

Name

Class

Date

: _____ : _____ e: _____

Ch 01: Introduction to Computer Networks

True / False

1. A network that connects LANs in different countries is most likely a WAN.

- a. True
- b. False

ANSWER: True

POINTS: 1

REFERENCES: LANs, Internetworks, WANs, and MANs

QUESTION TYPE: True / False

HAS VARIABLES: False

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

2. In order to find out your MAC address, you should open a command prompt and type `ipconfig /all`.

- a. True
- b. False

ANSWER: True

POINTS: 1

REFERENCES: How Two Computers Communicate on a LAN: Some Details

QUESTION TYPE: True / False

HAS VARIABLES: False

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

3. What makes a computer a "server" is the fact that it has a server operating system installed on it.

- a. True
- b. False

ANSWER: True

POINTS: 1

REFERENCES: Clients and Servers

QUESTION TYPE: True / False

HAS VARIABLES: False

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

4. Each component of a computer is designed to perform only one specific task-either input, processing, or output.

- a. True
- b. False

ANSWER: False

POINTS: 1

Ch 01: Introduction to Computer Networks

REFERENCES: Basic Functions of a Computer
QUESTION TYPE: True / False
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

5. An extranet is a private network, such as a school or company network, in which the devices and servers are available only to users connected to the internal network.

- a. True
- b. False

ANSWER: False
POINTS: 1
REFERENCES: Internet, Intranet, and Extranet
QUESTION TYPE: True / False
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

Multiple Choice

6. The XYZ company has two offices, one in Chicago, and a brand new office in Pittsburgh. To connect the two offices, they will need a dedicated line, probably leased from the phone company. What type of network will they be implementing to connect their two offices?

- a. LAN
- b. WAN
- c. PAN
- d. SAN

ANSWER: b
POINTS: 1
REFERENCES: LANs, Internetworks, WANs, and MANs
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

7. Air waves are an example of what type of network component?

- a. network interface card
- b. network medium
- c. interconnecting device
- d. network protocol

ANSWER: b

Ch 01: Introduction to Computer Networks

POINTS: 1
REFERENCES: Network Components
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

8. Windows 10 is an example of which of the following?

- a. network protocol
- b. client operating system
- c. server software
- d. server operating system

ANSWER: b
POINTS: 1
REFERENCES: Clients and Servers
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

9. What is one of the disadvantages of a peer-to-peer network compared to a server-based network?

- a. more difficult to setup and install
- b. more expensive
- c. higher administration costs
- d. limited security

ANSWER: d
POINTS: 1
REFERENCES: Peer-to-Peer/Workgroup Model
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

10. What command would you issue from a command prompt to see a listing of the computers in your workgroup?

- a. arp -a
- b. net view
- c. ipconfig /all
- d. ping

ANSWER: b
POINTS: 1

Ch 01: Introduction to Computer Networks

REFERENCES: Network Models
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

11. What is one of the disadvantages of a server-based network compared to a peer-to-peer network?

- a. additional costs
- b. decentralized data access
- c. difficult to expand
- d. less secure

ANSWER: a
POINTS: 1
REFERENCES: Network Models
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

12. Which component manages the details of communicating with the NIC hardware to send and receive data to and from network media?

- a. client
- b. server software
- c. network protocol
- d. device driver

ANSWER: d
POINTS: 1
REFERENCES: Network Components
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

13. When data is being prepared for transmission onto the network, it is broken into small pieces and a header and trailer are added to each piece to help identify it. What is this process called?

- a. multitasking
- b. verification
- c. encapsulation
- d. application

ANSWER: c
POINTS: 1

Ch 01: Introduction to Computer Networks

REFERENCES: Packets and Frames
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

14. Every NIC has a unique address that consists of a 12-digit hexadecimal value. What is this address called?

- a. IP address
- b. subnet mask
- c. MAC address
- d. default gateway

ANSWER: c

POINTS: 1

REFERENCES: How Two Computers Communicate on a LAN: Some Details
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

15. Using the physical mail analogy, what part of an address on an envelope is most like the IP address?

- a. MAC address
- b. street address
- c. recipient name
- d. zip code

ANSWER: d

POINTS: 1

REFERENCES: How Two Computers Communicate on a LAN: Some Details
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

16. You are building a gaming computer and you want to install a dedicated graphics card that has a fast GPU and 4GB of memory on board. You need to make sure that you have the right connector available on your motherboard. What type of connector would be appropriate?

- a. PCI
- b. SATA
- c. PCI Express
- d. IDE

ANSWER: c

POINTS: 1

Ch 01: Introduction to Computer Networks

REFERENCES: Personal Computer Hardware
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

17. You want a fast CPU for the new computer you are building and your motherboard only has one CPU socket. To increase the processing power, you need a CPU that provides more than one processor. What type of CPU are you looking for?

- a. multicore
- b. multiprocessing
- c. multitasking
- d. multilink

ANSWER: a
POINTS: 1
REFERENCES: Basic Functions of a Computer
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

18. Which component, located on the motherboard, carries out all the instructions provided by computer programs?

- a. hard drive
- b. RAM
- c. NIC
- d. CPU

ANSWER: d
POINTS: 1
REFERENCES: Basic Functions of a Computer
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

19. You are the network administrator for a company and you want to separate the traffic from the accounting department from the rest of the network. However, the accounting department still needs to have access to other network resources. What type of network do you need to implement?

- a. WPAN
- b. internetwork
- c. WAN

Ch 01: Introduction to Computer Networks

- d. wireless network

ANSWER: b
POINTS: 1
REFERENCES: LANs, Internetworks, WANs, and MANs
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

20. Which part of the network communication process is responsible for sending and receiving data to and from the network media?

- a. network software
b. network protocol
c. user application
d. network interface

ANSWER: d
POINTS: 1
REFERENCES: Layers of the Network Communication Process
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

21. You're the network administrator for a company located in Arizona that has just opened an office in Texas. You need to make sure that the two locations can communicate. What type of network are you implementing?

- a. MAN
b. WAN
c. internetwork
d. extended LAN

ANSWER: b
POINTS: 1
REFERENCES: LANs, Internetworks, WANs, and MANs
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

22. You have just started a new business. You need to have three to four workstations available for your employees who simply need to share some files and a printer, but you don't have a large budget. Security is not a major concern, but costs are. Which network model would be the most appropriate for your situation?

- a. internetwork

Ch 01: Introduction to Computer Networks

- b. domain
- c. peer-to-peer network
- d. server-based network

ANSWER: c
POINTS: 1
REFERENCES: Network Models
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

23. Which unit of data stores a single value that can be a 0 or a 1?

- a. byte
- b. bit
- c. nibble
- d. word
- e. bps

ANSWER: b
POINTS: 1
REFERENCES: Storage Components
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

Multiple Response

24. Which of the following are examples of output devices? (Choose all that apply.)

- a. monitor
- b. printer
- c. keyboard
- d. speakers
- e. CPU

ANSWER: a, b, d
POINTS: 1
REFERENCES: Basic Functions of a Computer
QUESTION TYPE: Multiple Response
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 3:16 PM

Ch 01: Introduction to Computer Networks

25. Which of the following are examples of input devices? (Choose all that apply.)

- a. mouse
- b. monitor
- c. keyboard
- d. scanner
- e. printer

ANSWER: a, c, d
POINTS: 1
REFERENCES: Basic Functions of a Computer
QUESTION TYPE: Multiple Response
HAS VARIABLES: False
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 3:16 PM

Completion

26. The three basic functions of a computer are input, _____, and output.

ANSWER: processing
POINTS: 1
REFERENCES: Basic Functions of a Computer
QUESTION TYPE: Completion
HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

27. A _____ is a packet that has been encapsulated with the source and destination MAC addresses in the header and an error-checking code in the trailer.

ANSWER: frame
POINTS: 1
REFERENCES: Packets and Frames
QUESTION TYPE: Completion
HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

28. A _____ is a chunk of data with the source and destination IP addresses added to it.

ANSWER: packet
POINTS: 1
REFERENCES: Packets and Frames
QUESTION TYPE: Completion

Ch 01: Introduction to Computer Networks

HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

29. A _____ is a collection of users and computers whose accounts are managed by Windows servers called domain controllers.

ANSWER: domain
POINTS: 1
REFERENCES: Server/Domain-Based Model
QUESTION TYPE: Completion
HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

30. The process of _____ adds IP addresses and then MAC addresses to chunks of data before sending the data onto the network.

ANSWER: encapsulation
POINTS: 1
REFERENCES: Packets and Frames
QUESTION TYPE: Completion
HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
DATE CREATED: 7/19/2019 2:32 PM
DATE MODIFIED: 7/19/2019 2:32 PM

Matching

Match each item with a statement below.

- a. server
- b. network protocols
- c. domain
- d. LAN
- e. header
- f. packet
- g. WAN
- h. nonvolatile memory
- i. internetwork
- j. core

REFERENCES: [Glossary](#)

Ch 01: Introduction to Computer Networks

QUESTION TYPE:	Matching
HAS VARIABLES:	False
DATE CREATED:	7/19/2019 2:32 PM
DATE MODIFIED:	7/19/2019 2:32 PM

31. the term used to describe an OS designed mainly to share network resources

ANSWER: a

POINTS: 1

32. the software defining the rules and formats a computer must use when sending information across the network

ANSWER: b

POINTS: 1

33. a collection of users and computers in a Windows server-based network

ANSWER: c

POINTS: 1

34. a network that connects devices in a small geographic area

ANSWER: d

POINTS: 1

35. information added to the front end of a chunk of data

ANSWER: e

POINTS: 1

36. a chunk of data with source and destination IP addresses in the header

ANSWER: f

POINTS: 1

37. network that is geographically dispersed

ANSWER: g

POINTS: 1

38. the firmware of a computer is stored in this type of storage

ANSWER: h

POINTS: 1

39. a networked collection of LANs tied together by devices such as routers

ANSWER: i

POINTS: 1

40. an instance of a processor inside a single CPU chip

ANSWER: j

Ch 01: Introduction to Computer Networks

POINTS:

1

Subjective Short Answer

41. Judy has just sent a ping message from her computer to John's computer using John's computer's IP address to verify that she has connectivity. List the steps that the message takes to get to the other computer and what layer of the network communication process each step relates to.

ANSWER: First, Judy opens a command prompt and types the command `ping 192.168.0.10`. This is the user application layer. The next step is for Judy's computer to create the ping message to send to John's computer. This is the network software layer. The ping message then is encapsulated with the IP addresses of both Judy's computer and John's, which are the source and destination IP addresses. At this step, Judy's computer also finds out what the MAC address of John's computer is, which will be the destination MAC address. Both of these steps are part of the network protocol layer. Finally, Judy's computer adds her MAC address and John's MAC address (source and destination MAC addresses) to the package, converts the message into bits, and sends it to the network medium. This is the network interface step.

POINTS: 1

REFERENCES: Layers of the Network Communication Process

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

42. What is the difference between short-term storage and long-term storage?

ANSWER: Data that is stored in short-term storage is erased when the computer is powered off. When the computer is turned back on, there is no trace of any previous data. The computer transfers programs and files into this short-term storage to make it readily available for the CPU. Long-term storage retains its data even when no power is applied to the computer. Long-term storage is where programs and files are stored.

POINTS: 1

REFERENCES: Storage Components

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

43. How do you access the BIOS setup utility?

ANSWER: Turn your computer on and watch the first screen that appears carefully as it will have a message. This message will tell you what key to press to enter the BIOS. When you know what key to press, do so quickly. If you do not press the key in time, the computer will continue to boot. After it boots, shut down the computer and try again.

Ch 01: Introduction to Computer Networks

POINTS: 1

REFERENCES: Computer Boot Procedure

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

44. What is the difference between a LAN and a WAN?

ANSWER: A LAN is a group of computers connected by a network device, such as a hub or switch, that is located in a small area, such as an office building. LAN connections usually have high data transfer rates and use UTP cabling. A WAN is a network that covers a much larger area. It can be in the same state, or across several states, or across several countries. It usually connects several LANs together using high-speed, public communication links that are typically very expensive.

POINTS: 1

REFERENCES: LANs, Internetworks, WANs, and MANs

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

45. What are the three basic tasks performed by a computer?

ANSWER: Input, processing, and output. First, it accepts input. Input can come from several different devices like a mouse, a keyboard, or storage. Input usually is generated by a user's actions, but not always. Next, the CPU processes the input, which means that it examines the input and determines or calculates the results. Finally, the CPU sends instructions to whatever device is appropriate to perform or display the output. Output devices include, but are not limited to, monitors, printers, and storage devices.

POINTS: 1

REFERENCES: Basic Functions of a Computer

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

46. What is a peer-to-peer network, and what are its advantages and disadvantages?

ANSWER: A peer-to-peer network is a collection of computers in which each computer can act as a client or a server, or both, and each has equal authority. Advantages of a peer-to-peer network are that it is easy to install, is relatively inexpensive to implement, doesn't require extensive training or special staff,

Ch 01: Introduction to Computer Networks

and the loss of a single machine will not cripple the network. Disadvantages include lack of security, difficult to locate resources, reduced performance when computer is acting as server, and limitation on the number of users.

POINTS: 1

REFERENCES: Network Models

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

47. What is a server-based network, and what are its advantages and disadvantages?

ANSWER: A server-based network is a network that has certain computers that take on the role of servers, and all the other computers act as clients. The advantages are centralized control over network resources, better security, easy expandability, and no limitations to the number of users. The disadvantages include higher costs for equipment and software, the need for administrative personnel to maintain network resources, and the fact that a single computer could cause the entire network to fail.

POINTS: 1

REFERENCES: Network Models

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

48. What is the difference between a client operating system and a server operating system?

ANSWER: A client operating system is designed mainly to run user applications like a word processor or spreadsheet program and to access network resources like file servers or the Internet. A server operating system is designed to provide clients with access to network resources such as directory services, shared files, and e-mail.

POINTS: 1

REFERENCES: Clients and Servers

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

49. Explain the boot procedure.

ANSWER: First, power is supplied to the motherboard. Second, the CPU starts. Third, the CPU gets the configuration information from the BIOS and carries out the startup routines, which include

Ch 01: Introduction to Computer Networks

performing the POST. The BIOS searches the boot devices for an OS. After an OS is found, it is loaded into RAM, and finally, the OS services are started.

POINTS: 1

REFERENCES: Computer Boot Procedure

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM

50. What is the difference between an intranet and an extranet?

ANSWER: An intranet is a private network, such as a school or company network, in which the devices and servers are available only to users connected to the internal network. Many of the same protocols and technologies used on the Internet are used to access information on an intranet. An extranet sits somewhere between the Internet and an intranet. It allows limited and controlled access to internal network resources by outside users. It's used when two organizations need to share resources, so controls are put in place to allow these organizations to access resources without making resources available to the wider Internet.

POINTS: 1

REFERENCES: Internet, Intranet, and Extranet

QUESTION TYPE: Subjective Short Answer

HAS VARIABLES: False

STUDENT ENTRY Basic

MODE:

DATE CREATED: 7/19/2019 2:32 PM

DATE MODIFIED: 7/19/2019 2:32 PM