

TRUE/FALSE QUESTIONS

1)

Data communications deals with the transmission of signals in a reliable and efficient manner.

1)

Answer



True

False

2)

There are several fundamental differences between data processing and data communications.

2)

Answer

True



False

3)

There are no fundamental differences among data, voice, and video communications.

3)

Answer



True

False

4)

Effective and efficient data communication and networking facilities are vital to any enterprise.

4)

Answer



True

False

5)

Growth in services and growth in traffic capacity go hand in hand.

5)

Answer



True

False

6)

The increasing use of optical fiber, while greatly increasing capacity, has caused an increase in transmission prices as well.

6)

Answer

True



False

7)

Voice oriented telecommunications networks and data networks are more "intelligent" than ever.

7)

Answer



True

False

8)

Changes in corporate data traffic patterns are driving the creation of high-speed WANs.

8)

Answer



True

False

9)

It is not necessary for a device to interface with the transmission system in order to communicate.

9)

_____ Answer

True



False

10)

A modem is required to establish communication between a workstation and a server over a public telephone network.

10)

_____ Answer



True

False

11)

Compression refers to the ability of a number of devices to share a transmission facility.

11)

_____ Answer

True



False

12)

The basic building block of any communications facility is the transmission line.

12)

_____ Answer



True

False

13)

Developing switching systems with the capacity and rapid response to support the demand requirements with the increased use of fiber optic transmission is no longer a challenge.

13)

Answer

True



False

14)

Frame relay networks are commonly used for terminal-to-computer and computer-to-computer communications.

14)

Answer

True



False

15)

The LAN is owned by the same organization that owns the attached devices.

15)

Answer



True

False

MULTIPLE CHOICE QUESTIONS

1)

Enterprises have formed _____ to reach customers, suppliers, and partners while isolating their proprietary information from unwanted access.

1)

A)

internets and extranets

B)

intranets and extranets

C)

LANs and WANs

D)

WANs and extranets

Answer

B

2)

DWDM enables capacities of _____ per second.

2)

A)

megabits

B)

gigabits

C)

terabits

D)

picobits

Answer

C

3)

The growth of _____ enhances the ability of employees to take their business context with them as they move about, resulting in the ability to use enterprise information resources and services from virtually anywhere.

3)

A)

high-speed wireless access

B)

extranets

C)

WANs

D)

remote data access

Answer

A

4)

An _____ uses Internet and Web technology in an isolated facility internal to an enterprise.

4)

A)

extranet

B)

intranet

application network C)
Internet portal D)
Answer
B

5)
A network in which small chunks of data are passed through the network from node to node, and at each node the entire data chunk is received, stored briefly, and then transmitted to the next node, is a _____ network.

5)

circuit switching A)
ATM B)
packet switching C)
frame relay D)
Answer
C

6)
A dominant architecture in the business environment and the more recent Web-focused intranet trend is _____ computing.

6)

client/server A)
token ring B)
GUI C)
Ethernet D)
Answer
A

7)
The rapid conversion of consumer electronics to digital technology is having an impact on both the Internet and corporate intranets. Two examples of this trend are _____ .

7)

power workgroups and server farms A)
B)

DVDs and CD-ROMs

C)

server farms and DVDs

D)

digital versatile disks and digital still cameras

Answer

D

8)

The key elements of a simple communications model are _____ .

8)

A)

source, signal, destination

B)

source, signal, receiver

C)

source, transmission, destination

D)

signal, transmission, receiver

Answer

C

9)

Once an interface is established _____ is required for communication.

9)

A)

transmission

B)

signal generation

C)

synchronization

D)

digital conversion

Answer

B

10)

In order for data processing devices to communicate certain conventions must be decided on. These requirements can collectively be termed _____ .

10)

A)

exchange management

B)

synchronization

transmission systems C)
flow control D)

Answer

A

11)

In situations in which an information exchange is interrupted due to a fault somewhere in the system, _____ techniques are needed to either resume activity at the point of interruption or to restore systems to their state prior to the beginning of the exchange.

11)

_____ A)
routing control B)
error correction C)
flow control D)
recovery

Answer

D

12)

In a _____ network, a dedicated communications path is established between two stations through the nodes of the network. The telephone network is the most common example.

12)

_____ A)
packet switching B)
frame relay C)
circuit switching D)
ATM

Answer

C

13)

A _____ is a physical facility that provides the infrastructure to move data between connected networks.

13)

_____ A)
NAP B)

ATM
C)
FDDI
D)
NSP
Answer
A

14)
Individual hosts and LANs are connected to an Internet Service Provider through a _____.

14)

A)
CPE
B)
POP
C)
NSP
D)
NAP
Answer
B

15)
The place where telephone companies terminate customer lines and locate switching equipment to interconnect those lines with other networks is the _____ .

15)

A)
NAP
B)
POP
C)
CO
D)
ISP
Answer
C

FILL IN THE BLANK QUESTIONS

1)
Three different forces have consistently driven the architecture and evolution of data communications and networking facilities traffic growth, development of new services, and _____ .

1)

Answer
advances in technology

2)

Today's networks can offer differing levels of _____, which include specifications for maximum delay and minimum throughput.

2)

Answer

quality of service (QoS)

3)

Recent offerings of _____ multiplexing enable capacities of many terabits per second for long-distance telecommunication and data network links.

3)

Answer

dense wavelength division

4)

A variety of customizable services in the areas of network management and _____ are provided by today's networks.

4)

Answer

security

5)

An _____ extends a company's intranet out onto the Internet to allow selected customers, suppliers, and mobile workers to access the company's private data and applications.

5)

Answer

extranet

6)

The need to make efficient use of transmission facilities that are typically shared among a number of communicating devices is referred to as _____.

6)

Answer

transmission system utilization

7)

There is a potential for error in all communication systems, therefore, _____ and correction are required in circumstances where errors cannot be tolerated.

7)

Answer

error detection

8)

_____ is required to assure that the source does not overwhelm the destination by sending data faster than they can be processed and absorbed.

8)

Answer

Flow control

9)

_____ is the process of squeezing the data down so that a lower capacity, cheaper transmission facility can be used to meet a given demand.

9)

Answer

Compression

10)

Networks that generally cover a large geographical area, require the crossing of public right-of-ways, consist of a number of interconnected switching nodes, and rely on circuits provided by a common carrier are _____ .

10)

Answer

Wide Area Networks (WANs)

11)

Using fixed length packets and sometimes referred to as cell relay, _____ is a culmination of developments in circuit switching and packet switching. It is so efficient that it can offer a constant data rate channel even though it is using a packet switching technique.

11)

Answer

Asynchronous transfer mode (ATM)

12)

_____ networks provide advantages in the areas of mobility and ease of installation and configuration.

12)

Answer

Wireless

13)

The Internet evolved from the _____ which was developed in 1969 by the Advanced Research Projects Agency of the U.S. Department of Defense.

13)

Answer

ARPANET

14)

Communicating across arbitrary, multiple, packet-switched networks is _____ .

14)

Answer

internetworking

15)

Each IP packet includes an unique numeric address of the destination host. This address is referred to an an _____ .

15)

Answer

IP address

1

TRUE

2)

FALSE

3)

TRUE

4)

TRUE

5)

TRUE

6)

FALSE

7)

TRUE

8)

TRUE

9)

FALSE

10)

TRUE

11)

FALSE

12)

TRUE

13)

FALSE

14)

FALSE

15)

TRUE

1)

B

2)

C

3)

A

4)

B

5)

C

6)

A

7)

D

8)

C

9)

B

10)

A

11)

D

12)

C

13)

A

14)

B

15)

C

1)

advances in technology

2)

quality of service (QoS)

3)

dense wavelength division

4)

security

5)

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6)

transmission system utilization

7)

error detection

8)

Flow control

9)

Compression

10)

Wide Area Networks (WANs)

11)

Asynchronous transfer mode (ATM)

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Wireless

13)

ARPANET

14)

internetworking

15)

IP address