1) Members of a team in a company need to understand business processes since they need to evaluate new technologies.

**Answer:** TRUE

AACC: Analytical Thinking
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.1: Why does the AllRoad team need to understand business processes?
Classification: Concept

2) Creating an abstraction or model of their company's current process helps a team have an informed and better discussion about developing new business processes.

**Answer:** TRUE

AACC: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.1: Why does the AllRoad team need to understand business processes?
Classification: Concept

3) A ________ is a network of activities for accomplishing a business function.
A) process capital
B) task force
C) business portfolio
D) business process

**Answer:** D

AACC: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept

4) In the swimlane format, the specific tasks that need to be accomplished as part of a business process are known as ________.
A) decisions
B) resources
C) activities
D) databases

**Answer:** C

AACC: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
5) A ________ is a subset of the activities in a business process that is performed by an actor.
A) sequence flow
B) resource
C) swimlane
D) role
Answer: D
AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept

6) Activities within a business process are shown in ________.
A) circles
B) rectangles with rounded corners
C) squares
D) diamonds with rounded corners
Answer: B
AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept

7) According to the business process modeling notation standard, the start of a business process is symbolized by a ________.
A) circle having a thick border
B) circle having a narrow border
C) square having a thick border
D) square having a narrow border
Answer: B
AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept

8) Which of the following statements is true about roles in a business process?
A) A role is the superset of the activities in a business process.
B) Roles are grouped in swimlane diagrams according to the number of actors involved.
C) The name of a role is written at the top of a swimlane.
D) A particular role can be fulfilled by just one person.
Answer: C
AACSB: Information Technology
Difficulty: Moderate
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept
9) Which of the following statements is true of the swimlane format?
A) It lists the names of actors on the top to specify individual roles.
B) It specifies the tasks that need to be accomplished as part of a business process.
C) It illustrates the flow of activities involved in a business process using grids.
D) It uses numerals to indicate the start and end of a business process.
Answer: B

10) According to the business process modeling notation, the end of a business process is symbolized by a ________.
A) circle having a thick border B) circle having a narrow border C) square having a thick border D) square having a narrow border
Answer: A

11) A(n) ________ is a collection of data that is stored within a business process.
A) repository B) sequence flow C) activity D) resource
Answer: A

12) ________ represent the movement of data from one activity to another.
A) Data charts B) Data buses C) Data modules D) Data flows
Answer: D
13) According to the business process modeling notation standard, an activity with a boxed plus sign inside it indicates a ________.
A) subprocess
B) data flow
C) sequence flow
D) data repository
Answer: A
AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept

14) Which of the following statements is true about business process modeling notation?
A) Sequence flows are indicated by dashed lines.
B) Data flows are indicated by solid labeled lines.
C) A circle with thin border represents a decision.
D) The medium of data flow is represented by thick solid lines.
Answer: D
AACSB: Information Technology
Difficulty: Moderate
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept

15) A role is a subset of activities in a business process.
Answer: TRUE
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept

16) Swimlane diagram is a graphical arrangement in which all the activities for a given role are shown in a single vertical lane.
Answer: TRUE
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept

17) In some business cases, a role can be fulfilled by an information system.
Answer: TRUE
AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.2: How can business process modeling help AllRoad?
Classification: Concept
18) According to the business process modeling notation standard, the start of a business process is symbolized by a circle having a thick border.

**Answer:** FALSE

AACSB: Information Technology  
Difficulty: Easy  
Course LO: Discuss the role of information systems in supporting business processes.  
Learning Obj: LO 2.2: How can business process modeling help AllRoad?  
Classification: Concept

19) According to the business process modeling notation standard, the end of a business process is symbolized by a circle having a narrow border.

**Answer:** FALSE

AACSB: Information Technology  
Difficulty: Easy  
Course LO: Discuss the role of information systems in supporting business processes.  
Learning Obj: LO 2.2: How can business process modeling help AllRoad?  
Classification: Concept

20) According to the business process modeling notation standard, solid lines between activities are called sequence flows.

**Answer:** TRUE

AACSB: Information Technology  
Difficulty: Easy  
Course LO: Discuss the role of information systems in supporting business processes.  
Learning Obj: LO 2.2: How can business process modeling help AllRoad?  
Classification: Concept

21) A collection of files on the Internet is a repository.

**Answer:** TRUE

AACSB: Information Technology  
Difficulty: Easy  
Course LO: Describe the components of an information system (IS).  
Learning Obj: LO 2.2: How can business process modeling help AllRoad?  
Classification: Concept

22) Data flows represent the movement of data from one activity to another.

**Answer:** TRUE

AACSB: Information Technology  
Difficulty: Easy  
Course LO: Describe the components of an information system (IS).  
Learning Obj: LO 2.2: How can business process modeling help AllRoad?  
Classification: Concept

23) A repository can be printed records stored in a shoebox or a collection of files in the cloud.

**Answer:** TRUE

AACSB: Information Technology  
Difficulty: Easy  
Course LO: Describe the components of an information system (IS).  
Learning Obj: LO 2.2: How can business process modeling help AllRoad?  
Classification: Concept
24) In a business process modelling notation diagram, the medium of data delivery is very important.

**Answer:** FALSE

AACSB: Information Technology

Difficulty: Easy

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

Learning Obj: LO 2.2: How can business process modeling help AllRoad?

Classification: Concept

25) What is a business process? How are business process modelling notations used in business processes?

**Answer:** A business process is a network of activities for accomplishing a business function. The business process modelling notation is an international standard for creating business process diagrams. These notations are used in the constructing diagrams of business processes.

AACSB: Analytical Thinking

Difficulty: Easy

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

Learning Obj: LO 2.2: How can business process modeling help AllRoad?

Classification: Concept

26) Briefly describe activities and roles in swimlane format.

**Answer:** Swimlane format is a graphical arrangement in which all of the activities for a given role are shown in a single vertical lane. Each swimlane has activities, which are specific tasks that need to be accomplished as part of the process. A role is a subset of the activities in a business process that is performed by an actor, which is a person, group, department, organization, or information system. The name of the role is written at the top of a swimlane, not people's names. This is because a given role may be fulfilled by many people, or the organization may change the people who are assigned to a given role.

AACSB: Information Technology

Difficulty: Easy

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

Learning Obj: LO 2.2: How can business process modeling help AllRoad?

Classification: Concept

27) Briefly describe a repository.

**Answer:** A repository is a collection of data that is stored within a business process. A repository can be a cardboard box, a notebook, a list, an Excel spreadsheet, a database, or even a collection of databases. For the purpose of documenting a business process, the particular medium in which repository data is stored is unimportant.

AACSB: Information Technology

Difficulty: Moderate

Course LO: Discuss best practices for using and managing databases.

Learning Obj: LO 2.2: How can business process modeling help AllRoad?

Classification: Concept

28) Briefly describe data flows.

**Answer:** According to the business process modeling notation (BPMN), the labeled dashed lines are called data flows. They represent the movement of data from one activity to another. The data can be delivered via email, text message, over the phone, by fax, or by some other means. In a BPMN diagram, the medium of the data delivery is also unimportant.

AACSB: Information Technology

Difficulty: Moderate

Course LO: Discuss best practices for using and managing databases.

Learning Obj: LO 2.2: How can business process modeling help AllRoad?
29) _______ is the ratio of benefits to costs.
A) Effectiveness  
B) Efficiency  
C) Scalability  
D) Performance rating  
**Answer:** B

AACSB: Analytical Thinking  
Difficulty: Easy  
Course LO: Discuss the role of information systems in supporting business processes.  
Learning Obj: LO 2.3: How can information systems improve process quality?  
Classification: Concept

30) Which of the following statements is true of the dimensions to measure process quality?
A) Process effectiveness is determined by the ratio of benefits to costs.
B) An effective business process enables an organization to accomplish its strategy.
C) If two versions of a business process create the same benefit, the higher cost version is more efficient.
D) Cost of infrastructure is not included under cost of business process.  
**Answer:** B

AACSB: Analytical Thinking  
Difficulty: Moderate  
Course LO: Discuss the role of information systems in supporting business processes.  
Learning Obj: LO 2.3: How can information systems improve process quality?  
Classification: Concept

31) The outermost components of the information systems framework _______.
A) can take action  
B) can be automated to reduce human intervention  
C) form a bridge between the human and computer sides  
D) represent sunk costs  
**Answer:** A

AACSB: Analytical Thinking  
Difficulty: Moderate  
Course LO: Discuss the role of information systems in supporting business processes.  
Learning Obj: LO 2.3: How can information systems improve process quality?  
Classification: Concept

32) The software and procedure components of the information systems framework are _______.
A) actors  
B) sets of instructions  
C) the outermost components  
D) bridges between the human side and the computer side  
**Answer:** B

AACSB: Information Technology  
Difficulty: Moderate  
Course LO: Describe the components of an information system (IS).  
Learning Obj: LO 2.3: How can information systems improve process quality?  
Classification: Concept
33) The ________ component of the information systems framework provides instructions for people.
A) procedure
B) software
C) hardware
D) data
Answer: A
AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

34) In an information systems framework, ________ is the bridge between the computer side on the left and the human side on the right.
A) hardware
B) software
C) procedure
D) data
Answer: D
AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

35) Which of the following components of an information system play the role of actors?
A) software and people
B) procedures and people
C) data and people
D) hardware and people
Answer: D
AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

36) When activities formerly done by people following procedures are moved to computers that perform the work by following instructions in software, the activities are said to be _________. A) outsourced
B) automated
C) documented
D) systematized
Answer: B
AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept
37) Automation of a process activity consists of moving work from the ________ of the symmetrical five-component framework.
A) software side to the human side
B) data side to the procedure side
C) human side to the computer side
D) software side to the hardware side

Answer: C

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

38) Which of the following statements is true of using an information system to improve process quality?
A) Information systems that are most user friendly are also most cost effective.
B) Information systems are most effective at improving process quality if they are developed solely by technical personnel.
C) Information systems can improve process efficiency but not process effectiveness.
D) Information systems that are labor saving may not be efficient.

Answer: D

AACSB: Information Technology
Difficulty: Moderate
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

39) Process effectiveness and process efficiency are the two dimensions in which the process quality can be measured.
Answer: TRUE

AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

40) An effective business process enables an organization to accomplish its strategy.
Answer: TRUE

AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

41) Effectiveness is the ratio of benefits to costs.
Answer: FALSE

AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept
42) An activity is considered to be automated when it is characterized by people following procedures.

**Answer:** FALSE

AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

43) The outermost components of the symmetrical five-component framework of information systems are data and procedures.

**Answer:** FALSE

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

44) In the five-component framework of information systems, the actors are hardware and people.

**Answer:** TRUE

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

45) In the five-component framework of an information system (IS), data is the bridge between the computer side and the human side.

**Answer:** TRUE

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

46) In an information systems framework, data is considered to be a part of the computer side.

**Answer:** FALSE

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

47) In an information systems framework, software and procedure components are both sets of instructions.

**Answer:** TRUE

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept
48) Procedures act as the bridge between the computer and human sides of the five-component framework of an information system (IS).

**Answer:** FALSE
AACS: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

49) Automation is the process in which the work is transferred from human side to computer side.

**Answer:** TRUE
AACS: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

50) Automation moves work from the software component to the hardware component.

**Answer:** FALSE
AACS: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

51) One of the major benefits of an information system is that it improves process quality.

**Answer:** TRUE
AACS: Information Technology
Difficulty: Easy
Course LO: Explain how IS can be used to gain and sustain competitive advantage.
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

52) Information systems can improve process efficiency but not process effectiveness.

**Answer:** FALSE
AACS: Information Technology
Difficulty: Easy
Course LO: Explain how IS can be used to gain and sustain competitive advantage.
Learning Obj: LO 2.3: How can information systems improve process quality?
Classification: Concept

53) Describe the process of automation against the background of the five-component framework of an information system.

**Answer:** The five components of an information system are hardware, software, data, procedures, and people. They are arranged symmetrically in the framework. The outermost components, hardware and people, are both actors—they take action. The software and procedure components are both sets of instructions: Software is instructions for hardware, and procedures are instructions for people. Finally, data is the bridge between the computer side on the left and the human side on the right. When an activity in a business process is handled by an automated system, it means that work formerly done by people following procedures has been moved so that computers now do that work by following instructions in software. Thus, the automation of a process activity consists of moving work from the right-hand side of the five-component information system (IS) framework to the left.
54) Describe the benefits of using an information system to store vendor and product-related data.

**Answer:** In order to select a vendor, a buyer has to gather data about vendors and products, make analyses of costs and margins, and store the results of those analyses. If an information system (IS) is not used to store these results, accessing past records and results will require a manual search. An IS makes the process of finding reliable data and reports faster and more reliable, improving the efficiency and quality of the business process.

55) ________ is defined as recorded facts or figures.

A) Information  
B) Substance  
C) Data  
D) Content

**Answer:** C

56) John's height is 6 feet 3 inches. This is a type of ________.

A) data  
B) information  
C) procedure  
D) content

**Answer:** A

57) The fact that Joe works nine hours per day is an example of ________.

A) sample  
B) content  
C) information  
D) data

**Answer:** D
58) People can perceive different information from the same data.
   **Answer:** TRUE
   **AACSB:** Information Technology
   **Difficulty:** Easy
   **Course LO:** Discuss the role of information systems in supporting business processes.
   **Learning Obj:** LO 2.4: What is information?
   **Classification:** Concept

59) Repositories are collections of data.
   **Answer:** TRUE
   **AACSB:** Information Technology
   **Difficulty:** Easy
   **Course LO:** Describe the components of an information system (IS).
   **Learning Obj:** LO 2.4: What is information?
   **Classification:** Concept

60) Data presented in a meaningful context is known as information.
   **Answer:** TRUE
   **AACSB:** Information Technology
   **Difficulty:** Easy
   **Course LO:** Describe the components of an information system (IS).
   **Learning Obj:** LO 2.4: What is information?
   **Classification:** Concept

61) Information is data processed by grouping, comparing, or other similar operations.
   **Answer:** TRUE
   **AACSB:** Information Technology
   **Difficulty:** Easy
   **Course LO:** Describe the components of an information system (IS).
   **Learning Obj:** LO 2.4: What is information?
   **Classification:** Concept

62) Data is knowledge derived from information.
   **Answer:** FALSE
   **AACSB:** Information Technology
   **Difficulty:** Easy
   **Course LO:** Describe the components of an information system (IS).
   **Learning Obj:** LO 2.4: What is information?
   **Classification:** Concept

63) Average wage is knowledge that can be derived from the data of individual wages.
   **Answer:** TRUE
   **AACSB:** Analytical Thinking
   **Difficulty:** Easy
   **Course LO:** Describe the components of an information system (IS).
   **Learning Obj:** LO 2.4: What is information?
   **Classification:** Concept
64) Define information.
**Answer:** The most common definition of information is that information is knowledge derived from data. It can also be defined as the data presented in a meaningful context. The data can be processed by summing, ordering, averaging, grouping, comparing, or other similar operations.

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.4: What is information?
Classification: Concept

65) Explain data with an example.
**Answer:** Data is defined as recorded facts or figures. Information is knowledge derived from data. The facts that an employee of an organization earns $17.50 per hour and that another employee of the same organization earns $25.00 per hour are examples of data.

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.4: What is information?
Classification: Concept

66) Which of the following refers to information that is based on correct and complete data and has been processed correctly, as expected?
A) relevant information
B) measurable information
C) accurate information
D) timely information

**Answer:** C
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

67) The effectiveness of new online ad programs needs to be evaluated based on the frequency at which a customer clicks those ads. Identify the most effective and efficient method to analyze this data.
A) The click ratios must be tracked in real time.
B) The data must be saved in batches and processed a few hours later.
C) The clicks can be monitored for a short period of time and can be integrated for the total time.
D) The sample time at which the maximum data is accumulated is assumed to prevail for the entire cycle.

**Answer:** B
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept
68) Which of the following is a characteristic of good data?
A) It must be available in the cloud storage.
B) It must be more than just barely sufficient.
C) It must be based on incomplete data.
D) It must be contextually relevant.
Answer: D

AACSB: Analytical Thinking
Difficulty: Moderate
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

69) Which of the following statements is true about data characteristics of quality information?
A) Information systems that produce real-time data are less expensive than those that produce data at a later time.
B) The timeliness of information can be measured against events.
C) Accurate information can be conceived from inaccurate data.
D) Data that appears on any Web page is reliable.
Answer: B

AACSB: Information Technology
Difficulty: Moderate
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

70) Which of the following information is good information for the CEO of a call center?
A) hourly variance reports of performance parameters in each queue
B) daily report of calls attended by each employee
C) real-time information about the average time spent per call by employees
D) department-level averages of revenue generation figures
Answer: D

AACSB: Analytical Thinking
Difficulty: Moderate
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

71) ________ information is information that directly pertains both to the context and to the subject.
A) Timely
B) Relevant
C) Measurable
D) Expensive
Answer: B

AACSB: Information Technology
Difficulty: Easy
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept
72) Which of the following statements is true regarding the characteristics of good information?
A) Information needs to be more than just barely sufficient for the purpose for which it is generated.
B) Information must hold an appropriate relationship between its cost and value.
C) Accurate information can be based on incomplete data.
D) Good information is just recorded facts and figures.
**Answer:** B

AACSB: Information Technology
Difficulty: Moderate
Course LO: Describe the components of an information system (IS).
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

73) As long as information is relevant and timely, it need not always be complete.
**Answer:** FALSE

AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss best practices for selecting, evaluating, and managing information systems projects.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

74) Data delivered with active graphics need not be cross-checked for accuracy.
**Answer:** FALSE

AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss best practices for selecting, evaluating, and managing information systems projects.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

75) Accurate information is based on correct and complete data, and has been processed correctly.
**Answer:** TRUE

AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss best practices for using and managing databases.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

76) Users develop work-arounds when data from an information system is unreliable.
**Answer:** TRUE

AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss best practices for using and managing databases.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept
77) Timeliness of information can be measured against a calendar.
Answer: TRUE
AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss best practices for using and managing databases.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

78) The quality of thinking determines the quality of the information that is produced.
Answer: TRUE
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Discuss best practices for using and managing databases.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

79) Data needs to be sufficient for the purpose for which it is generated, but just barely so.
Answer: TRUE
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Discuss best practices for using and managing databases.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

80) Accurate data should be relevant both to the context and to the subject.
Answer: TRUE
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Discuss best practices for using and managing databases.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

81) All data about an organization are relevant to the higher management.
Answer: FALSE
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Explain how information systems can be used to assist in decision making.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept

82) For data to be worth its cost, an appropriate relationship must exist between the cost of data and its value.
Answer: TRUE
AACSB: Analytical Thinking
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
Classification: Concept
83) Information systems should not be subject to the same financial analyses to which other assets are subjected.

Answer: FALSE

AACSB: Information Technology
Difficulty: Easy
Course LO: Discuss the role of information systems in supporting business processes.
Learning Obj: LO 2.5: What data characteristics are necessary for quality information?
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84) Describe accurate information. Why does an information system that provides accurate information crucial to an organization?

Answer: Good information is accurate information, which is based on correct and complete data, and it has been processed correctly as expected. Accuracy is crucial; business professionals must be able to rely on the results of their information systems. The IS function can develop a bad reputation in an 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.

AACSB: Information Technology
Difficulty: Moderate
Course LO: Discuss best practices for using and managing databases.
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85) Explain the importance of timeliness of information in an organization.

Answer: Good information requires that data be available in time for its intended use. A monthly report that arrives six weeks late is most likely useless. In such a case, the data has arrived long after the decisions that needed that information have been made. An information system that sends a poor customer credit report after the goods have been shipped is unhelpful and frustrating. Timeliness can be measured against a calendar (six weeks late) or against events (for example, before shipping).

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86) In some cases, developing systems that provide data in near real time is much more difficult and expensive than producing data a few hours later. Provide an example that supports this statement.

Answer: A person who works in marketing needs to be able to assess the effectiveness of new online ad programs. He or she wants an information system that will not only deliver ads over the Web, but one that will also enable him or her to determine how frequently customers click on those ads. In this case, determining click ratios in near real time will be very expensive; saving the data in a batch and processing it some hours later will be much easier and cheaper. If the user can manage with data that is a day or two old, the system will be easier and cheaper to implement.

AACSB: Information Technology
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87) Describe relevant data. Explain the importance of relevant data in an organizational context. 
**Answer:** Relevant data is data that directly pertains to both the context and the subject. Considering context, a CEO needs data that is summarized to an appropriate level for his or her job. A list of the hourly wage of every employee in the company is unlikely to be useful. More likely, the CEO needs average wage information by department or division. A list of all employee wages is irrelevant in this context. 
Data should also be relevant to the subject at hand. If data about short-term interest rates is required to find a possible line of credit, then a report that shows 15-year mortgage interest rates is irrelevant. 

AACSB: Information Technology 
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88) Why is it important for data to be just barely sufficient? 
**Answer:** Data needs to be sufficient for the purpose for which it is generated, but just barely so. People are inundated with data; one of the critical decisions that people 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. 

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89) What are the costs associated with data? When is data considered to be worth its cost? 
**Answer:** Data is not free. There are costs for developing an information system, costs of operating and maintaining that system, and costs of time and salary for reading and processing the data the system produces. For data to be worth its cost, an appropriate relationship must exist between the cost of data and its value. 

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