answer: B

Difficulty: Difficult

Question: 23e

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

101) Convert a decimal number 15 to the binary number.

- A) It is a binary number.
- B) 1100
- C) 1101
- D) 1111

Answer: D

Difficulty: Difficult

Question: 23g

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

102) Convert the binary number 100 to decimal.

- A) It is in decimal.
- B) 2
- C) 4
- D) 8

Answer: C

Difficulty: Difficult

Question: 23k

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

103) In decimal, the binary number 110 is _____.

- A) 15
- B) 16
- C) 17
- D) none of the above

Answer: D

Difficulty: Difficult

Question: 23k

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

104) A 5-bit field can represent _____ alternatives or different combinations.

- A) 8
- B) 16
- C) 32
- D) 64

Answer: C

Difficulty: Difficult

Question: 24a

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

105) If you add one bit to an alternatives field, you can have _____.

- A) one more alternative
- B) two more alternatives
- C) twice as many alternatives
- D) none of the above

Answer: C

Difficulty: Basic

Question: 24b

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking

106) How many alternatives can you represent with a 10-bit field?

- A) 256
- B) 512
- C) 1,024
- D) none of the above

Answer: C

Difficulty: Difficult

Question: 24c

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

107) To represent 65 alternatives, your alternatives field would have to be at least _____ bits long.

- A) 5
- B) 6
- C) 7
- D) 8

Answer: C

Difficulty: Difficult

Question: 24d

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

108) The five senses can be represented with a _____-bit field.

- A) 2
- B) 3
- C) 4
- D) 5

Answer: B

Difficulty: Difficult

Question: 24e

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

109) In TCP, port number fields are 16 bits long. How many possible port numbers are there?

- A) 16
- B) 1,024
- C) 16,384
- D) 64,536

Answer: D

Difficulty: Basic

Question: 24a

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

110) ASCII has a 7-bit code. How many keyboard characters can it represent?

- A) 128
- B) 256
- C) 512
- D) 1,024

Answer: A

Difficulty: Difficult

Question: 24e

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge

111) Which of the following protocols is reliable?

- A) IP
- B) TCP
- C) both A and B
- D) neither A nor B

Answer: B

Difficulty: Basic

Question: 25a

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Application of Knowledge

112) Not making all protocols reliable _____.

- A) reduces cost
- B) is very dangerous
- C) is widely viewed as having been a mistake
- D) none of the above

Answer: A

Difficulty: Difficult

Question: 25b

Objective: Explain how application programs encode data into binary representation.

AACSB: Applying Information Technology, Analytical Thinking, Application of Knowledge