1. The terms “data” and “information” mean the same thing.
   1. True
   2. False

*ANSWER:* False

1. To become data, information is manipulated through tabulation, or any other operation that leads to greater understanding of a situation.
   1. True
   2. False

*ANSWER:* False

1. Every system has a single goal.
   1. True
   2. False

*ANSWER:* False

1. Companies are implementing open information systems that can be linked to other systems owned by business partners such as suppliers and clients.
   1. True
   2. False

*ANSWER:* True

1. Computers collect, store, and process data into information according to instructions people provide via computer programs.
   1. True
   2. False

*ANSWER:* True

1. Input is the information an information system produces and displays in the format most useful to an organization.
   1. True
   2. False

*ANSWER:* False

1. The computer processes data through output devices.
   1. True
   2. False

*ANSWER:* False

1. Transaction processing systems (TPSs) are the most widely used information systems.
   1. True
   2. False

*ANSWER:* True

1. Many enterprise resource planning systems are used by service representatives in combination with a telephone.
   1. True
   2. False

*ANSWER:* False

1. Information systems whose purpose is to glean from raw data relationships and trends that might help organizations compete better are called business intelligence (BI) systems.
   1. True
   2. False

*ANSWER:* True

1. Geographic Information Systems can be used to manage daily operations as well as for planning and decision making.
   1. True
   2. False

*ANSWER:* True

1. While accounting systems focus on recording and reporting financial changes and states, the purpose of human resource management systems is to facilitate financial planning and business transactions.
   1. True
   2. False

*ANSWER:* False

1. A programmer is responsible for researching, planning, and recommending software and systems choices to meet

an organization’s business requirements.

* 1. True
  2. False

*ANSWER:* False

1. In the capacity of project leaders, senior systems analysts are put in charge of several analysts and programmers.
   1. True
   2. False

*ANSWER:* True

1. Project leaders seek and allocate resources, such as personnel, hardware, and software, that are used in the development process.
   1. True
   2. False

*ANSWER:* True

1. Since access to information can connote power, the database administrator must be astute not only technologically but politically as well.
   1. True
   2. False

*ANSWER:* True

1. The rapid spread of the Web, intranets, and extranets has minimized the stature of the organizational webmaster.
   1. True
   2. False

*ANSWER:* False

1. is the raw material in the production of information.
   1. Data b. Money

c. Node d. Program

*ANSWER:* a

1. A(n) is any manipulation of data, usually with the goal of producing information.
   1. transaction b. process

c. brownout d. encryption

*ANSWER:* b

1. A is an array of components that work together to achieve a common goal, or multiple goals, by accepting input, processing it, and producing output in an organized manner.
   1. node b. process

c. project d. system

*ANSWER:* d

1. records sums owed to the organization and by whom.
   1. Accounts payable b. Accounts receivable

c. Accounts programmable d. Accounts writable

*ANSWER:* b

1. A(n) interfaces and interacts with other systems.
   1. closed system b. host system

c. cloud system d. open system

*ANSWER:* d

1. Thinking of an organization in terms of its suborganizations or subsystems is called .
   1. organizational thinking b. organizational validating

c. systems thinking d. systems validating

*ANSWER:* c

1. The of a modern business shows a network of information subsystems that exchange information with each other and with the world outside the system.
   1. information hub b. information map

c. subsystem d. database

*ANSWER:* b

1. A large collection of electronic records is called a(n) .
   1. open system b. closed system

c. database d. webmaster

*ANSWER:* c

1. A supply chain management is an enterprise application because the systems that support each business process:
   1. record data collected at the boundaries of organizations.
   2. always take the form of a sequence.
   3. consist of sophisticated statistical models.

d. are connected to each other to form one large IS.

*ANSWER:* d

1. A(n) is a business event such as a sale, a purchase, the hiring of a new employee, and the like.
   1. encryption b. allocation

c. decryption d. transaction

*ANSWER:* d

1. Changing and manipulating the data in an information system is called .
   1. data warehousing b. cloud computing

c. data processing d. resource planning

*ANSWER:* c

1. The term refers to the sequence of activities involved in producing a product or service.
   1. resource planning b. activity chain

c. warehousing d. supply chain

*ANSWER:* d

1. The main goals of systems are to increase the quality of customer service, reduce the amount of labor involved in serving customers, and learn as much as possible about the service preferences of individual customers.
   1. customer relationship management b. enterprise resource planning

c. expert d. decision support

*ANSWER:* a

1. Business intelligence applications access large pools of data, usually transactional records stored in large databases called .
   1. data warehouses b. digital systems

c. subsystems d. supply chains

*ANSWER:* a

1. have been used to provide service via the Web, such as helping residents find locations of different services on a city map or plan travel routes.
   1. Business intelligence systems b. Decision support systems

c. Geographic information systems d. Expert systems

*ANSWER:* c

1. In , information systems help organize budgets, manage cash flow, analyze investments, and make decisions that could reduce interest payments and increase revenues from transactions.
   1. accounting b. e-commerce

c. finance d. marketing

*ANSWER:* c

1. The purpose of is to pinpoint the people and organizations most likely to purchase what the organization sells and to promote the appropriate products and services to those people and organizations.
   1. accounting b. e-commerce

c. finance d. marketing

*ANSWER:* d

1. systems help mainly in record-keeping, employee evaluation, and employee benefits.
   1. Accounting b. Financial

c. Human resource management d. Marketing

*ANSWER:* c

1. refers to the buying and selling goods and services via a telecommunications network.
   1. Encapsulation b. Business intelligence

c. Enterprise application d. E-commerce

*ANSWER:* d

1. A is responsible for researching, planning, and recommending software and systems choices to meet an

organization’s business requirements.

* 1. network administrator b. network analyst

c. system administrator d. systems analyst

*ANSWER:* d

1. A is responsible for managing an organization’s computer operating systems.
   1. database administrator b. webmaster

c. systems analyst d. system administrator

*ANSWER:* d

1. are normally responsible for developing cost analyses, design considerations, implementation timelines, and feasibility studies of a computer system before making recommendations to senior management.
   1. Database designers b. Network administrators

c. Project managers d. Systems analysts

*ANSWER:* d

1. A is responsible for the databases and data warehouses of an organization—a very sensitive and powerful position.
   1. database administrator b. database programmer

c. system administrator d. project manager

*ANSWER:* a

1. A oversees the planning and implementation of sophisticated security measures to block unauthorized access but at the same time to allow easy and timely access to authorized users.
   1. database administrator b. network administrator

c. programmer d. systems analyst

*ANSWER:* a

1. A is highly involved in the implementation of supply chain management systems, because they access corporate databases.
   1. database administrator b. database programmer

c. network administrator d. systems analyst

*ANSWER:* a

1. In most organizations, the chief security officer (CSO) reports to the .
   1. chief administrative officer (CAO)
   2. chief information officer (CIO)
   3. chief information security officer (CISO)
   4. systems executive officer (SEO)

*ANSWER:* b

1. The is responsible for all aspects of an organization’s ISs and is often a corporate vice president.
   1. chief information security officer b. chief security officer

c. chief information officer d. chief administrative officer

*ANSWER:* c

1. A is responsible for creating and maintaining an organization’s intranet and extranet.
   1. webmaster b. network administrator

c. database administrator d. systems analyst

*ANSWER:* a

1. is facts or conclusions that have meaning within a context.

*ANSWER:* Information

1. Raw data is in information systems to create useful information.

*ANSWER:* processed

1. The components of a larger system are called .

*ANSWER:* subsystems

1. A(n) consists of several subsystems, components of a larger system, with sub goals, all contributing to meeting the main goal.

*ANSWER:* system

1. A(n) consists of all the components that work together to process data and produce information.

*ANSWER:* information system

IS

information system (IS)

1. The computer’s greatest contribution to ISs is efficient .

*ANSWER:* data processing

1. is the information an IS produces and displays in the format most useful to an organization.

*ANSWER:* Output

1. In addition to communication that takes place between computer components, communication occurs between computers over distances called .

*ANSWER:* telecommunications

1. Supply chain management systems are often called , because the information they provide supports the planning of shipping resources such as personnel, funds, raw materials, and vehicles.

*ANSWER:* enterprise resource planning systems ERP systems

enterprise resource planning (ERP) systems

1. systems help manage an organization’s relationships with its customers.

*ANSWER:* CRM

Customer relationship management Customer relationship management (CRM)

1. A(n) relies on artificial intelligence techniques to support knowledge-intensive decision-making processes.

*ANSWER:* expert system ES

expert system (ES)

1. rely on models and formulas to produce concise tables or a single number that determines a decision.

*ANSWER:* Decision support systems

1. ISs provide information that helps management decide how many sales representatives to assign to specific products in specific geographical areas.

*ANSWER:* Marketing

1. A(n) helps track every click a web user makes on that site, so that companies specializing in consumer profiling can learn their shopping and buying habits.

*ANSWER:* cookie

1. The job of a(n) involves the creation of new systems or the modification of existing ones.

*ANSWER:* systems analyst

1. The is responsible for acquiring, implementing, managing, maintaining, and troubleshooting local area networks throughout the organization and their interfaces with the wide area networks such as the Internet.

*ANSWER:* network administrator

1. A(n) is involved in creatively deciding how to represent the organization on the web.

*ANSWER:* webmaster

1. In most cases when both positions are encountered in one organization, the chief technology officer (CTO) reports to the \_\_\_\_\_.

*ANSWER:* CIO

chief information officer

chief information officer (CIO)

1. A person who holds the position of must have both technical understanding of current and developing information technologies and business knowledge.

*ANSWER:* chief information officer

CIO

chief information officer (CIO)

1. Describe closed systems and open systems.

*ANSWER:* Systems are closed or open, depending on the nature of the information flow in the system. A closed system stands alone, with no connection to another system; nothing flows in from another system, nothing flows out to another system. For example, a small check-producing system that prints and cuts checks when an employee enters data through a keyboard is a closed system. The system might be isolated for security purposes. An open system interfaces and interacts with other systems. For example, an accounting system that records accounts receivable, accounts payable, and cash flow is open if it receives its payroll figures from the payroll system. Subsystems, by definition, are always open, because as components of a bigger system, they must receive information from, and give information to, other subsystems. Increasingly, companies are implementing open information systems that can be linked to other systems owned by business partners such as suppliers and clients.

1. Define information systems.

*ANSWER:* With an understanding of the words “information” and “system,” the definition of an information system is almost intuitive: an information system (IS) consists of all the components that work together to process data and produce information. Almost all business information systems consist of many subsystems with subgoals, all contributing to an organization’s main goal.

1. Describe transaction processing systems.

*ANSWER:* Transaction processing systems (TPSs) are the most widely used information systems. The predominant function of TPSs is to record data collected at the boundaries of organizations, in other words, at the point where the organization transacts business with other parties. They also record many of the transactions that take place inside an organization. TPSs include POS machines, which record sales; automatic teller machines, which record cash withdrawals, deposits, and transfers; and purchase order systems, which record purchases. A typical example would be the purchase of gasoline at a pump, using a credit card. The purchase is recorded by the gasoline company and later at the credit card-processing bank. After these data are collected, the IS either automatically processes the data immediately or stores it for later access on demand.

1. What are the characteristics of business intelligence systems?

*ANSWER:* ISs whose purpose is to glean from raw data relationships and trends that might help organizations compete better are called business intelligence (BI) systems. Usually, these applications consist of sophisticated statistical models, sometimes general and sometimes tailored for an industry or an organization. The applications access large pools of data, usually transactional records stored in large databases called data warehouses. With proper analysis models, BI systems might discover particular buying patterns of consumers, such as combinations of products purchased by a certain demographic group or on certain days; products that are sold at greater cycles than others; reasons for customer’s churns, that is, customers leaving a service provider for a competitor; and other valuable business intelligence that helps managers quickly decide to change a strategy.

1. What is the purpose of financial systems?

*ANSWER:* While accounting systems focus on recording and reporting financial changes and states, the purpose of financial systems is to facilitate financial planning and business transactions. In finance, information systems help organize budgets, manage cash flow, analyze investments, and make decisions that could reduce interest payments and increase revenues from financial transactions.