

TRUE/FALSE

1. The use of information systems is practical in only a limited number of professions.

ANS: F PTS: 1 REF: Information Concepts

2. Information is simply a collection of raw facts such as an employee number or the total hours worked in a week.

ANS: F PTS: 1 REF: Information Concepts

3. Some countries try to censor or control what information is available to their citizens, especially through the Internet and social media.

ANS: T PTS: 1 REF: Information Concepts

4. Information and data are essentially the same thing.

ANS: F PTS: 1 REF: Information Concepts

5. Using a computer to forecast future sales and order more inventory before a shortage can occur is an example of information system feedback.

ANS: F PTS: 1 REF: System Concepts

6. A CBIS is a single set of hardware, software, databases, telecommunications, people, and procedures configured to collect, manipulate, store, and process data into information.

ANS: T PTS: 1 REF: System Concepts

7. The technology infrastructure is a set of shared IS resources that form the foundation of each computer-based information system.

ANS: T PTS: 1 REF: System Concepts

8. Increasingly, companies are incorporating computer-based information systems into their products and services.

ANS: T PTS: 1 REF: System Concepts

9. Today's more advanced processor chips have the power of 1990s-era supercomputers.

ANS: T PTS: 1 REF: System Concepts

10. Teraflops is a measure of computer processing speed.

ANS: T PTS: 1 REF: System Concepts

11. Application software such as Microsoft Windows controls basic computer operations, including start-up and printing.

ANS: F PTS: 1 REF: System Concepts

12. Software is needed for computers of all sizes from cell phones and small hand held devices to the largest supercomputers.

ANS: T PTS: 1 REF: System Concepts

13. Information about the documents on the Web and access to these documents are controlled and provided by tens of thousands of special computers called Web servers.

ANS: T PTS: 1 REF: System Concepts

14. The World Wide Web is a network of links on the Internet to documents containing text, graphics, video, and sound.

ANS: T PTS: 1 REF: System Concepts

15. An intranet is a network based on Web technologies that allows selected outsiders, such as business partners and customers, to access authorized resources of a company's extranet.

ANS: F PTS: 1 REF: System Concepts

16. Transaction processing systems were developed in the 1950s.

ANS: T PTS: 1 REF: Business Information Systems

17. C2C stands for computer-to-computer e-commerce.

ANS: F PTS: 1 REF: Business Information Systems

18. Mobile commerce is the use of mobile, wireless devices to place orders and conduct business.

ANS: T PTS: 1 REF: Business Information Systems

19. While technologically advanced, unfortunately, e-commerce offers few advantages for streamlining work activities.

ANS: F PTS: 1 REF: Business Information Systems

20. Electronic business goes beyond e-commerce and e-procurement by using information systems and the Internet to perform all business-related tasks and functions.

ANS: T PTS: 1 REF: Business Information Systems

21. A DSS can include a collection of models to support a decision maker, a collection of facts, and procedures that help decision makers to interact with the DSS.

ANS: T PTS: 1 REF: Business Information Systems

22. An MIS typically provides standard reports generated with data and information from a TPS or ERP system.

ANS: T PTS: 1 REF: Business Information Systems

- ### MULTIPLE CHOICE

1. _____ is an important component of every information system that helps organizations to achieve their goals.
- a. Hardware
 - b. Software
 - c. Feedback mechanism
 - d. Data
- ANS: C PTS: 1 REF: Information Concepts
2. The process of defining relationships among data to create useful information requires _____
- a. an information system.
 - b. intelligence
 - c. knowledge
 - d. intuition

ANS: C PTS: 1 REF: Information Concepts

3. _____ are people who create, use, and disseminate knowledge and are usually professionals in science, engineering, business, and other areas.
- a. Systems analysts
 - b. Knowledge workers
 - c. Chief Information Officer
 - d. End user

ANS: B PTS: 1 REF: Information Concepts

4. Data that can be used for a variety of purposes is said to be _____.
- a. flexible
 - b. economical
 - c. relevant
 - d. verifiable

ANS: A PTS: 1 REF: Information Concepts

5. The value of information is directly linked to how it helps decision makers achieve their organization's _____.
- a. profits
 - b. goals
 - c. cost reduction initiatives
 - d. quality improvement measures

ANS: B PTS: 1 REF: Information Concepts

6. _____ is a measure of the extent to which a system achieves its goals.
- a. Efficiency
 - b. Reliability
 - c. Performance rate
 - d. Effectiveness

ANS: D PTS: 1 REF: System Concepts

7. In information systems, _____ is used to make changes to input or processing activities.
- a. forecasting
 - b. feedback
 - c. output
 - d. processing

ANS: B PTS: 1 REF: System Concepts

8. _____ consists of computer equipment used to perform input, processing, and output activities.
- a. Information technology
 - b. Technology infrastructure
 - c. Telecommunications
 - d. Hardware

ANS: D PTS: 1 REF: System Concepts

9. Keyboards, automatic scanning devices, and equipment that can read magnetic ink characters are examples of _____ hardware.
- a. storage
 - b. processing
 - c. output
 - d. input

ANS: D PTS: 1 REF: System Concepts

10. _____ consists of computer programs that govern the operation of the computer.
- a. Hardware
 - b. Software
 - c. Applications
 - d. Telecommunications

ANS: B PTS: 1 REF: System Concepts

11. _____ connect computers and equipment in a building, around the country, or around the world to enable electronic communications.
- a. Telecommunications
 - c. Networks

- ANS: C PTS: 1 REF: System Concepts

- Internet
- blog
- Web 2.0
- extranet

- a. Hardware
- b. Software
- c. Procedures
- d. People

a. electronic and mobile commerce
b. transaction processing
c. decision support
d. all of the above

- e-commerce
- e-business
- mobile commerce
- e-procurement

- transaction processing system
- enterprise resource planning system
- decision support system
- e-commerce system

- decision support system
- management information system
- business intelligence system
- transaction processing system

- transaction processing system
- e-commerce system
- enterprise resource planning system
- decision support system

- TPS
- MIS
- DSS
- Virtual reality system

ANS: C PTS: 1 REF: Business Information Systems

20. The _____ is an organized collection of people, procedures, software, databases, and devices to create, store, share, and use the organization's knowledge and experience.
- a. artificial intelligence system
 - b. expert system
 - c. virtual reality
 - d. knowledge management system
- ANS: D PTS: 1 REF: Business Information Systems
21. _____ is a branch of artificial intelligence that allows computers to recognize and act on patterns or trends.
- a. Vision systems
 - b. Neural networks
 - c. Robotic systems
 - d. Natural language processing
- ANS: B PTS: 1 REF: Business Information Systems
22. Hiring an outside company to perform some or all of a systems development project is called _____.
- a. virtual reality
 - b. offshoring
 - c. systems investigation
 - d. outsourcing
- ANS: D PTS: 1 REF: Business Information Systems
23. The goal of the _____ phase of systems development is to gain a clear understanding of the problem to be solved or opportunity to be addressed.
- a. systems analysis
 - b. systems investigation
 - c. systems design
 - d. systems implementation
- ANS: B PTS: 1 REF: Systems Development
24. The _____ phase of systems development defines the problems and opportunities of the existing systems.
- a. systems investigation
 - b. analysis
 - c. design
 - d. maintenance
- ANS: B PTS: 1 REF: Systems Development
25. According to Thomas Friedman in his book *The World is Flat*, we have progressed from the globalization of countries to the globalization of multinational corporations to the globalization of _____.
- a. information systems
 - b. technology
 - c. products and services
 - d. individuals
- ANS: D PTS: 1 REF: Global Challenges in Information Systems

COMPLETION

1. _____ is the awareness and understanding of a set of information and the ways the information can be made useful to support a specific task or reach a decision.
- ANS: Knowledge
- PTS: 1 REF: Information Concepts
2. In information systems, the activity of gathering and capturing raw data is called _____.
- ANS: input

PTS: 1 REF: Information Concepts

3. Predicting future events to avoid problems is called _____.

ANS: forecasting

PTS: 1 REF: System Concepts

4. _____ is information from the system that is used to make changes to input or processing activities.

ANS: Feedback

PTS: 1 REF: System Concepts

5. Computerized _____ are being placed in vehicles to record vehicle speed, possible engine problems, driver performance, and more.

ANS: event data recorders

PTS: 1 REF: System Concepts

6. Although most software can be installed from CDs, many of today's software packages can be downloaded through the _____.

ANS: Internet

PTS: 1 REF: System Concepts

7. An approach to work called _____ that enables people to work from home or while traveling.

ANS: telecommuting

PTS: 1 REF: System Concepts

8. The _____ is the world's largest computer network consisting of thousands of interconnected networks, all freely exchanging information.

ANS: Internet

PTS: 1 REF: System Concepts

9. _____ allows people to get the information they need from the Internet instead of from desktop or corporate computers.

ANS: Cloud computing

PTS: 1 REF: System Concepts

10. The _____ is a network of links on the Internet to documents containing text, graphics, video, and sound.

ANS: World Wide Web or Web

PTS: 1 REF: System Concepts

11. The technology used to create the Internet is also being applied within companies and organizations to create _____, which allow people in an organization to exchange information and work on projects.

ANS: intranets

PTS: 1 REF: System Concepts

12. _____ include the strategies, policies, methods, and rules for using the CBIS.

ANS: Procedures

PTS: 1 REF: System Concepts

13. _____ involves any business transactions executed electronically between companies.

ANS: E-commerce

PTS: 1 REF: Business Information Systems

14. The use of mobile, wireless devices to place orders and conduct business is called _____

ANS: mobile commerce, m-commerce

PTS: 1 REF: Business Information Systems

15. An organized collection of people, procedures, software, databases, and devices used to record completed business transactions is called a(n) _____.

ANS: transaction processing system

PTS: 1 REF: Business Information Systems

16. A(n) _____ is a set of integrated programs that manages the vital business operations for an entire multisite, global organization.

ANS: Enterprise resource planning system

PTS: 1 REF: Business Information Systems

17. A(n) _____ is an organized collection of people, processes, software, databases, and devices that provides routine information to managers and decision makers.

ANS: management information system

PTS: 1 REF: Business Information Systems

18. A system to create, store, share, and use the organization's knowledge and experience is called a(n) _____.

ANS: knowledge management system

PTS: 1 REF: Business Information Systems

19. _____ is a branch of artificial intelligence that allows computers to recognize and act on patterns or trends.

ANS: Neural network

PTS: 1 REF: Business Information Systems

20. The collection of rules, procedures, and relationships that must be followed by an expert system to achieve the proper outcome is contained in the expert system's _____.

ANS: knowledge base

PTS: 1 REF: Business Information Systems

21. _____, a newer form of virtual reality, has the potential to superimpose digital data over real photos or images.

ANS: Augmented reality

PTS: 1 REF: Business Information Systems

22. _____ is the activity of creating or modifying information systems.

ANS: Systems development

PTS: 1 REF: Systems Development

23. During the _____ phase of the systems development process the project team determines how the new system should be developed to meet the business needs defined during systems analysis.

ANS: design

PTS: 1 REF: Systems Development

24. The _____ phase of systems development includes purchasing software, hardware, databases, and other IS components.

ANS: systems implementation

PTS: 1 REF: Systems Development

25. _____ is the knowledge of how data and information are used by individuals, groups, and organizations.

ANS: Information systems literacy

PTS: 1 REF: Information Systems in Society, Business, and Industry

ESSAY

1. Briefly distinguish between data, information, and knowledge.

ANS:

Data consists of raw facts, such as employee number or total hours worked in a week. Information is a collection of facts organized and processed so that they have additional value beyond the value of individual facts. Turning data into information is a process, a set of logically related tasks performed to achieve a defined outcome. The process of defining relationships among data to create useful information requires knowledge. Knowledge is the awareness and understanding of a set of information and the ways that information can be made useful to support a specific task or reach a decision.

PTS: 1

REF: Information Concepts

2. Define the term information system and briefly identify its fundamental components.

ANS:

An information system is a set of interrelated elements or components that collect, manipulate, store, and disseminate data and provide for a corrective reaction to meet an objective. The fundamental components include input, processing, output, and feedback. Input is the activity of gathering and capturing raw data. Processing involves converting data into useful output. It can be done manually or by using a computer. Output involves producing useful information, often in the form of documents and reports. Feedback is information from the system that is used to make changes to input or processing activities.

PTS: 1

REF: Systems Concepts

3. Distinguish between the Internet and the Web.

ANS:

The Internet is the world's largest network consisting of thousands of interconnected networks, all freely exchanging information. People use the Internet to research information, buy and sell products and services, make travel arrangements, conduct banking, download music and videos, read books, and listen to radio programs, among other activities. The Web is one of many services available over the Internet. It is a network of links on the Internet to documents containing text, graphics, video, and sound. Information about the documents and access to them are controlled and provided by tens of thousands of special computers called Web servers.

PTS: 1

REF: System Concepts

4. Distinguish between an MIS and DSS.

ANS:

An MIS provides routine information to managers and decision makers. The first MIS systems were developed in the 1960s and provide standard reports generated with data and information from a TPS or ERP system. DSS systems were first developed in the 1980s and used to support problem-specific decision making. The DSS employs a collection of models to support the decision maker, a collection of facts, and systems and procedures that help users interact with it.

PTS: 1

REF: Business Information Systems

5. Identify and briefly discuss the three eras of globalization according to Thomas Friedman.

ANS:

We have progressed from the globalization of multinational countries (Globalization 1.0) to the globalizations of corporations (Globalization 2.0) and individuals (Globalization 3.0). Today, people in remote areas can use the Internet to compete with and contribute to other people, the largest corporations, and entire countries. These workers are empowered by high-speed Internet access, making the world flatter. In the Globalization 3.0 era, designing a new airplane or computer can be separated into smaller subtasks and then completed by a person or small group that can do the best job. These workers can be located in India, China, Russia, and other areas of the world. The subtasks can then be combined or reassembled into the complete design. This approach can be used to prepare tax returns, diagnose a patient's medical condition, fix a broken computer, and many other tasks.

PTS: 1

REF: Global Challenges in Information Systems