



FIRST ATTEMPT GUARANTEE

EXAMGURU

Exam : N10-003

Title : NETWORK+ (2005)

**This is SAMPLE Guide.
Actual Guide contains all the questions**

QUESTION 1

If one of the links to a computer on a physical star topology is severed, what will be the result?

- A.The entire network will stop working.
- B.The affected link and the adjacent network links will stop working.
- C.Only the affected link will stop working.
- D.Only the adjacent links will stop working.

Answer: C

In the star topology each computer is connected to a central point by a separate cable or wireless connection.

Thus

each computer has a dedicated link to the network central device and a break in the link between a particular computer

and the central network device will affect only that computer.

References:

David Groth and Toby Skandier,Network+ Study Guide(4th Edition), Sybex,AlamedaCA, 2005, pp. 1016.

QUESTION 2

When one connection to a host fails in a full mesh network, which of the following is true?

- A.All hosts can communicate
- B.No hosts can communicate
- C.Half of the host will lose communication
- D.Only the two hosts between the failed connection will lose communication

Answer: A

In a full mesh network, each node has a connection to at two other nodes. Thus, should one connection fail, it will have

no effect on communication as all nodes will be connected to at least one other node.

References:

David Groth and Toby Skandier,Network+ Study Guide(4th Edition), Sybex,AlamedaCA, 2005, pp. 1415.

QUESTION 3

Which of the following network topologies uses the most cable?

- A.Star
- B.Ring
- C.Bus
- D.Mesh

Answer: D

In the mesh topology, each node is connected to at least three other nodes. This requires more cabling than in the ring or

bus topology, in which each node is connected to only two other nodes, or the star topology, in which each node is

connected to a central hub or switch.

Incorrect Answers:

A:In the star topology, each node is connected to a central hub or switch. This requires less cabling than in the

meshtopology, in which each node is connected to at least three other nodes.

B:In the ring topology consists of a closed loop in which each node is connected to the node ahead of it and the node behind it in the loop. This requires less cabling than in the mesh topology, in which each node is connected to at least three other nodes.

C:The bus topology is similar to the ring topology, except that the cable does not form a complete loop, but is terminated at each end. Each node, except the nodes at the end points, is connected to the node ahead of it and the node behind it along the cable. This requires less cabling than in the mesh topology, in which each node is connected to at least three other nodes. References:

David Groth and Toby Skandier, Network+ Study Guide(4th Edition), Sybex, AlamedaCA, 2005, pp. 5154.

QUESTION 4

Which of the following network topologies uses the least cable?

- A.Star
- B.Ring
- C.Bus
- D.Mesh

Answer: C

The bus topology consists of a single cable that connects the network nodes. Both ends of the cable are terminated just after the last node. Each node, except the nodes at the end points, is connected to the node ahead of it and the node behind it along the cable. This requires least amount of cabling. Incorrect

Answers:

A:In the star topology, each node is connected to a central hub or switch. This requires more cabling than in the bus topology, in which the nodes are connected on a single trunk cable that is terminated just after the last nodes at either end.

B:In the ring topology consists of a closed loop in which each node is connected to the node ahead of it and the node behind it in the loop. This requires more cabling than in the bus topology, in which the nodes are connected on a single trunk cable that is terminated just after the last nodes at either end and does not need to connect the ends together to form a loop.

C:In the mesh topology, each node is connected to at least three other nodes. This requires more cabling than in the ring or bus topology, in which each node is connected to only two other nodes, or the star topology, in which each node is

connected to a central hub or switch.

References:

David Groth and Toby Skandier, Network+ Study Guide (4th Edition), Sybex, Alameda CA, 2005, pp. 5154.

QUESTION 5

Which of the following networking topology requires the MOST physical connections per node?

- A. Bus
- B. Ring
- C. Star
- D. Mesh

Answer: D

In the mesh topology, each node is connected to at least three other nodes. This requires more connections per node than in the ring or bus topology, in which each node is connected to only two other nodes, or the star topology, in which each node is connected to a central hub or switch. Incorrect Answers:

A: In the star topology, each node is connected to a central hub or switch. This requires fewer connections per node than in the mesh topology, in which each node is connected to at least three other nodes.

B: In the ring topology consists of a closed loop in which each node is connected to the node ahead of it and the node behind it in the loop. This requires fewer connections per node than in the mesh topology, in which each node is connected to at least three other nodes.

C: The bus topology is similar to the ring topology, except that the cable does not form a complete loop, but is terminated at each end. Each node, except the nodes at the end points, is connected to the node ahead of it and the node behind it along the cable. This requires fewer connections per node than in the mesh topology, in which each node is connected to at least three other nodes. References:

David Groth and Toby Skandier, Network+ Study Guide (4th Edition), Sybex, Alameda CA, 2005, pp. 5154.

QUESTION 6

At which of the following speeds does token ring operate?

- A. 1 Mbps, 10 Mbps (Megabit per second)
- B. 1 Mbps, 4 Mbps (Megabit per second)
- C. 4 Mbps, 16 Mbps (Megabit per second)
- D. 10 Mbps, 100 Mbps (Megabit per second)

Answer: C

Token ring initially operated at 4 Mbps. This was later increased to 16 Mbps.

References:

David Groth and Toby Skandier, Network+ Study Guide (4th Edition), Sybex, Alameda CA, 2005, p. 65.

QUESTION 7

Which frequency band is used in the IEEE 802.11b standard?

- A.1.5 GHz (Gigahertz)
- B.2.4 GHz (Gigahertz)
- C.5.0 GHz (Gigahertz)
- D.7.0 GHz (Gigahertz)

Answer: B

IEEE 802.11, IEEE 802.11b and IEEE 802.11g uses the 2.4 GHz frequency band.

Incorrect Answers:

A, D: No IEEE wireless standard uses the 1.5 GHz or the 7.0 GHz frequency bands.

C: IEEE 802.11a uses the 5.0 GHz frequency band, not 802.11b.

References:

David Groth and Toby Skandier, Network+ Study Guide (4th Edition), Sybex, Alameda CA, 2005, pp. 249-252.

QUESTION 8

Which standard covers the methods for performing authentication services for wireless access to a central LAN (Local Area Network)?

- A.802.5
- B.802.1x
- C.802.3
- D.802.4

Answer: B

802.1x is an authentication method for authenticating wireless users and requires them to authenticate at the WAP before they are granted access to the network.

Incorrect Answers:

A: 802.5 defines Token Ring.

C: 802.3 defines Ethernet.

D: 802.4 defines Token Bus.

References:

David Groth and Toby Skandier, Network+ Study Guide (4th Edition), Sybex, Alameda CA, 2005, pp. 636-65, 340.

QUESTION 9

Which of the following IEEE (Institute of Electrical and Electronics Engineers) standards represents Ethernet?

- A.802.0
- B.802.3
- C.802.5
- D.802.11

Answer: B

The IEEE 802.3 standard defines a network that uses a bus topology, baseband signaling, and a CSMA/CD network

access method. This standard was developed to match the Digital, Intel, and Xerox

(DIX) Ethernet networking technology and is referred to as Ethernet.

Incorrect Answers:

A:There is not IEEE 802.0 standard.

C:IEEE 802.5 represents Token Ring, not Ethernet.

D:IEEE 802.11 represents Wireless LAN, not Ethernet.

References:

David Groth and Toby Skandier,Network+ Study Guide(4th Edition), Sybex,AlamedaCA, 2005, pp. 6366.

QUESTION 10

Which of the following topologies does FDDI (Fiber Distributed Data Interface) require?

A.Star

B.Bus

C.Ring

D.Mesh

Answer: C

FDDI is a tokenpassing network using fiberoptic

cable. It is similar to Token Ring but uses two rings that counterrotate

instead of one ring. If a failure occurs, the counterrotating rings can join together forming a ring around

the fault, thus isolating the fault and allowing communications to continue.

Reference:

David Groth,Network+ Study Guide(3rd Edition), Sybex,Alameda, 2002, pp. 330.

QUESTION 11

Which of the following media access methods is used in an IEEE (Institute and Electronics Engineers) 802.3 network?

A.Polling

B.Token passing

C.CSMA / CD (Carrier Sense Multiple Access / Collision Detection)

D.CSMA / CA (Carrier Sense Multiple Access / Collision Avoidance)

Answer: C

An IEEE 802.3 network is Ethernet which uses CSMA / CD (Carrier Sense Multiple Access / Collision Detection).

Incorrect Answers:

A:Pollingis a media access control method that uses a central device called a controller that polls each device in turn and

asks if it has data to transmit.

B:Token passing occurs in Token Bus and Token Ring networks which are IEEE 802.4 and IEEE 802.5 networks

respectively.

D:CSMA / CA (Carrier Sense Multiple Access / Collision Avoidance)occursin Wireless LANs which are 802.11

networks.

Reference:

David Groth and Toby Skandier, Network+ Study Guide (4th Edition), Sybex, Alameda CA, 2005, p. 6366.

QUESTION 12

Which of the following access methods does Ethernet use?

- A. Token passing
- B. Full duplex
- C. CSMA / CA (Carrier Sense Multiple Access / Collision Avoidance)
- D. CSMA / CD (Carrier Sense Multiple Access / Collision Detection)

Answer: D

Ethernet uses CSMA / CD (Carrier Sense Multiple Access / Collision Detection).

Incorrect Answers:

A: Token passing occurs in Token Bus and Token Ring.

B: Full duplex describes a transmission characteristic in which data can be transmitted in both directions simultaneously.

This is possible in Ethernet, but is not an access method.

C: CSMA / CA (Carrier Sense Multiple Access / Collision Avoidance) occurs in Wireless networks.

Reference:

David Groth and Toby Skandier, Network+ Study Guide (4th Edition), Sybex, Alameda CA, 2005, p. 6366.

QUESTION 13

Which of the following are NOT terminated on a punch down block?

- A. STP (Shielded Twisted Pair) cable
- B. MMF (MultiMode Fiber) cable
- C. UTP (Unshielded Twisted Pair) cable
- D. Category 3 cable

Answer: B

Fiber optic cable is not terminated.

Incorrect Answers:

A, C: All twisted pair copper cable, be they shielded twisted pair or unshielded twisted, is terminated on a punch down block.

D: Category 3 cable is a twisted pair copper cable. All twisted pair copper cable is terminated on a punch down block.

References:

David Groth and Toby Skandier, Network+ Study Guide (4th Edition), Sybex, Alameda CA, 2005, pp. 2022, 271272.

QUESTION 14

ExamGuru.net has recently installed a number of ceiling fans in its offices. No users are complaining of slow activity on the LAN and WAN. Nothing on the Category 5 UTP network has changed to cause this. What is the most likely cause of this problem?

- A. AMI (Alternate Mark Inversion)

- B.EMI (Electromagnetic Interference)
- C.MIB (Management Information Base)
- D.FDM (Frequency Division Multiplexing)

Answer: B

UTP networks are susceptible to EMI which could be caused by the motors in the ceiling fans.

Incorrect Answers:

A:AMI is a line encoding technique for T1 connections. It uses bipolar pulses to represent logical values and does not affect UTP networks.

C:MIB is a database containing the information pertinent to network management. It allows for the management of network technologies such as Remote Access Routing Services, IP Helper, and SNMP.

D:FDM is used in Wireless networks. It is a multiplexing technique that sends different signals over multiple frequencies. It does not affect UTP networks. References:

David Groth and Toby Skandier, Network+ Study Guide(4th Edition), Sybex, Alameda CA, 2005, pp. 237-238, 241, 250. http://en.wikipedia.org/wiki/Alternate_Mark_Inversion

<http://msdn.microsoft.com/library/default.asp?url=/library/enus/mib/mib/portal.asp>

QUESTION 15

Which of the following IEEE (Institute of Electrical and Electronic Engineers) standards requires copper cable?

- A. 10BASEFL
- B. 100BASEFX
- C. 100BASECX
- D. 10 GBASELR

Answer: C

Only 100BASECX uses copper cable.

Incorrect Answers:

A, B, D: 10BASEFL,

100BASEFX,

and 10 GBASELR

all use fiber optic cable.

Reference:

David Groth and Toby Skandier, Network+ Study Guide(4th Edition), Sybex, Alameda CA, 2005, pp. 1731.

QUESTION 16

Which of the following Ethernet standards is fiber optic based?

- A. 1000BASETX

- B.10 GBASELR
- C.1000BASECX
- D.10BASET

Answer: B

Only 10 GBASE-LR is fiber optic based.

Incorrect Answers:

A, C, D:1000BASE-TX,1000BASE-CX, and 10BASE-T are all copper cable based.

Reference:

David Groth and Toby Skandier,Network+ Study Guide(4th Edition), Sybex,AlamedaCA, 2005, pp. 1731.

QUESTION 17

Which of the following IEEE (InstituteofElectricaland Electronics Engineers) standards uses a 1300 nm (nanometer) beam?

- A.1000BASE-LX and 10 GBASE-LR
- B.1000BASE-CX and 1000BASE-T
- C.1000BASE-SX and 10 GBASE-SR
- D.10 GBASE-ER and 10 GBASE-SR

Answer: A

1000BASE-LX and 10 GBASE-LR used long wavelength beams of 1300 nanometers (nm).

Incorrect Answers:

B:1000BASE-CX and 1000BASE-T uses twisted pair copper wires. However, beams are used in optical cable.

C:1000BASE-SX and 10 GBASE-SR uses short wavelength beams of 850 nanometers (nm).

D:10 GBASE-ER users 1550 nanometers (nm) beams while 10 GBASE-SR uses 850 nm beams.

References:

David Groth and Toby Skandier,Network+ Study Guide(4th Edition), Sybex,AlamedaCA, 2005, pp. 23-24.

QUESTION 18

Which of the following media types is the MOST prone to EMI (electromagnetic interference)?

- A.Category 5e UTP (Unshielded Twisted Pair)
- B.RG-58 (Radio Grade) coaxial cable
- C.SMF (Single Mode Fiber) optic cable
- D.MMF (MultiMode Fiber) optic cable

Answer: A

UTP (Unshielded Twisted Pair) cable is susceptible to EMI (electromagnetic interference).

Incorrect Answers:

B:RG-58 coaxial cable is also susceptible to EMI, but not to the same extent as UTP.

C, D:Both SMF and MMF optic cable are immune to EMI.

References:

David Groth and Toby Skandier,Network+ Study Guide(4th Edition), Sybex,AlamedaCA, 2005, pp. 1920, 2527.

QUESTION 19

What is the maximum length of a cable used for 1000BASESX?

A.100
meters(328.08
feet) B.250
meters(820.21.feet
t) C.550
meters(1,804.46
feet) D.3000
meters(9,842.52
feet)

Answer: C

100BASE-SX uses multimode fiber optic cable that has a maximum transmission distance of 550 meters. References:

David Groth and Toby Skandier, Network+ Study Guide(4th Edition), Sybex, Alameda CA, 2005, pp. 30-31.

QUESTION 20

What is the maximum length of a cable used for 100BASEFX? A.100 meters(328.08 feet)

B.250
meters(820.21.feet
) C.550
meters(1,804.46
feet) D.2000
meters (6,561.68
feet)

Answer: D

100BASEFX
uses multimode fiber optic cable that has a maximum transmission distance of 2000 meters. References:

David Groth and Toby Skandier, Network+ Study Guide(4th Edition), Sybex, Alameda CA, 2005, pp. 30-31.

QUESTION 21

What is the maximum length of a cable used for 100BASE-TX? A.100 meters(328.08 feet)

B.250
meters(820.21.feet
) C.550
meters(1,804.46
feet) D.2000
meters (6,561.68
feet)

Answer: A

100BASE-TX uses multimode fiber optic cable that has a maximum transmission distance of 100 meters. References:

David Groth and Toby Skandier, Network+ Study Guide(4th Edition), Sybex, Alameda CA, 2005, pp. 30-31.

QUESTION 22

Which type of connector would a cable have if it were supplied with a splitter and a cable modem for Internet access?