

Overview

Acquiring a high level of familiarization and proficiency in working with networks is essential in today's connected workplace. This event provides recognition for FBLA members who have an understanding of network technologies.

Competencies

The topics listed below are prioritized, listing the most important content areas of the tests.

- General network terminology
- Network operating system terminology
- Equipment for Internet access
- OSI model and functionality
- Network topologies and connectivity

Procedures/Tips

- Review the Competitive Events Tips in the front of the book.

Web Site Resources

- http://www.webopedia.com/quick_ref/
- <http://www.pctechguide.com/29network.htm>
- http://www.webopedia.com/Networks/Network_Topologies/
- http://www.convert-me.com/en/convert/data_transfer_rate

Networking Concepts Sample Questions

1. A "clear text" password is transmitted through
 - a. no encryption.
 - b. Kerberos encryption.
 - c. Public Key encryption.
 - d. well-known encoding encryption algorithms.
2. What is the speed of a T1 leased line?
 - a. 1.544Mbps
 - b. 100mpbs
 - c. 10mbps
 - d. 44.736Mbps
3. Which of the following protocols is commonly used to send e-mails from one server to another?
 - a. POP3
 - b. ICMP
 - c. RIP
 - d. SMTP
4. Attenuation refers to
 - a. the amount of resistance in a UTP cable.
 - b. the loss of data signal in fiber optic cabling because of dispersion.
 - c. the weakening of data signals as they travel through a media.
 - d. the "bleeding" of signals from wire in UTP to another.
5. The port number assigned for the POP3 protocol is
 - a. 43.
 - b. 110.
 - c. 25.
 - d. 80.
6. Which of the following switches can be added to the "ping" command to make it run continuously?
 - a. -w
 - b. -c
 - c. -o
 - d. -t
7. Which of the following WAN technologies offers speeds as high as 2.4Gbps?
 - a. X.25
 - b. Frame relay
 - c. ATM
 - d. SONET
8. What is the function of ARP?
 - a. It resolves IP addresses to MAC addresses.
 - b. It resolves WINS addresses to DNS addresses.
 - c. It resolves hostnames to IP addresses.
 - d. It resolves NetBIOS names to IP addresses.
9. UTP is an acronym that indicates what wiring type(s)?
 - a. coaxial cable
 - b. wireless connections
 - c. category 1, 2, 3, 4, or 5 cable
 - d. fiber optic cable

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10. The acronym "NIC" refers to:
 - a. Network Interconnectivity Council
 - b. Network and Internet Commission
 - c. National Internet Council
 - d. Network Interface Card
 11. Windows 95, Windows 98, and MacOS9 are all examples of what?
 - a. DOS based operating systems
 - b. Microsoft operating systems
 - c. Server based operating systems
 - d. Peer-to-Peer based operating systems
 12. On a Windows 2000 domain controller, which of the following can not be found?
 - a. local users
 - b. domain groups
 - c. domain users
 - d. local printers
 13. To dynamically assign the necessary TCP/IP information for a server or workstation to connect to a network, which protocol should be used?
 - a. OPSF
 - b. RIP
 - c. OPSF
 - d. DHCP
 14. If you decided to block access to port 53 on your network, what service would you be blocking?
 - a. SMTP
 - b. WINS
 - c. POP3
 - d. DNS
 15. Which protocol can be used to transfer a file between a Unix server and a Windows 2000 server?
 - a. Telnet
 - b. FTP
 - c. PPP
 - d. PPTP
 16. Which of the following can be used to reduce broadcasts on the network by separating broadcast domains?
 - a. hubs
 - b. routers
 - c. repeaters
 - d. switches
 17. Which of the following devices forwards incoming traffic to all ports **except** for the incoming port?
 - a. hub
 - b. router
 - c. bridge
 - d. repeater
 18. To connect two hubs or switches together using UTP, which type of port is typically used?
 - a. MDI-X
 - b. MDI
 - c. MODE
 - d. MIDI

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19. To allow many workstations to access the Internet through one registered "live" IP address, which service should be used?
 - a. DNS
 - b. DHCP
 - c. Proxy service
 - d. NAT
 20. What is maximum throughput of a BRI ISDN connection?
 - a. 64Kbps
 - b. 128Mbps
 - c. 128Kbps
 - d. 64Mbps
 21. The topology of a network is defined by what OSI layer?
 - a. network
 - b. data link
 - c. physical
 - d. session
 22. A network switch operates at what OSI Layer?
 - a. session
 - b. network
 - c. physical
 - d. data-link
 23. Which OSI layer provides error detection and correction?
 - a. data-link
 - b. session
 - c. network
 - d. transport
 24. There are ____ layers in the OSI Model.
 - a. six
 - b. eight
 - c. seven
 - d. nine
 25. E-mail and FTP work at which layer of the OSI model?
 - a. session
 - b. application
 - c. user
 - d. presentation
 26. A Token Ring network uses what device to connect to workstations?
 - a. hub
 - b. repeater
 - c. MSAU
 - d. switch
 27. Which of the following network types is easiest to add new nodes to?
 - a. mesh
 - b. bus
 - c. star
 - d. ring

28. Which of the following standards uses a dual ring configuration for fault tolerance?

- a. 802.5
- b. 802.2
- c. FDDI
- d. 802.3

29. A T3 lines offers transmission speeds up to

- a. 274.176Mbps.
- b. 6.312Mbps.
- c. 44.736Mbps.
- d. 312.412Mbps.

30. OC-3 offers transmission speeds up to

- a. 1.244Gbps
- b. 155.52Mbps
- c. 51.84Mbps
- d. 622.08Mbps

Marketing Answer Key

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|-------|-------|-------|
| 1) D | 11) B | 21) B |
| 2) B | 12) D | 22) C |
| 3) C | 13) A | 23) A |
| 4) C | 14) D | 24) A |
| 5) C | 15) A | 25) C |
| 6) C | 16) D | 26) B |
| 7) D | 17) C | 27) D |
| 8) D | 18) A | 28) A |
| 9) D | 19) D | 29) C |
| 10) C | 20) B | 30) A |

Network Design Answer Key

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|-------|-------|-------|
| 1) A | 11) C | 21) D |
| 2) D | 12) A | 22) B |
| 3) D | 13) A | 23) D |
| 4) A | 14) B | 24) B |
| 5) B | 15) A | 25) D |
| 6) D | 16) B | 26) A |
| 7) A | 17) B | 27) C |
| 8) B | 18) A | 28) C |
| 9) A | 19) A | 29) B |
| 10) C | 20) A | 30) B |

Networking Concepts Answer Key

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|-------|-------|-------|
| 1) A | 11) D | 21) B |
| 2) A | 12) A | 22) D |
| 3) D | 13) D | 23) A |
| 4) C | 14) D | 24) C |
| 5) B | 15) B | 25) B |
| 6) D | 16) B | 26) C |
| 7) D | 17) A | 27) C |
| 8) A | 18) A | 28) C |
| 9) C | 19) D | 29) C |
| 10) D | 20) C | 30) B |

Parliamentary Procedure Answer Key

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|-------|-------|-------|
| 1) A | 11) D | 21) A |
| 2) B | 12) B | 22) C |
| 3) D | 13) D | 23) D |
| 4) C | 14) B | 24) B |
| 5) B | 15) A | 25) B |
| 6) D | 16) B | 26) C |
| 7) A | 17) A | 27) C |
| 8) D | 18) C | 28) A |
| 9) C | 19) D | 29) D |
| 10) B | 20) D | 30) D |

Personal Finance Answer Key

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|-------|-------|-------|
| 1) A | 11) A | 21) C |
| 2) B | 12) D | 22) B |
| 3) A | 13) D | 23) C |
| 4) A | 14) B | 24) A |
| 5) C | 15) B | 25) D |
| 6) B | 16) B | 26) C |
| 7) A | 17) C | 27) B |
| 8) D | 18) B | 28) A |
| 9) A | 19) D | 29) A |
| 10) D | 20) B | 30) C |