
NETWORKING CONCEPTS

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.

This is an individual online test.

Competencies and Task Lists

<http://www.fbla-pbl.org/competitive-event/networking-concepts-fbla/>

Website Resources

- Networking
<http://www.pctechguide.com/29network.htm>
- Network Topologies
http://www.webopedia.com/Networks/Network_Topologies/

NETWORKING CONCEPTS SAMPLE QUESTIONS

- 1) A network that has a large capacity, covers a large geographical area and combine multiple communication channels is known as what type of a network?
A) MAN
B) SAN
C) WAN
D) LAN

Competency: General Network Terminology and Concepts

- 2) What is the most common method for encrypting TCP/IP communications?
A) SSL
B) PGP
C) Kerberos
D) HKEY

Competency: General Network Terminology and Concepts

3) What type of firewall inspects each packet passing through the network and accepts or rejects it based on user-defined rules?

- A) packet filter
- B) proxy server
- C) circuit-level gateway
- D) application gateway

Competency: General Network Terminology and Concepts

4) Which of the following terms refers to a permanent IP address assignment from a DHCP server?

- A) reservation
- B) relay
- C) scope
- D) lease

Competency: General Network Terminology and Concepts

5) Jeff just moved to a new apartment and is looking for a company to contact for Internet service. He is willing to pay a monthly fee, but in return he needs a modem and also an e-mail address. Who would Jeff contact for this service?

- A) DNS
- B) ISDN
- C) ISP
- D) IEEE

Competency: General Network Terminology and Concepts

6) Which of the following is a non-routable protocol?

- A) NetBEUI
- B) TCP/IP
- C) DHCP
- D) AppleTalk

Competency: General Network Terminology and Concepts

7) The term for a computer with no network is:

- A) client/server
- B) peer to peer
- C) null
- D) standalone

Competency: General Network Terminology and Concepts

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- 8) A Digital Subscriber line is best described as:
- A) an always on services made up of copper phone lines that are not used by voice.
 - B) using existing cable lines that converts a digital signal to analog when sending data.
 - C) a solution for those who live in remote areas because it connects to satellites.
 - D) a dedicated line that connects directly from the ISP to your home/business without sharing.

Competency: General Network Terminology and Concepts

- 9) Which networking tool would be used to attach an RJ-45 connector to a CAT5e networking cable?
- A) punch down tool
 - B) crimper
 - C) DHCP tool
 - D) reflectometer

Competency: General Network Terminology and Concepts

- 10) Which of the following is **not** a network operating system?
- A) Windows NT
 - B) Windows for Workgroups
 - C) Windows 2000
 - D) Linux

Competency: Network Operating System Concepts

- 11) Which of the following is **not** a way an operating system allocates disk space for files.
- A) sporadic allocation
 - B) contiguous allocation
 - C) linked allocation
 - D) indexed allocation

Competency: Network Operating System Concepts

- 12) What is the purpose of the event viewer tool?
- A) Schedule programs or other tasks to run automatically.
 - B) Used to check the main log files in Windows Server.
 - C) View advanced system information about the CPU, memory, hard disk, and network performance.
 - D) View and edit group policy security settings.

Competency: Network Operating System Concepts

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- 13) A roaming mandatory profile must be renamed with what extension:
- A) .DAT
 - B) .TMP
 - C) .MAN
 - D) .TXT

Competency: Network Operating System Concepts

- 14) Which of the following are the recommended steps that should be taken for worm attack mitigation?
- A) containment, quarantine, inoculation, treatment
 - B) containment, inoculation, quarantine, treatment
 - C) quarantine, containment, inoculation, treatment
 - D) inoculation, containment, quarantine, treatment

Competency: Network Security

- 15) HTTPS communication traffic is on what TCP port?
- A) 443
 - B) 21
 - C) 23
 - D) 80

Competency: Network Security

- 16) Which of the following would be classified as an access attack?
- A) Trojan horse
 - B) zero-day attack
 - C) DoS
 - D) password attack

Competency: Network Security

- 17) Which of the following reconnaissance attack tools are used to search the publicly available IP addresses to identify the addresses that are active?
- A) ping sweeps
 - B) packet sniffers
 - C) port scans
 - D) Internet queries

Competency: Network Security

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- 18) The main network cable to which branch networks may be connected is called the:
- A) backbone
 - B) express cable
 - C) trunk
 - D) thick cable

Competency: Network Security

- 19) What networking device determines the path that a message should take through a network?
- A) switch
 - B) firewall
 - C) router
 - D) bridge

Competency: Equipment for Network Access (Wi-Fi, Wireless)

- 20) Related to security, DES is:
- A) Denial of Electronic Service
 - B) Digital Encryption Security
 - C) Data Encryption Standard
 - D) Disk Encryption Standard

Competency: Equipment for Network Access (Wi-Fi, Wireless)

- 21) Which of the following does not describe characteristics of baseband technologies?
- A) Baseband can send and receive at the same time if the transmission media is split into two channels.
 - B) Baseband transmissions occupy the entire bandwidth of network media.
 - C) Baseband typically uses digital signaling over a single wire.
 - D) Baseband transmissions cannot be sent and received at the same time.

Competency: Equipment for Network Access (Wi-Fi, Wireless)

- 22) You've been asked by your supervisor to research new possible operating systems for the ABC Company using one of their current PCs. The company is running a Windows OS, but would like to look at Linux and Mac operating systems as possibilities. Which method listed below would be the best option to test out the systems?
- A) Create a virtual machine to run and test the software.
 - B) Use a dual boot configuration to choose the test OS at startup.
 - C) Research what you can on the Internet.
 - D) Uninstall Windows and install each of the test systems separately.

Competency: Equipment for Network Access (Wi-Fi, Wireless)

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- 23) Which of the following is **not** a characteristic that applies to UDP?
- A) Lost or corrupt packets are not resent.
 - B) Packet delivery is guaranteed.
 - C) Packets are treated independently.
 - D) Packet delivery is not guaranteed.

Competency: OSI Model Functionality

- 24) What is the generic designator for any of several digitally multiplexed communications carrier systems which has a basic unit called the DS0, which has a transmission rate of 64kbit/s?
- A) cable modem
 - B) T-Carrier
 - C) DSL
 - D) ISDN

Competency: OSI Model Functionality

- 25) The Internet uses the network protocol called _____.
- A) CSMA/CD
 - B) HTTP
 - C) TCP/IP
 - D) FTP

Competency: OSI Model Functionality

- 26) Your Company is requesting that the company network is segregated logically in terms of the departments they deal with. There are three main departments: manufacturing, accounting and sales. The data intended for manufacturing must not reach accounting or sales. Which solution would best fit this request?
- A) VLANs
 - B) Routing
 - C) RMON probe
 - D) SNMP

Competency: Network Topologies and Connectivity

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- 27) What specialized United Nations agency provides developing countries with technical expertise and equipment to advance their technological standard of living?
- A) NATO
 - B) ITU
 - C) ISO
 - D) ICANN

Competency: Network Topologies and Connectivity

- 28) Which of the following statements is true about single-mode fiber optic cable?
- A) Single-mode has higher attenuation than multimode.
 - B) Single-mode has a larger core.
 - C) Single-mode is typically used in LANs or small distances.
 - D) Single-mode provides the highest throughput.

Competency: Network Topologies and Connectivity

- 29) What type of RJ45 UTP cable is used between switches?
- A) crossover with a router in between the two switches
 - B) crossover with a CSU/DSU
 - C) straight-through
 - D) crossover cable

Competency: Network Topologies and Connectivity

- 30) Which command can be used on a Window computer to test the connectivity of the local machine?
- A) Ping -192.168.0.1
 - B) Ping -l
 - C) Ping 127.0.0.1
 - D) Ping -loopback

Competency: Network Topologies and Connectivity