**Chapter 1: introduction**

**TRUE OR FALSE**

T F 1. The four forms of information used by modern information

 systems are voice, data, image, and video.

T F 2. The number of computers and terminals at work in the world

 today is over 100 million.

T F 3. Communications technologies using data networks have essentially

 replaced telephone networks in today’s business settings.

T F 4. Computerization has enhanced the range of features available to

 businesses for voice communication.

T F 5. The need to store and transmit images has been a driving force in

 the development of networking technology.

T F 6. Video networks in business are used primarily to deliver

 programming.

T F 7. Data compression is used to minimize the amount of information

 that must be transmitted in networks.

T F 8. The major cost component for communications is the resource

 needed to transmit data across distance.

T F 9. Wireless networks have the advantage of mobility, but the

 disadvantage of difficult implementation.

T F 10. The basic building block of any communications facility is the

 transmission line.

T F 11. The two media technologies currently driving the evolution of

data communications networks are local area networks and cable television networks.

T F 12. The most common example of packet switched technology is the

 modern telephone network.

T F 13. Mobility is the newest frontier for ICT managers.

T F 14. Cloud computing is being embraced by all major business

 software vendors with the exception of Oracle.

T F 15. Convergence refers to the merger of previously distinct

 telephony and information technologies and markets.

**MULTIPLE CHOICE**

1. The three forces that have driven the architecture and evolution of data communications and networking facilities are:
2. Traffic growth, advances in technology, and legal considerations
3. Traffic growth, development of services, and advances in technology
4. Development of services, advances in technology, and legal considerations
5. Advances in technology, lower costs, and greater capacities
6. Which of the following is NOT one of the four types of information found on networks?

A. data B. control

C. video D. voice

1. Which of the following is NOT one of the stated trends in technology identified as contributing to increasing traffic and services in networks?

A. The emergence of the Internet

B. More and more people are discovering the World Wide Web as a

 valuable resource

C. The ever-increasing use of mobile devices and applications

1. Increasing quality and variety of services in both voice and data

networks

1. Among the application services lists given below, which lists the services in order such that the desired throughput rates are increasing?
2. Still image transfers, large file transfers, transaction processing, and voice
3. Voice, transaction processing, still image transfers, and large file transfers
4. Large file transfers, voice, transaction processing, and still image transfers
5. Transaction processing, voice, still image transfers, and large file transfers
6. Commonly referred to as cell relay, \_\_\_\_\_\_\_\_\_ is a culmination of advancements in both circuit switching and packet switching
7. asynchronous transfer mode B. frame relay

C. convergence D. MAN

1. Which of the following is NOT one of the main application areas that serve as one of the drivers in determining the design and makeup of enterprise networks?
2. Transaction processing B. IP telephony
3. Multimedia messaging D. E-business
4. The concept that describes the merger of previously distinct telephony and information technologies and markets is called \_\_\_\_\_\_\_\_\_\_\_.
5. unification B. outsourcing

C. merger D. convergence

1. Which of the following is NOT one of the four layers in the model of business-driven convergence?

A. Networks B. Infrastructure

C. Management D. Services

1. The types of networks commonly used in businesses today include:

A. Local area networks, wide-area networks, and telephone networks

B. Local area networks, telephone networks, and voice mail networks

C. Wide area networks, voice mail networks, and email networks

D. Voice mail networks, email networks, and local area networks

1. Which of the following is the most commonly used standard for computer

 communications?

A. SLA B. TCP/IP

C. ISO D. USD

1. In the past, the data processing function was organized around a single computer. Today, it is much more common to find many computers linked by networks. This approach to data processing is called:

A. decentralized computing B. client computing

C. distributed computing D. connected computing

1. Which of the following are emerging enterprise network applications?
2. video broadcasting and smart objects
3. cloud computing and telepresence
4. video enriched collaboration and cloud computing
5. all of the above
6. At the \_\_\_\_\_\_\_\_ level the manager deals with the information network in terms

of the services that must be available to ensure that users can take full advantage of the applications that they use.

 A. enterprise services B. communications infrastructure

 C. network infrastructure D. application

 14. \_\_\_\_\_\_\_\_\_\_ is similar to online chat because it is text-based and exchanged

 bidirectionally in real time.

A. Audio conferencing B. Instant messaging

C. Presence D. Web conferencing

 15. \_\_\_\_\_\_\_\_\_\_ allows users in two or more locations to interact simultaneously via

 two-way video and audio transmission.

 A. Web conferencing B. Unified messaging

 C. Videoconferencing D. Audio conferencing

**SHORT ANSWER**

1. Two types of transmission media recently gaining in popularity in business

 communications are \_\_\_\_\_\_\_\_\_\_ connections and fiber optic cables.

2. The type of network commonly used at business premises is called a \_\_\_\_\_\_\_\_\_\_.

3. The type of network commonly used with multiple premises in businesses is

 called a \_\_\_\_\_\_\_\_\_\_\_\_.

4. An architecture where multiple computers provide database functions, file

 services, printing services, and other specialized functions on a shared basis for

 many users is called a \_\_\_\_\_\_\_\_\_\_\_\_\_ architecture.

5. Convergence can be thought of in terms of a three-layer model of enterprixe

 communications: applications, enterprise services, and \_\_\_\_\_\_\_\_\_.

6. Three key benefits of IP network convergence are: cost savings, transformation,

 and \_\_\_\_\_\_\_\_\_.

7. A \_\_\_\_\_\_\_\_\_\_ is the element that provides UC users with a unified user interface

 across communication devices.

8. \_\_\_\_\_\_\_\_\_ is the ability to determine, in real time, where someone is, how he or she

 prefers to be reached, and what he or she is currently doing.

9. \_\_\_\_\_\_\_\_\_\_ refers to live meetings or presentations in which participants access the

 meeting or presentation via a mobile device or the Web, either over the Internet

 or corporate intranet.

10. \_\_\_\_\_\_\_\_\_\_ systems provide a common repository for messages from multiple

 sources.

11. A classic example of \_\_\_\_\_\_\_\_\_\_ is the telephone network.

12. In a \_\_\_\_\_\_\_\_\_\_ network data are transmitted in a sequence of small chunks that

 are passed through the network from switching node to switching node along

 some path leading from source to destination.

13. \_\_\_\_\_\_\_\_\_\_\_ is a nongovernmental organization that promotes the development of

 standardization and related activities with a view to facilitating the

 international exchange of goods and services, and to developing cooperation in

 the spheres of intellectual, scientific, technological, and economic activity.

14. The \_\_\_\_\_\_\_\_\_\_ is an international organization within the United Nations System

 in which governments and the private sector coordinate global telecom

 networks and services.

15. \_\_\_\_\_\_\_\_\_\_ is a U.S. federal agency that deals with measurement science,

 standards, and technology related to U.S. government use and to the promotion

 of U.S. private sector innovation.