***Using MIS, 10e* (Kroenke)**

**Chapter 1 The Importance of MIS**

1) \_\_\_\_\_\_\_\_ states that the number of transistors per square inch on an integrated chip doubles every 18 months.

A) Nielsen's Law

B) Faraday's Law

C) Moore's Law

D) Newton's Law

E) Metcalfe's Law

Answer: C

Diff: 1

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

2) According to Moore's Law, the \_\_\_\_\_\_\_\_.

A) price of an integrated chip reduces once in 18 months

B) performance of each transistor on a square inch of an integrated chip doubles every year

C) number of transistors per square inch on an integrated chip doubles every 18 months

D) density of a transistor decreases every year

E) rate of innovation increases exponentially

Answer: C

Diff: 2

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

3) \_\_\_\_\_\_\_\_ states that network connection speeds for high-end users will increase by 50 percent per year.

A) Nielsen's Law

B) Kryder's Law

C) Moore's Law

D) Bell's Law

E) Metcalfe's Law

Answer: A

Diff: 2

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

4) Which of the following ratios has fallen as a result of Moore's Law?

A) price/performance

B) demand/supply

C) profit/loss

D) debt/equity

E) price/earnings

Answer: A

Diff: 1

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

5) In 1972, computer scientist \_\_\_\_\_\_\_\_ recognized that digital devices would change the world as they evolved and became widely used.

A) Gordon Bell

B) Robert Metcalfe

C) Gordon Moore

D) Jakob Nielsen

E) Sam Flynn

Answer: A

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

6) \_\_\_\_\_\_\_\_ states that the value of a network is equal to the square of the number of users connected to it.

A) Moore's Law

B) Metcalfe's Law

C) Bell's Law

D) Nielsen's Law

E) Flynn's Law

Answer: B

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

7) Google's Project Loon is a major effort to \_\_\_\_\_\_\_\_.

A) decrease the size of storage devices, while increasing their capacity

B) facilitate the use of Internet on submarines, while they are submerged

C) promote the use of virtual machines, that operate on voice command

D) bring Internet access to everyone using a network of inflated balloons

E) reduce the rate of decay in magnetic disks

Answer: D

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

8) Despite the rapid growth of technology, digital devices fail to impact the industry.

Answer: FALSE

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

9) Gordon Moore was the inventor of Ethernet.

Answer: FALSE

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

10) The Information Age is a period in history where the production, distribution, and control of information is the primary driver of the economy.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

11) Bell's Law states that a new computer class forms roughly each decade establishing a new industry.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Concept

12) The Digital Revolution was the conversion from mechanical and analog devices to digital devices.

Answer: TRUE

Diff: 2

AACSB: Information Technology

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

13) Kryder's Law states that the storage density on magnetic disks is increasing at an exponential rate.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

14) Discuss the Digital Revolution.

Answer: The Digital Revolution was the conversion from mechanical and analog devices to digital devices. This shift to digital devices meant monumental changes for companies, individuals, and the society as a whole. The problem was, people couldn't really understand how, or even why, this shift was going to affect them. Much like people today, they based their future projections on past events. They knew factories, bureaucracies, mass production, and operational efficiency. But this knowledge didn't prepare them for the changes that were coming.

The Digital Revolution didn't just mean that new "digital" equipment was replacing old mechanical, or analog, equipment. These new digital devices could now be connected to other digital devices and share data among themselves. They could also work faster as processor speed increased.

Diff: 2

AACSB: Information Technology

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

15) State Nielsen's Law. What is the implication of Nielsen's Law for managers?

Answer: According to Nielsen's Law, "network connection speeds for high-end users will increase by 50 percent per year." Because of this law, the types of services and applications that can be provided over networks (i.e. the Internet) have changed radically. Therefore, it is important for managers to realize that, because of Nielsen's Law, networks will become faster, new companies, new products, and new platforms will emerge.

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.1: Why is introduction to MIS the most important class in the business school?

Classification: Concept

16) What job prospects are available for professionals who know how to use information systems (ISs)?

Answer: Information systems and computer technology provide job and wage benefits beyond just IS professionals. As the price of computer technology plummets, the value of jobs that benefit from it increases dramatically. For example, plentiful, high-paying jobs are available to business professionals who know how to use information systems to improve business process quality, or those who know how to interpret data mining results for improved marketing, or those who know how to use emerging technology like 3D printing to create new products and address new markets.

Diff: 3

AACSB: Information Technology

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

17) \_\_\_\_\_\_\_\_ is most likely to be outsourced to the lowest bidder.

A) Ability to experiment

B) Routine skill

C) Ability to collaborate

D) Abstract reasoning skill

E) Systems thinking

Answer: B

Diff: 2

AACSB: Analytical Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

18) Which of the following is categorized as a nonroutine cognitive skill?

A) symbolic thinking

B) marketing knowledge

C) tax accounting

D) systems thinking

E) data entry

Answer: D

Diff: 1

AACSB: Analytical Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

19) Dallas is an analyst at an online retailer. He is great at creating representative diagrams showing the relationships between customer purchases, billing, and shipment. This indicates that he has \_\_\_\_\_\_\_\_ skills.

A) abstract reasoning

B) collaborative

C) experimental

D) systems thinking

E) spatial intelligence

Answer: A

Diff: 3

AACSB: Reflective Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Application

20) Abstract reasoning is the ability to \_\_\_\_\_\_\_\_.

A) develop ideas and plans with others when performing tasks

B) make and manipulate models

C) act quickly on a problem

D) provide and receive critical feedback

E) identify the crux of an argument

Answer: B

Diff: 1

AACSB: Information Technology

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

21) \_\_\_\_\_\_\_\_ is the ability to model the components of a system, to connect the inputs and outputs among those components into a sensible whole that reflects the structure and dynamics of the phenomenon observed.

A) Abstract reasoning

B) Systems thinking

C) Collaboration

D) Experimentation

E) Function modeling

Answer: B

Diff: 1

AACSB: Information Technology

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

22) A manager will essentially require \_\_\_\_\_\_\_\_ skills to test ideas clearly on a small scale, before taking bigger risks or committing significant resources to a larger project.

A) collaboration

B) experimentation

C) interpersonal

D) systems thinking

E) social

Answer: B

Diff: 2

AACSB: Analytical Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

23) Lindsay is an analyst at a large power company. She creates a custom spreadsheet showing how cold weather might affect the company's profitability. This shows her \_\_\_\_\_\_\_\_ skills.

A) abstract reasoning

B) experimentation

C) systems thinking

D) problem-solving

E) risk ordering

Answer: C

Diff: 2

AACSB: Reflective Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Application

24) After making minor changes to a team report, Jeff felt like he had done enough work on the project. When he was asked to contribute more, he got offended and quit responding to requests from some team members. Jeff's inability to receive critical feedback indicates a lack of \_\_\_\_\_\_\_\_ skills.

A) systems thinking

B) collaboration

C) abstract reasoning

D) experimentation

E) ideation

Answer: B

Diff: 3

AACSB: Reflective Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Application

25) \_\_\_\_\_\_\_\_ is the activity of two or more people working together to achieve a common goal, result, or work product.

A) Systems thinking

B) Abstract reasoning

C) Collaboration

D) Experimentation

E) Competition

Answer: C

Diff: 1

AACSB: Information Technology

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

26) Cami is the marketing manager for a regional furniture maker. She closely monitors the impact of each marketing campaign on overall sales. She routinely tries novel promotional offers to reach first-time customers. Which of the following skills does Cami exhibit?

A) systems thinking

B) experimentation

C) abstract reasoning

D) collaboration

E) troubleshooting

Answer: B

Diff: 3

AACSB: Reflective Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Application

27) \_\_\_\_\_\_\_\_ is defined as making a reasoned analysis of an opportunity, envisioning potential solutions, evaluating those possibilities, and developing the most promising ones, consistent with the resources one has.

A) Troubleshooting

B) Abstract reasoning

C) Problem-solving

D) Experimentation

E) Cognition

Answer: D

Diff: 1

AACSB: Information Technology

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

28) Bryce, a floor manager at an industrial plant, works well with all of his line employees. Bryce's ability to collaborate is a routine skill.

Answer: FALSE

Diff: 2

AACSB: Analytical Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Application

29) A person's strong abstract reasoning skills won't be able to easily construct models.

Answer: FALSE

Diff: 1

AACSB: Analytical Thinking

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

30) Explain the four nonroutine cognitive skills that are key to a successful career today.

Answer: The four nonroutine cognitive skills identified as critical for organizations in the current scenario are as follows:

(1) Abstract reasoning—the ability to make and manipulate models.

(2) Systems thinking—the ability to model the components of a system, to connect the inputs and outputs among those components into a sensible whole that reflects the structure and dynamics of the phenomenon observed.

(3) Collaboration—the activity of two or more people working together to achieve a common goal, result, or work product.

(4) Ability to experiment—making a reasoned analysis of an opportunity, envisioning potential solutions, evaluating those possibilities, and developing the most promising ones, consistent with the resources you have.

Diff: 3

AACSB: Information Technology

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.2: How will MIS affect me?

Classification: Concept

31) Which of the following is an example of computer hardware?

A) a monitor

B) a browser

C) a spreadsheet

D) an operating system

E) a variable

Answer: A

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Concept

32) The storage controllers in a computer are an example of the \_\_\_\_\_\_\_\_ component of information systems.

A) hardware

B) software

C) intangible

D) virtual

E) bootable

Answer: A

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Concept

33) An operating system like Windows or Linux is an example of the \_\_\_\_\_\_\_\_ component of an information system.

A) software

B) hardware

C) tangible

D) physical

E) virtual

Answer: A

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Application

34) Skype is an application that provides users with video chat and voice call capabilities. This is an example of \_\_\_\_\_\_\_\_.

A) hardware

B) virtualization

C) business intelligence

D) software

E) a process

Answer: D

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Application

35) A customer relationship management (CRM) system contains the names and phone numbers of customers. Such details stored in a CRM system are part of the \_\_\_\_\_\_\_\_ component.

A) hardware

B) data

C) procedure

D) programming

E) process

Answer: B

Diff: 2

AACSB: Information Technology; Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Application

36) Zach follows the instructions that show him how to create a custom Web site in his school's learning management system. These steps that he follows are examples of the \_\_\_\_\_\_\_\_ component of an information system.

A) procedure

B) data

C) software

D) hardware

E) memory

Answer: A

Diff: 3

AACSB: Information Technology; Reflective Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Application

37) Noel creates a table listing the number of students in his biology class, their names, age, and phone numbers. His table is an example of the \_\_\_\_\_\_\_\_ component of an information system.

A) program

B) data

C) information

D) hardware

E) process

Answer: B

Diff: 2

AACSB: Reflective Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Application

38) The \_\_\_\_\_\_\_\_ component of the five-component framework of an information system includes individuals who maintain the data and support the networks of computers.

A) procedural

B) people

C) data

D) networking

E) storage

Answer: B

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Concept

39) Which of the following statements is TRUE of business users who administer the development of information systems?

A) It is mandatory that they hold a degree in database management.

B) They should take an active role in the system's development.

C) They should refrain from specifying the system's requirements.

D) When the system fails, they must refrain from performing tasks related to system recovery.

E) They are skilled programmers.

Answer: B

Diff: 2

AACSB: Information Technology

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.3: What is MIS?

Classification: Concept

40) According to the five-component framework, the five components of an information system are present in every information system.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Concept

41) The five-component framework applies to simple and complex information systems.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Concept

42) Information systems exist to help people who work in an organization to achieve the strategies of that business.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Explain how IS can be used to gain and sustain competitive advantage

LO: 1.3: What is MIS?

Classification: Concept

43) Define the terms system, information system, and management information system.

Answer: A system is a group of components that interact to achieve some purpose. An information system (IS) is a group of components that interact to produce information. A management information system is defined as a system that helps organizations achieve their strategies.

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Concept

44) List and briefly explain the five-component model of an information system with examples.

Answer: The five components described in the model are: computer hardware, software, data, procedures, and people. These five components are present in every information system, from the simplest to the most complex. For example, when one uses a computer to write a class report, he/she is using hardware (the computer, storage disk, keyboard, and monitor), software (Word, WordPerfect, or some other word-processing program), data (the words, sentences, and paragraphs in the report), procedures (the methods used to start the program, enter the report, print it, and save and back up the file), and people (the user).

Diff: 3

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.3: What is MIS?

Classification: Concept

45) Why do businesses develop information systems? Also, point out some of the wrong reasons businesses sometimes cite for developing information systems.

Answer: Information systems exist to help people who work in an organization achieve the strategies of the organization. Information systems are not created for the sheer joy of exploring technology. They are not created so that the company can be "modern" or so that the company can show it has a social networking presence on the Web. They are not created because the information systems department thinks it needs to be created, because the company is "falling behind the technology curve."

Diff: 3

AACSB: Information Technology

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.3: What is MIS?

Classification: Concept

46) According to the five-component model of information systems, the \_\_\_\_\_\_\_\_ component provides instructions for the people who use information systems.

A) software

B) data

C) hardware

D) procedure

E) storage

Answer: D

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

47) In the five-component model, the process of automation is a process of moving work from \_\_\_\_\_\_\_\_.

A) processes to procedures

B) procedures to people

C) the digital mode to the analog mode

D) the human side to the computer side

E) processing to storage

Answer: D

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

48) In the five-component model of information systems, which of the following components is considered an actor?

A) software

B) hardware

C) data

D) procedure

E) information

Answer: B

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

49) The hardware components of an information system will act as a(n) \_\_\_\_\_\_\_\_.

A) bridge between the computer side and the human side

B) actor on the human side

C) instruction on the computer side

D) actor on the computer side

E) functional anchor on the human side

Answer: D

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

50) BigBank uses a custom customer management system to manage all of its interactions with retail clients. This system is an \_\_\_\_\_\_\_\_ of the company's information system.

A) instruction on the computer side

B) actor on the human side

C) instruction on the human side

D) actor on the computer side

E) instruction for the hardware

Answer: A

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Application

51) The \_\_\_\_\_\_\_\_ component in the five-component model of information systems is considered a bridge that connects the computer side and the human side.

A) software

B) procedure

C) data

D) hardware

E) virtual

Answer: C

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

52) Which of the following pairs of components constitutes the computer side of information systems?

A) software and data

B) data and hardware

C) people and procedures

D) hardware and software

E) data and memory

Answer: D

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

53) Which of the following pairs of components constitutes the human side of information systems?

A) software and procedures

B) software and people

C) people and procedures

D) hardware and people

E) instructions and code

Answer: C

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

54) Which of the following is an example of a low-tech information system?

A) an inventory tracking system that stores millions of records and produces reports every 24 hours

B) a file of email addresses stored in an email program

C) a customer support system that keeps track of product issues

D) a decision support system that analyzes multiple variables

E) an enterprise data loss prevention system that monitors the flow of data over a network

Answer: B

Diff: 2

AACSB: Information Technology; Analytical Thinking

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.4: How can you use the five-component model?

Classification: Concept

55) Which of the following components of an information system is the easiest to change and results in the least amount of organizational disruption?

A) hardware

B) software

C) database

D) procedures

E) protocols

Answer: A

Diff: 1

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Concept

56) Drudgen Fitness Inc. is a fitness equipment provider that markets its products through a chain of retail outlets in four states. As part of its expansion strategy, the company decides to open outlets in four more states and decides to revise its existing business processes. According to the five-component model of information systems, which of the following processes will be the least disruptive to the organization?

A) collecting demographic data from the new markets

B) developing new CRM software for the existing and new outlets

C) relocating existing employees and hiring new employees

D) buying and installing new computers in the new outlets

E) changing the sales, reporting, and compensation procedures

Answer: D

Diff: 3

AACSB: Information Technology; Reflective Thinking

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Application

57) Which of the following would be the most disruptive to an organization when implementing an information system?

A) installing new hardware components

B) creating new databases

C) developing new programs

D) changing reporting relationships

E) setting up online data backups

Answer: D

Diff: 2

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Concept

58) It is generally more difficult to make changes to the \_\_\_\_\_\_\_\_ of an information system than to the database itself.

A) software

B) hardware

C) programs

D) procedures

E) memory

Answer: D

Diff: 2

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Concept

59) A large retailer loses millions of customer records in a major data breach. They must develop and implement a new system which includes new hardware, applications, and storage. Which of the following actions will be most difficult to perform when implementing the new information system?

A) upgrading the computer systems used by the retail chain

B) writing the programs to create the software

C) changing the structure of existing databases that reflect supplier and customer data

D) training the employees to use and manage the new system

E) installing new transaction processing hardware

Answer: D

Diff: 3

AACSB: Reflective Thinking

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Application

60) According to the five-component model of information systems, the data and software components of information systems are capable of performing actions.

Answer: FALSE

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

61) In the five-component model of an information system, data is the bridge between the computer and the human sides.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

62) In the five-component model of an information system, hardware and software are part of the human side.

Answer: FALSE

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

63) According to the five-component model of an information system, software is the most important component of an information system.

Answer: FALSE

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

64) The lower the amount of work to be moved from the human side to the computer side of an information system, the higher is the complexity of that system.

Answer: FALSE

Diff: 2

AACSB: Information Technology

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.4: How can you use the five-component model?

Classification: Concept

65) Obtaining or developing new programs is more difficult than ordering additional hardware.

Answer: TRUE

Diff: 2

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Concept

66) Changing personnel responsibilities to suit an information system is more disruptive to an organization than ordering additional hardware for the information system.

Answer: TRUE

Diff: 2

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Concept

67) Changing the structure of existing databases causes more organizational disruption than changing working procedures.

Answer: FALSE

Diff: 2

AACSB: Information Technology

Course LO: Discuss the key issues involved in managing the components of IT infrastructure

LO: 1.4: How can you use the five-component model?

Classification: Concept

68) Ordering additional hardware creates the least amount of organizational disruption compared to changes in the four components of an information system.

Answer: TRUE

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

69) Which is the most important component of an information system? Why?

Answer: People are part of every information system that they use. The user's mind and thinking are not merely a component of the information systems they use; they are the most important component. This is so because, even if users have the perfect information system, if they do not know what to do with the data that it produces, they are wasting both their time and money. The quality of users' thinking is what determines the quality of the information that is produced.

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

70) Explain how the five components of an information system are arranged in terms of ease of change and organizational disruption.

Answer: The five components of the information systems framework are: computer hardware, software, data, procedures, and people. The five components are arranged in order of ease of change and the amount of organizational disruption. It is usually a simple matter to order new hardware and install it. Obtaining or developing new programs is more difficult. Creating new databases or changing the structure of existing databases is still more difficult. Changing procedures, requiring people to work in new ways, is even more difficult. Finally, changing personnel responsibilities and reporting relationships and hiring and terminating employees are both very difficult and very disruptive to an organization.

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.4: How can you use the five-component model?

Classification: Concept

71) Which of the following is considered as information rather than mere data?

A) a list of property prices in a neighborhood

B) the return on investment of an advertising campaign

C) the total number of students in a school

D) the price of a company's shares on a given day

E) the weight of a car

Answer: B

Diff: 2

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Concept

72) Which of the following is a common description of information?

A) collection of unprocessed data

B) unbiased, unrelated data

C) knowledge derived from data

D) list of recorded facts or figures

E) an array of related variables

Answer: C

Diff: 1

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Concept

73) Which of the following best describes data?

A) information presented in a meaningful context

B) processed information

C) recorded facts or figures

D) knowledge derived from facts or figures

E) the ability to use knowledge

Answer: C

Diff: 1

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Concept

74) Which of the following terms is described as processed data or data presented in a meaningful context?

A) questionnaires

B) scenarios

C) illustrations

D) reports

E) forms

Answer: D

Diff: 1

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Application

75) \_\_\_\_\_\_\_\_ skills determine the ability to conceive information from data.

A) Cognitive

B) Abstract reasoning

C) Symbolic thinking

D) Experimentation

E) Spatial

Answer: A

Diff: 2

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Concept

76) A furniture manufacturer keeps details of its current inventory including weight, quantity, and price. These details can be called \_\_\_\_\_\_\_\_.

A) an analysis

B) data

C) information

D) an assessment

E) knowledge

Answer: B

Diff: 2

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Application

77) Silway Travels organizes tours to a number of cities in Illinois. The manager of the company examines a spreadsheet which is an annual record of airfares to different cities from Chicago. The contents of the spreadsheet will be used to determine the difference in peak season and off-season airfares. The spreadsheet, in this case, represents \_\_\_\_\_\_\_\_.

A) a survey

B) data

C) information

D) an analysis

E) a system

Answer: B

Diff: 3

AACSB: Reflective Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Application

78) Data becomes information when it is presented in a meaningful context.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Concept

79) The statement that the average computer network architect makes $98,430, is information.

Answer: TRUE

Diff: 2

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Application

80) Discuss the common definitions of information.

Answer: The most common definition of information is that information is knowledge derived from data, whereas data is defined as recorded facts or figures. Another common definition is that information is data presented in a meaningful context. A third definition of information that one often hears is that information is processed data, or sometimes, information is data processed by summing, ordering, averaging, grouping, comparing, or other similar operations. The fundamental idea of this definition is that individuals do something to data to produce information.

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Concept

81) Explain the relation between data and information.

Answer: The relation between data and information can be understood with the help of a graph. The graph is data that humans perceive, and from that perception conceive information. In short, if it's on a piece of paper or on a digital screen, it's data. If it's in the mind of a human, it's information. The quality of thinking, or ability to conceive information from data, is determined by one's cognitive skills. The data is just the data; the information conceived from it is the value that one adds to the information system. People have different perceptions and points of view, not surprisingly, then, they will conceive different information from the same data.

Diff: 3

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.5: What is information?

Classification: Concept

82) Which of the following is a critical characteristic of good information?

A) abundance of details

B) accuracy

C) inexpensive

D) ease of creation

E) quantity

Answer: B

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

83) Sandra is a production manager at a soda manufacturing and bottling plant. One of her duties is to create a monthly inventory report based on the list of material received from the supplier on delivery. Sandra's report for the previous month, however, turned out to be invalid as the supplier provided an erroneous list. In this scenario, her report cannot be considered good information as it was lacking in \_\_\_\_\_\_\_\_.

A) accuracy

B) effectiveness

C) method

D) content

E) quantity

Answer: A

Diff: 3

AACSB: Reflective Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Application

84) Which of the following statements is TRUE of good information?

A) Good information should go well beyond the scope of the purpose for which it is generated.

B) Information should be relevant to the subject, not necessarily to the context.

C) Good information should be based on correct and complete data.

D) Good information is only received from sources that provide data for free.

E) Good information comes from large data sets.

Answer: C

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

85) John Carter, the CEO of Carter Steels, is concerned about the sudden rise in employee attrition in his organization. He asks Walter, the human resources manager, to provide him with the last quarter's report showing the rate of attrition. Walter, however, sends the salary details of the new hires for the last quarter. This report is of no use to Carter as it is \_\_\_\_\_\_\_\_.

A) inaccurate

B) not timely

C) irrelevant

D) miscalculated

E) uncleaned

Answer: C

Diff: 3

AACSB: Reflective Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Application

86) The CEO of a large company asks the sales manager to report the sales figures of the previous quarter. The manager immediately sends her the list of products sold in the previous quarter. These details do NOT qualify as good information because they are \_\_\_\_\_\_\_\_.

A) too narrow in scope

B) too expensive

C) not timely

D) not relevant

E) too large

Answer: D

Diff: 2

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Application

87) In the context of information systems, which of the following statements is TRUE of data characteristics?

A) Data generated should be in excess of what is required.

B) An appropriate relationship should exist between the cost of data and its value.

C) Data should be relevant to the context, not necessarily to the subject.

D) Freely available data is always accurate and timely.

E) Larger data sets yield more accurate information.

Answer: B

Diff: 2

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

88) Will decides to gift his wife a house for their 10th wedding anniversary. He contacts his real estate agent about a specific house that he wants to buy. The realtor assures him that he will contact the owners immediately to find out the asking price. The agent, however, informs Will about the price two months after the anniversary. The information provided by the agent is most likely to be useless because it lacked \_\_\_\_\_\_\_\_.

A) sufficiency

B) relevance

C) timeliness

D) accuracy

E) precision

Answer: C

Diff: 3

AACSB: Reflective Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Application

89) Information is considered inefficient if \_\_\_\_\_\_\_\_.

A) it is highly accurate

B) it is made available ahead of time

C) it is sufficient

D) it is out of context

E) it is relevant

Answer: D

Diff: 1

AACSB: Analytical Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

90) Which of the following is the least critical aspect of good information?

A) data accuracy

B) timeliness of data

C) additional data

D) relevance of data

E) sufficiency of data

Answer: C

Diff: 1

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

91) Caroline asks her secretary to send information on the meetings that she needs to attend next month. Her secretary, Joanne, provides her with the details immediately, but leaves out certain additional details that are irrelevant to Caroline's requirements. Which of the following statements is TRUE about this scenario?

A) The information that Joanne provided was partly good, as it was timely but inaccurate.

B) Joanne provided adequate and timely information, but the information was of no value to Caroline.

C) The information that Joanne gave was accurate and sufficient for Caroline's purpose.

D) The information that Caroline obtained through Joanne was not timely or worth its cost.

E) The information that Caroline obtained through Joanne was not accurate.

Answer: C

Diff: 3

AACSB: Reflective Thinking

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Application

92) Robert is a strategic planner for a consulting firm. He receives countless reports for daily analysis, but he avoids being inundated with information by selecting only the few reports that actually serve his purpose. Which principle of data characterization is Robert following?

A) Information should be just barely sufficient for its purpose.

B) Data that arrives after a prolonged period of time is of the highest quality.

C) Information needs to be relevant to the subject, not necessarily to the context.

D) Freely available data is always accurate and timely.

E) Collecting as much data as possible is always preferable.

Answer: A

Diff: 3

AACSB: Reflective Thinking

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.6: What are necessary data characteristics?

Classification: Application

93) A good information system is one that provides the users with more information than what is required.

Answer: FALSE

Diff: 2

AACSB: Information Technology

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.6: What are necessary data characteristics?

Classification: Concept

94) Data is worth its cost when an appropriate relationship exists between the cost of data and its value.

Answer: TRUE

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

95) What are the five characteristics of good data?

Answer: The five characteristics of data are as follows:

(1) Accurate—Good information is based on correct and complete data, and it has been processed correctly as expected.

(2) Timely—Good data is produced in time for its intended use.

(3) Relevant—Good data is relevant both to the context and to the subject.

(4) Just barely sufficient—Good data is sufficient for the purpose for which it is generated, but just barely so.

(5) Worth its cost—For good data to be worth its cost, there must be an appropriate relationship between the cost of data and its value.

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

96) Explain why data accuracy is crucial to the success of an information system.

Answer: Good information is conceived from accurate, correct, and complete data that has been processed correctly as expected. The IS function can develop a bad reputation in the organization if a system is known to produce inaccurate data. In such a case, the information system becomes a waste of time and money as users develop work-arounds to avoid the inaccurate data.

Diff: 3

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

97) Explain the concept of "just barely sufficient" data.

Answer: Data needs to be sufficient for the purpose for which it is generated, but just barely so. We are inundated with data; one of the critical decisions that each of us has to make each day is what data to ignore. The higher one rises into management, the more data one will be given, and because there is only so much time, the more data one will need to ignore. So, data should be sufficient, but just barely.

Diff: 2

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.6: What are necessary data characteristics?

Classification: Concept

98) Which of the following statements is TRUE about the changes and developments foreseen by the year 2027?

A) Traditional classrooms will be replaced by classrooms in a box.

B) Desktop and portable computers will increase in popularity.

C) Processing image data would be difficult.

D) Mobile devices would be cheaper and powerful.

E) Mainframes will overtake servers.

Answer: A

Diff: 1

AACSB: Analytical Thinking

Course LO: Discuss the role of information systems in supporting business processes

LO: 1.7: 2027?

Classification: Concept

99) By 2027, huge networks of computers would be required to process image data in real time.

Answer: TRUE

Diff: 1

AACSB: Information Technology

Course LO: Describe different methods of managing IS security

LO: 1.7: 2027?

Classification: Concept

100) What are some of the key speculations about the nature of workplaces and schools in the future?

Answer: The social implications of advancements in technology and information systems could change workplaces and schools in the future. Since information systems do not depend on physical proximity, employees may band together in temporary teams, work together, and then band together in another way. They may not need organizations in the future. The same concept can be applied to classrooms. The prospect of obtaining education without going to a classroom seems highly plausible with the increased use of information systems. Further, this system would also reduce the cost of education but allow students to obtain the same degree.

Diff: 3

AACSB: Information Technology

Course LO: Describe the components of an information system (IS)

LO: 1.7: 2027?

Classification: Concept