***Using MIS, 8e* (Kroenke)**

**Chapter 1 The Importance of MIS**

1.1 True/False Questions

1) According to Moore’s Law, the number of transistors per square inch on an integrated chip doubles every 18 months.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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) Moore's Law predicts that the price to performance ratio of computers will double once in eighteen months.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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) Because of Moore's Law, the cost of data processing, communications, and storage is essentially zero.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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) Because of Moore's Law, any routine skill is liable to be outsourced to the lowest bidder.

Answer: TRUE

AACSB: Information Technology

Difficulty: Moderate

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

5) Brad, an employee who works in the production department, has the ability to collaborate well with others. Brad's ability to collaborate is an example of a routine skill.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: Moderate

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

6) The ability to construct and manipulate models is an example of abstract reasoning.

Answer: TRUE

AACSB: Analytical Thinking

Difficulty: Easy

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

7) Systems thinking refers to the skill that helps to make a reasoned analysis of a problem and envisioning potential solutions to the problem.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: Easy

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

8) A person who is good at collaboration will avoid giving critical feedback to others.

Answer: FALSE

AACSB: Analytical Thinking

Difficulty: Easy

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

9) The most important skill for effective collaboration is to give and receive critical feedback.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

10) Experimentation involves making a reasoned analysis of an opportunity and developing the most promising solutions, consistent with the resources one has.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

11) The term management information systems refers to the management and use of information systems that help organizations achieve their strategies.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

12) A system is a group of components that interact to produce information.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

14) Applications such as MS Word and Excel are examples of procedures.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

15) According to the five-component framework, additional components are added to the existing component framework as the complexity of a system increases.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

17) Users should take an active role in system development to create an information system that meets their needs.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

19) A company should only develop information systems if its competitors have developed information systems.

Answer: FALSE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.2: What is MIS?

Classification: Concept

20) The five components of information systems are symmetric.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

Answer: FALSE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

25) Information systems differ in the amount of work that is moved from the human side to the computer side.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

26) 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

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

27) When considering different information systems alternatives, it will be helpful to consider the low-tech versus high-tech alternatives in light of the amount of work that is being moved from people to computers.

Answer: TRUE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

Answer: FALSE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

32) Information technology and information systems are synonymous terms.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.4: Why is the difference between information technology and information systems important?

Classification: Concept

33) Information technology is an assembly of hardware, software, data, procedures, and people that produces information.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.4: Why is the difference between information technology and information systems important?

Classification: Concept

34) Information system refers to the products, methods, inventions, and standards that are used for the purpose of producing information.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.4: Why is the difference between information technology and information systems important?

Classification: Concept

35) People can buy information systems, but they cannot buy information technology.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.4: Why is the difference between information technology and information systems important?

Classification: Concept

36) Data refers to the knowledge derived from information.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.5: What is information?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.5: What is information?

Classification: Concept

38) Mary processes employee statistics to obtain a meaningful understanding of her organization. The data that she derives by processing becomes information.

Answer: TRUE

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.5: What is information?

Classification: Application

39) Information systems become a waste of time and money when users work with inaccurate data.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

40) A user of information systems can rely on data if it appears in the context of a Web page, a well-formatted report, or a fancy query.

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

41) Data accuracy is a critical requirement for good information.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

42) Good information is conceived from accurate, correct, and complete data.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

43) Good information requires that data be timely.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

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

Answer: FALSE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

45) Data needs to be sufficient for the purpose for which it is generated.

Answer: TRUE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

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

Answer: FALSE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

47) Information systems should be subject to the same financial analyses to which other assets are subjected.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

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

Answer: TRUE

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.6: What are necessary data characteristics?

Classification: Concept

49) It is likely that desktop and portable computers will disappear in the next decade.

Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

Course LO: Describe different methods of managing IS security

LO 1.7: 2025?

Classification: Concept

50) By 2025, huge networks of computers would be required to process image data in real time. Answer: TRUE

AACSB: Information Technology

Difficulty: Easy

Course LO: Describe different methods of managing IS security

LO 1.7: 2025?

Classification: Concept

1.2 Multiple-Choice Questions

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

Answer: C

AACSB: Information Technology

Difficulty: Easy

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 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

Answer: C

AACSB: Information Technology

Difficulty: Moderate

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) Which of the following is a major implication of Moore's Law?

A) Data processing activities have become complex and time-consuming.

B) Costs of computing and processing have increased.

C) The size of integrated chips has increased.

D) Costs of communications and storage have become very low.

Answer: D

AACSB: Information Technology

Difficulty: Moderate

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

Answer: A

AACSB: Information Technology

Difficulty: Easy

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) Which of the following types of skills is most likely to be outsourced to the lowest bidder?

A) ability to experiment

B) accounting skills

C) ability to collaborate

D) abstract reasoning skills

Answer: B

AACSB: Analytical Thinking

Difficulty: Moderate

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

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

A) symbolic thinking

B) marketing knowledge

C) tax accounting

D) systems thinking

Answer: D

AACSB: Analytical Thinking

Difficulty: Easy

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

7) Carlos is a business student doing an internship at Bruno and Venus, a firm specializing in the export of sophisticated equipment to other countries. He finds that he is unable to create a representative chart depicting the relation between processes such as procurement, shipping, and billing. This indicates that he lacks \_\_\_\_\_\_\_\_ skills.

A) abstract reasoning

B) collaborative

C) experimental

D) systems thinking

Answer: A

AACSB: Analytical Thinking

Difficulty: Hard

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: Application

8) 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

Answer: B

AACSB: Information Technology

Difficulty: Easy

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

9) \_\_\_\_\_\_\_\_ 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

Answer: B

AACSB: Information Technology

Difficulty: Easy

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

10) 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

Answer: B

AACSB: Analytical Thinking

Difficulty: Moderate

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

11) Meredith constantly analyzes her work in terms of her individual contribution that she makes to the overall output of the organization. This shows her \_\_\_\_\_\_\_\_ skills.

A) abstract reasoning

B) experimentation

C) systems thinking

D) problem-solving

Answer: C

AACSB: Analytical Thinking

Difficulty: Moderate

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: Application

12) When presenting an idea to his colleagues, Marcus failed to consider others' views and got defensive when people asked him questions. This situation indicates that Marcus lacks \_\_\_\_\_\_\_\_ skills.

A) systems thinking

B) collaboration

C) abstract reasoning

D) experimentation

Answer: B

AACSB: Analytical Thinking

Difficulty: Moderate

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: Application

13) \_\_\_\_\_\_\_\_ 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

Answer: C

AACSB: Information Technology

Difficulty: Easy

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

14) Erin is a manager for a reputed software firm. She typically monitors and evaluates the existing working procedures of her subordinates. She constantly changes these working procedures so that they are consistent with the company's resources. This shows her ability to \_\_\_\_\_\_\_\_.

A) participate in systems thinking

B) experiment

C) make abstractions

D) collaborate

Answer: B

AACSB: Analytical Thinking

Difficulty: Hard

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: Application

15) \_\_\_\_\_\_\_\_ 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) Systems thinking

B) Abstract reasoning

C) Problem-solving

D) Experimentation

Answer: D

AACSB: Information Technology

Difficulty: Easy

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

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

A) a monitor

B) a browser

C) a spreadsheet

D) an operating system

Answer: A

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

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

A) hardware

B) software

C) database

D) virtual

Answer: A

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

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

A) software

B) hardware

C) data

D) procedure

Answer: A

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.2: What is MIS?

Classification: Application

19) Adobe Acrobat is an application that allows users to create and edit digital documents. This is an example of \_\_\_\_\_\_\_\_.

A) hardware

B) virtualization

C) business intelligence

D) software

Answer: D

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.2: What is MIS?

Classification: Application

20) 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) program

Answer: B

AACSB: Information Technology; Analytical Thinking

Difficulty: Moderate

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

LO 1.2: What is MIS?

Classification: Application

21) Mark follows certain steps to access the supplementary readings for a course when using his organization's library management system. These steps that he follows are examples of the \_\_\_\_\_\_\_\_ component of an information system.

A) procedure

B) data

C) software

D) hardware

Answer: A

AACSB: Information Technology; Analytical Thinking

Difficulty: Moderate

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

LO 1.2: What is MIS?

Classification: Application

22) A student fills an online admission form to register for a particular course. This is an example of the \_\_\_\_\_\_\_\_ component of the information system.

A) program

B) data

C) information

D) hardware

Answer: B

AACSB: Information Technology

Difficulty: Moderate

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

 LO 1.2: What is MIS?

Classification: Application

23) 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

Answer: B

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

24) 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.

Answer: B

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.2: What is MIS?

Classification: Concept

25) 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

Answer: D

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

26) 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) instructions to actors

D) the human side to the computer side

Answer: D

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

A) software

B) hardware

C) data

D) procedure

Answer: B

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

28) 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

Answer: D

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

29) Globus Corp. uses a software tool to manage its supply chain. This software tool 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

Answer: A

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Application

30) 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

Answer: C

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

31) 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

Answer: D

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

32) 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

Answer: C

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

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

A) an inventory tracking system that 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

Answer: B

AACSB: Information Technology; Analytical Thinking

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

34) 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

Answer: A

AACSB: Information Technology

Difficulty: Easy

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

LO 1.3: How can you use the five-component model?

Classification: Concept

35) 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

Answer: D

AACSB: Information Technology; Analytical Thinking

Difficulty: Hard

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

LO 1.3: How can you use the five-component model?

Classification: Application

36) 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

Answer: D

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

37) 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

Answer: D

AACSB: Information Technology

Difficulty: Moderate

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

 LO 1.3: How can you use the five-component model?

Classification: Concept

38) Graham & Hilda Corp. is a firm that offers enterprise software solutions to independent retailers. The firm recently entered into a contract with a major national retail chain to develop and implement proprietary software that tracks inventory, restocking, and supplier information. 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

Answer: D

AACSB: Information Technology; Analytical Thinking

Difficulty: Hard

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

LO 1.3: How can you use the five-component model?

Classification: Application

39) Identify a statement that differentiates information technology from information systems.

A) One can buy information technology, but not information systems.

B) People are an important component of information technology, but not of information systems.

C) Information systems are a subset of information technology.

D) Unlike information system, information technology is an assembly of hardware, software, data, procedures, and people.

Answer: A

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.4: Why is the difference between information technology and information systems important?

Classification: Concept

40) Which of the following is a component of an information system, but not of information technology?

A) hardware

B) data

C) people

D) software

Answer: C

AACSB: Information Technology

Difficulty: Easy

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

LO 1.4: Why is the difference between information technology and information systems important?

Classification: Concept

41) Which of the following statements is true of information technology (IT)?

A) Information technology (IT) refers to the products, methods, inventions, and standards that are used for the purpose of producing information.

B) Information technology (IT) is an umbrella term that covers information systems and the products, methods, inventions, and standards used to produce information.

C) Information technology (IT) and information systems are synonymous with each other and can be used interchangeably.

D) Information technology (IT) is an assembly of hardware, software, data, procedures, and people that produces information.

Answer: A

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.4: Why is the difference between information technology and information systems important?

Classification: Concept

42) 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

Answer: B

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.5: What is information?

Classification: Concept

43) 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

Answer: C

AACSB: Analytical Thinking

Difficulty: Easy

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

LO 1.5: What is information?

Classification: Concept

44) 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

Answer: C

AACSB: Analytical Thinking

Difficulty: Easy

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

LO 1.5: What is information?

Classification: Concept

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

A) questionnaires

B) scenarios

C) illustrations

D) information

Answer: D

AACSB: Analytical Thinking

Difficulty: Easy

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

LO 1.5: What is information?

Classification: Application

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

A) Cognitive

B) Abstract reasoning

C) Symbolic thinking

D) Experimentation

Answer: A

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.5: What is information?

Classification: Application

47) A list of employee details is considered as \_\_\_\_\_\_\_\_.

A) knowledge

B) data

C) information

D) systems thinking

Answer: B

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.5: What is information?

Classification: Application

48) A spreadsheet consists of airfares to different cities from Chicago. If the contents of the spreadsheet are used to make a decision, it will be considered as\_\_\_\_\_\_\_\_.

A) knowledge

B) data

C) information

D) intuition

Answer: B

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.5: What is information?

Classification: Application

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

A) abundance of details

B) accuracy

C) low cost

D) ease of creation

Answer: B

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Concept

50) Sandra is a production manager at a soda manufacturer's bottling plant. She receives a report that contains the list of raw materials stored in the warehouse. She notices that the list also includes items that are not present in the warehouse. The list that she received would not qualify as good information because it is \_\_\_\_\_\_\_\_.

A) inaccurate

B) late

C) voluminous

D) too narrow in scope

Answer: A

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Application

51) 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.

Answer: C

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Concept

52) The CEO of an organization asks the human resources manager to send information about the rate of employee turnover in the organization for the last quarter. The manager sends the salary details of new hires during this period. This information is likely to be of little use to the CEO because it is \_\_\_\_\_\_\_\_.

A) inaccurate

B) not timely

C) irrelevant

D) too expensive

Answer: C

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Application

53) 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

Answer: D

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Application

54) 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.

Answer: B

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Concept

55) Patrick is looking to buy a home that costs less than $700,000, but his real estate agent keeps sending him fliers for homes that cost $1,000,000 or more. This information is likely to be useless because it is \_\_\_\_\_\_\_\_.

A) inaccurate

B) late

C) irrelevant

D) not reliable

Answer: C

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Application

56) 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 irrelevant to the subject

Answer: D

AACSB: Analytical Thinking

Difficulty: Easy

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Concept

57) 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

Answer: C

AACSB: Information Technology

Difficulty: Easy

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Concept

58) 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.

Answer: C

AACSB: Analytical Thinking

Difficulty: Hard

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Application

59) Which of the following statements is true about the quality of information?

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.

Answer: A

AACSB: Analytical Thinking

Difficulty: Moderate

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

LO 1.6: What Are Necessary Data Characteristics?

Classification: Concept

60) Which of the following statements is true about the changes and developments foreseen by the year 2025?

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

B) Desktop and portable computers will increase its popularity.

C) Processing image data would be difficult.

D) Mobile devices would be cheaper and powerful.

Answer: A

AACSB: Analytical Thinking

Difficulty: Easy

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

LO 1.7: 2025?

Classification: Concept

1.3 Essay Questions

1) State Moore's Law. What is the implication of Moore's Law for managers?

Answer: According to Moore's Law, "The number of transistors per square inch on an integrated chip doubles every 18 months. “Because of this law, the ratio of price to performance of computers has fallen drastically. Therefore, it is important for managers to realize that, because of Moore's Law, the cost of data processing, communications, and storage is essentially zero.

AACSB: Information Technology

Difficulty: Moderate

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

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

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

(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) Experimentation—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.

AACSB: Information Technology

Difficulty: Easy

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

3) 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.

AACSB: Information Technology

Difficulty: Easy

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

LO 1.2: What is MIS?

Classification: Concept

4) 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).

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.2: What is MIS?

Classification: Concept

5) 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."

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.2: What is MIS?

Classification: Concept

6) 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.

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

7) 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.

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.3: How can you use the five-component model?

Classification: Concept

8) How is information technology different from information systems?

Answer: Information technology and information systems are two closely related terms, but they are different. Information technology (IT) refers to the products, methods, inventions, and standards that are used for the purpose of producing information. IT pertains to the hardware, software, and data components. On the other hand, an information system (IS) is an assembly of hardware, software, data, procedures, and people that produces information. Information technology drives the development of new information systems.

A crucial difference between the two terms is that, while one can buy IT, one cannot buy an IS. That is, one can buy or lease hardware, license programs and databases, and even obtain predesigned procedures. Ultimately, however, it is people who execute those procedures to employ that new IT. For any new system, individuals will always have training tasks and costs, they will always have the need to overcome employees' resistance to change, and they will always need to manage the employees as the employees use the new system.

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.4: Why is the difference between information technology and information systems important?

Classification: Concept

9) 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.

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.5: What is information?

Classification: Concept

10) What are the five characteristics of good data?

Answer: Data should be:

(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 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.

AACSB: Information Technology

Difficulty: Moderate

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

LO 1.6: What are necessary data characteristics?

Classification: Concept