### **c2**

#### Student:

- 1. What is the primary reason for growth of Decision-Making Information Systems?
- A. People need to analyze large amounts of information
- B. People must make decisions quickly
- C. People must apply sophisticated analysis techniques, such as modeling and forecasting to make good decisions
- D. All of the above
- 2. Which of the following represents a top-down structure for decision making in a typical organization?
- A. Operational, Managerial, and Strategic
- B. Managerial, Operational, and Strategic
- C. Strategic, Operational, and Managerial
- D. Strategic, Managerial, and Operational

3. When a company is evaluating whether or not to produce a new product, it is typically a(n) \_\_\_\_\_\_\_ decision.

- A. operational
- B. managerial
- C. strategic
- D. All of the above
- 4. \_\_\_\_\_ objectives are unstructured.
- A. Operational
- B. Managerial
- C. Strategic
- D. All of the above
- 5. \_\_\_\_\_ objectives are semi-structured.
- A. Operational
- B. Managerial
- C. Strategic
- D. All of the above

- 6. \_\_\_\_\_ objectives are structured.
- A. Operational
- B. Managerial
- C. Strategic
- D. All of the above
- 7. Which of the following is a common example of a TPS operational accounting system?
- A. Payroll system
- B. Expert system
- C. CRM system
- D. CAD system

8. Where is the data stored that is often used to source the data and information contained in decision support and executive information systems?

- A. Transaction processing systems
- B. AI systems
- C. Expert systems
- D. CRM system
- 9. Which system is used for day-to-day business operational decisions?
- A. Transaction Processing System (TPS)
- B. Decision Support System (DSS)
- C. Executive Information System (EIS)
- D. None of the above

10. The basic building block of data is provided by \_\_\_\_\_\_ system which is further used by other systems for deriving analytical information.

- A. Transaction Processing System (TPS)
- B. Decision Support System (DSS)
- C. Executive Information System (EIS)
- D. None of the above

11. An insurance company may use \_\_\_\_\_ to analyze the amount of risk the company is undertaking when it insures drivers who have a history of driving under the influence of alcohol.

- A. Transaction Processing System (TPS)
- B. Decision Support System (DSS)
- C. Executive Information System (EIS)
- D. None of the above

12. The executive information system analyzes information to help executives in making \_\_\_\_\_ business decisions.

A. operational

B. managerial

- C. strategic
- D. None of the above
- 13. Strategic decisions focus on \_\_\_\_\_-term objectives.
- A. long
- B. short
- C. medium
- D. None of the above
- 14. Operational decisions focus on \_\_\_\_\_-term objectives.
- A. long
- B. short
- C. medium
- D. None of the above
- 15. Which of the following is an example of a neural network?
- A. Banks use neural networks to find opportunities in financial markets.
- B. Police use neural network software to fight crime.
- C. Fraud detection widely uses neural networks.
- D. All are examples of neural networks.
- 16. Which feature can a neural network possess?
- A. Learning and adjusting to new circumstances on their own.
- B. Functioning without complete or well-structured information.
- C. Coping with huge volumes of information with many dependent variables.
- D. All are features of neural networks.
- 17. What does examining business processes helps an organization determine?
- A. Bottlenecks
- B. Create duplicate activities
- C. Separate related activities
- D. All of the above

18. What does examining business processes helps an organization determine?

- A. Bottlenecks
- B. Eliminate duplicate activities
- C. Combine related activities
- D. All of the above

19.\_\_\_\_\_

result in a product or service that is received by an organization's

external customer.

- A. Business-facing processes
- B. Customer-facing processes
- C. Product-facing processes
- D. Supplier-facing processes

20. What is a graphic description of a process, showing the sequence of process tasks, which is developed for a specific purpose and from a selected viewpoint?

A. Information process model

B. Leadership process model

C. Business process model

D. Graphic process model

21. What represents the current state of the operation that has been mapped, without any specific improvements or changes to existing processes?

A. As-Is process models

B. To-Be process models

C. Past process models

D. Future process models

22. What is a business process?

A. The analysis and redesign of workflow within and between enterprises

B. A standardized set of activities that accomplish as specific task, such as processing a customer's order

C. Integrates all departments and functions throughout an organization into a single TI system so that employees can make decisions by viewing enterprise-wide information on all business operations D. None of the above

- 23. What is business process re-engineering?
- A. The analysis and redesign of workflow within and between enterprises
- B. A standardized set of activities that accomplish as specific task, such as processing a customer's order

C. Integrates all departments and functions throughout an organization into a single TI system so that employees can make decisions by viewing enterprise-wide information on all business operations

- D. None of the above
- 24. What is the purpose of business process re-engineering?
- A. To make all business processes best-in-class
- B. To make all employees best-in-class
- C. To make all business partners best-in-class
- D. All of the above
- 25. Which company used BPR to change its industry by implementing a mobile claims process?
- A. Saab
- B. Progressive Insurance
- C. Trek
- D. Charles Schwab

26. What encompasses all summarized or aggregated transactional data, and its primary purpose is to support performing analysis tasks?

- A. Transactional information
- B. Analytical information
- C. Timeliness
- D. Quality

#### 27. Which of the following is an example of transactional data?

- A. Trend projection
- B. Sales projection
- C. Purchasing stock
- D. All of the above

28. Which of the following is not a reason for the growth of decision-making information systems?

- A. People need to analyze large amounts of information
- B. People must make decisions quickly
- C. People must apply sophisticated analysis techniques to make good decisions
- D. People no longer have to worry about protecting the corporate asset of organizational information

29. Which of the following is a quantitative model typically used by a DSS?

- A. Sensitivity analysis
- B. What-if analysis
- C. Goal-seeking analysis
- D. All of the above

30. What is the study of the impact that changes in one (or more) parts of the model have on other parts of the model?

- A. Drill-down
- B. Sensitivity analysis
- C. Statistical analysis
- D. Goal-seeking analysis

31. What finds the inputs necessary to achieve a goal, such as a desired level of output?

- A. Drill-down
- B. Sensitivity analysis
- C. What-if analysis
- D. Goal-seeking analysis

32. What is consolidation?

A. Involves the aggregation of information and features simple roll-ups to complex groupings of interrelated information.

- B. The ability to look at information from different perspectives
- C. Enables users to get details, and details of details, of information
- D. Finds the inputs necessary to achieve a goal such as a desired level of output
- 33. What is drill-down capability?

A. Involves the aggregation of information and features simple roll-ups to complex groupings of interrelated information.

- B. The ability to look at information from different perspectives
- C. Enables users to get details, and details of details, of information
- D. Finds the inputs necessary to achieve a goal such as a desired level of output
- 34. What is slice-and-dice capability?

A. Involves the aggregation of information and features simple roll-ups to complex groupings of interrelated information.

- B. The ability to look at information from different perspectives
- C. Enables users to get details, and details of details, of information
- D. Finds the inputs necessary to achieve a goal such as a desired level of output

- 35. What are the capabilities of OLAP?
- A. consolidation of data
- B. drill-down data
- C. slice-and-dice data
- D. All of the above
- 36. Which of the following is not a measure of efficiency IS metric?
- A. Throughput
- B. Usability
- C. Transaction speed
- D. Response time
- 37. Which of the following is not a measure of effectiveness IS metric?
- A. Usability
- B. Customer satisfaction
- C. Financial Return on Investment
- D. System availability

38. What integrates information from multiple components and tailors the information to individual preferences?

- A. Drill-down
- B. Sensitivity analysis
- C. What-if analysis
- D. Digital dashboard

39. A digital dashboard is an example of \_\_\_\_\_.

- A. EIS
- B. DSS
- C. TPS
- D. None of the above
- 40. What are various commercial applications of artificial intelligence?
- A. Drill-down
- B. Sensitivity analysis
- C. Digital dashboard
- D. Intelligent systems

- 41. What is a category of AI that attempts to emulate the way the human brain works?
- A. Intelligent system
- B. Artificial intelligence
- C. Expert systems
- D. Neural network
- 42. Which of the following is the most commonly used form of AI in the business arena?
- A. Intelligent system
- B. Artificial intelligence
- C. Expert system
- D. Neural network
- 43. Which system imitates the reasoning processes of a skilled professional in solving difficult problems?
- A. Intelligent system
- B. Artificial intelligence
- C. Expert system
- D. Neural network

44. What is a special-purpose knowledge-based information system that accomplishes specific tasks on behalf of its users?

- A. Intelligent system
- B. Artificial intelligence
- C. Neural network
- D. Intelligent agent

45. What is an artificial intelligence system that mimics the evolutionary, survival-of-the-fittest process to generate increasingly better solutions to a problem?

- A. Intelligent system
- B. Artificial intelligence
- C. Neural network
- D. Genetic algorithm

46. Which artificial intelligence system enables telepresence, where users can be anywhere in the world and the system allows them to work alone or together at a remote site?

- A. Expert System
- B. Intelligent Agent
- C. Multi-Agent Systems and Agent-Based Modeling
- D. Virtual Reality

47. Which of the following is the computer simulation software that allows a surgeon from a remote location to perform a surgery operation by using the equipment that can be controlled remotely?

- A. Expert System
- B. Intelligent Agent
- C. Multi-Agent Systems and Agent-Based Modeling
- D. Virtual Reality

48. Which of the following represents the top-down (executives to analysts) organizational levels of information technology systems?

- A. TPS, DSS, EIS
- B. DSS, TPS, EIS
- C. EIS, DSS, TPS
- D. None of these choices are correct; it varies from organization to organization
- 49. Which of the following is an incorrect enterprise view of information technology?
- A. Processes are analytical for executives and transactional for analysts
- B. Granularity is coarse for executives and fine for analysts
- C. Processing is OLTP for executives and OLAP for analysts
- D. None of the above
- 50. Which of the following is a type of transaction processing system?
- A. Order processing
- B. Sales
- C. Manufacturing
- D. Transportation
- 51. Which of the following is a type of decision support system?
- A. Order processing
- B. Inventory tracking
- C. Manufacturing
- D. All of the above

52. Which system differentiates an executive information system from a decision support system and a transaction processing system?

- A. Order processing system
- B. Manufacturing system
- C. Stock market information system
- D. Transportation system

53. Which company has "The Wall of Shaygan", which is a digital dashboard that tracks 100-plus IT systems on a single screen?

- A. Burlington Northern and Santa Fe Railroad
- B. BostonCoach
- C. Verizon Communications
- D. RivalWatch

54. Which company offers a strategic business information service using artificial intelligence that enables organizations to track the product offering, pricing policies, and promotions of online competitors? A. Burlington Northern and Santa Fe Railroad

- B. BostonCoach
- C. Verizon Communications
- D. RivalWatch

55. Which of the following represents a mathematical method of handling imprecise or subjective information?

- A. Genetic algorithm
- B. Fuzzy logic
- C. Market basket analysis
- D. Statistical analysis

56. What encompasses all of the information contained within a single business process or unit of work and its primary purpose is to support the performing of daily operational tasks?

- A. Transactional data
- B. Analytical information
- C. Timeliness
- D. Quality
- 57. Which of the following is an example of transactional data?
- A. Withdrawing cash from an ATM
- B. Making an airline reservation
- C. Purchasing stock
- D. All of the above

58. Key performance indicators (KPIs) are the crucial steps companies perform to achieve their goals and objectives and implement their strategies. True False 59. Strategic decisions focus on short-term objectives whereas operational decisions focus on long-term objectives. True False

60. Key performance indicators (KPIs) are the measures that are tied to business drivers. True False

61. Critical success factors (CSFs) are the crucial steps companies perform to achieve their goals and objectives and implement their strategies. True False

62. With information systems, efficiency IS metrics measure the performance of information system itself whereas effectiveness IS metrics measure the impact that IS has on business processes. True False

63. "Doing things right" addresses effectiveness whereas "Doing the right things" addresses efficiency. True False

64. Benchmarks are baseline values the system seeks to attain. True False

65. Key performance indicators (KPIs) are the quantifiable metrics a company uses to evaluate progress toward critical success factors. True False

66. Companies frequently strive to improve their business processes by performing tasks faster, cheaper, and better. True False

67. As-Is process models show the results of applying change improvement opportunities to the current (As-Is) process model. True False 68. Purchasing stocks is an example of analytical information. True False

69. Transactional data is used when performing operational tasks and repetitive decisions such as analyzing daily sales reports and production schedules to determine how much inventory to carry. True False

70. A business process is the analysis and redesign of workflow within and between enterprises. True False

71. Progressive Insurance used CRM to revamp its insurance claims process. True False

72. A genetic algorithm is an artificial intelligence system that mimics the evolutionary, survival-of-the-fittest process to generate increasingly better solutions to a problem. True False

73. Virtual reality is a computer-simulated environment that can be a simulated world or an imaginary world. True False

74. The ultimate goal of AI is the ability to build a system that can mimic human intelligence. True False

75. Sensitivity analysis, what-if analysis, and market basket analysis are the three quantitative models typically used by a DSS. True False

76. Consolidation, drill-down, and slice-and-dice are the three most common capabilities offered in an OLAP-based system.True False

77. A shopping bot is one of the simplest examples of an intelligent agent. True False

78. A common example of TPS is an operational accounting system such as a payroll system. True False

79. Data stored in transaction processing systems is rarely used to source the data and information contained in decision support and executive information systems. True False

80. Mail-order companies use neural networks to determine which customers are and are not likely to order from their catalogues.True False

81. A neural network is able to derive results without complete or well-structured information. True False

82. Examining business processes helps an organization determine bottlenecks, eliminate duplicate activities, combine related activities, and identify smooth-running processes. True False

83. Business-facing processes are invisible to the external customer but essential to the effective management of the business and include goal setting, day-to-day planning, performance feedback, rewards, and resource allocation.

True False

84. \_\_\_\_\_ are the three quantitative models typically used by a DSS.

85. \_\_\_\_\_ are baseline values the system seeks to attain.

86. A(n) \_\_\_\_\_\_ agent is a special-purpose knowledge-based information system that accomplishes specific tasks on behalf of its users.

87. A(n) \_\_\_\_\_\_ bot is software that will search several retailer websites and provide a comparison of each retailer's offerings including price and availability.

88. The most common example of a \_\_\_\_\_\_ is an operational accounting system such as a payroll system or an order-entry system.

90. Police use \_\_\_\_\_\_ network software to fight crime.

·

91. A \_\_\_\_\_\_ is an artificial intelligence system that mimics the evolutionary, survival-of-the-fittest process to generate increasingly better solutions to a problem.

92. Coping with huge volumes of information with many dependent variables is a feature of

93. \_\_\_\_\_\_ is a computer-simulated environment that can be a simulated world or an imaginary world.

94. A \_\_\_\_\_\_ is one of the simplest examples of an intelligent agent.

95. Examining \_\_\_\_\_\_ helps an organization determine bottlenecks, eliminate duplicate activities, combine related activities, and identify smooth-running processes.

96. \_\_\_\_\_\_ are invisible to the external customer but essential to the effective management of the business and include goal setting, day-to-day planning, performance feedback, rewards, and resource allocation.

97. A \_\_\_\_\_\_\_ is a graphic description of a process, showing the sequence of process tasks, which is developed for a specific purpose and from a selected viewpoint.

98. \_\_\_\_\_\_ represent the current state of the operation that has been mapped, without any specific improvements or changes to existing processes.

99. \_\_\_\_\_ addresses efficiency—getting the most from each resource.

100. \_\_\_\_\_ addresses effectiveness—setting the right goals and objectives and ensuring they are accomplished.

101. \_\_\_\_\_ data encompasses all of the information contained within a single business process or unit of work and its primary purpose is to support the performing of daily operational tasks.

102. \_\_\_\_\_ information encompasses all organizational information and its primary purpose is to support the performing of managerial analysis tasks.

103. Organizations use \_\_\_\_\_\_ information to make repetitive decisions.

105. Business process re-engineering is the analysis and \_\_\_\_\_\_ of workflow within and between enterprises.

106. A decision support system models \_\_\_\_\_\_ to support managers and business professionals during the decision-making process.

107. \_\_\_\_\_ checks the impact of a change in an assumption on the proposed solution.

\_\_\_\_\_

\_\_\_\_\_

108. \_\_\_\_\_\_ analysis occurs when users change the value of one variable repeatedly and observe the resulting changes in other variables.

109. What-if analysis checks the impact of a \_\_\_\_\_ in an assumption on the proposed solution.

110. \_\_\_\_\_\_\_-seeking analysis could answer the question "How many customers are required to purchase our new product line to increase gross profits to \$5 million?"

111. \_\_\_\_\_ logic is a mathematical method of handling imprecise or subjective information.

114. \_\_\_\_\_\_\_\_\_ systems are computerized advisory programs that imitate the reasoning processes of experts in solving difficult problems.

115. \_\_\_\_\_ processes are invisible to the external customer but essential to the effective management of the business and include goal setting, day-to-day planning, performance feedback, rewards, and resource allocation.

116. Distinguish between transactional data and analytical data.

117. What are KPIs, and how they are used?

118. Distinguish between OLTP and OLAP with respect to the types of decisions made.

119. Briefly explain the capabilities of OLAP.

120. List and define the five most common categories of AI.

121. Define the ultimate goal of AI and describe a few current examples of how AI is being used throughout industries.

122. Discuss why organizations would undertake Business Process Re-engineering?

123. Discuss why business processes should drive information systems choices?

124. Identify how an organization can use business process re-engineering to improve its business.

125. List and define the four primary reasons for the growth of decision-making information systems.

126. Describe the three capabilities commonly offered by an EIS.

### c2 Key

1. What is the primary reason for growth of Decision-Making Information Systems?

A. People need to analyze large amounts of information

B. People must make decisions quickly

C. People must apply sophisticated analysis techniques, such as modeling and forecasting to make good decisions

**D.** All of the above

Refer to Figure 2.1.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #1 Difficulty: Easy Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

2. Which of the following represents a top-down structure for decision making in a typical organization?

A. Operational, Managerial, and Strategic

B. Managerial, Operational, and Strategic

C. Strategic, Operational, and Managerial

**D.** Strategic, Managerial, and Operational

Refer to Figure 2.2.

Accessibility: Keyboard Navigation

Baltzan - Chapter 02 #2

Difficulty: Easy

Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

3. When a company is evaluating whether or not to produce a new product, it is typically a(n) \_\_\_\_\_\_ decision.

A. operational
<u>B.</u> managerial
C. strategic
D. All of the above

Managerial decisions cover short- and medium-range plans, schedules, and budgets, along with policies, procedures, and business objectives for the firm. These types of decisions are considered semi-structured decisions. For example, decisions about producing new products or changing employee benefits range from unstructured to semi-structured.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #3 Difficulty: Easy Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

4. \_\_\_\_\_\_ objectives are unstructured.
A. Operational
B. Managerial
C. Strategic
D. All of the above

Strategic decisions are highly unstructured decisions, occurring in situations in which no procedures or rules exist to guide decision makers towards the correct choice.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #4 Difficulty: Easy Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

5. \_\_\_\_\_\_ objectives are semi-structured.
A. Operational
B. Managerial
C. Strategic
D. All of the above

Managerial decisions cover short- and medium-range plans, schedules, and budgets, along with policies, procedures, and business objectives for the firm. These types of decisions are considered semi-structured decisions. For example, decisions about producing new products or changing employee benefits range from unstructured to semi-structured.

6. \_\_\_\_\_ objectives are structured.

A. Operational

B. Managerial

C. Strategic

D. All of the above

Operational decisions are considered structured decisions, which arise in situations where established processes offer potential solutions.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #6 Difficulty: Easy Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

7. Which of the following is a common example of a TPS operational accounting system?

- A. Payroll system
- B. Expert system
- C. CRM system
- D. CAD system

The most common example of a TPS is an operational accounting system such as a payroll system or an order-entry system.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #7 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

8. Where is the data stored that is often used to source the data and information contained in decision support and executive information systems?

<u>A.</u> Transaction processing systems

- B. AI systems
- C. Expert systems
- D. CRM system

The data stored in transaction processing systems are often used to source the data and information contained in decision support and executive information systems.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #8 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

- 9. Which system is used for day-to-day business operational decisions?
- A. Transaction Processing System (TPS)
- B. Decision Support System (DSS)
- C. Executive Information System (EIS)
- D. None of the above

The operational decisions are of short term and often represent day-to-day transactions.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #9 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

10. The basic building block of data is provided by \_\_\_\_\_\_ system which is further used by other systems for deriving analytical information.

<u>A.</u> Transaction Processing System (TPS)

- B. Decision Support System (DSS)
- C. Executive Information System (EIS)
- D. None of the above

TPS often used to source the data as a basic building block of data for further analysis.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #10 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

11. An insurance company may use \_\_\_\_\_ to analyze the amount of risk the company is undertaking when it insures drivers who have a history of driving under the influence of alcohol.

- A. Transaction Processing System (TPS)
- **B.** Decision Support System (DSS)
- C. Executive Information System (EIS)
- D. None of the above

One national insurance company uses a DSS to analyze the amount of risk the company is undertaking when it insures drivers who have a history of driving under the influence of alcohol.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #11

Difficulty: Medium

Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

12. The executive information system analyzes information to help executives in making \_\_\_\_\_ business decisions.

A. operational
B. managerial
<u>C.</u> strategic
D. None of the above

The executive information system analyzes information to help executives in making strategic business decisions.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #12 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

13. Strategic decisions focus on \_\_\_\_\_-term objectives.

<u>A.</u> long

B. short

C. medium

D. None of the above

Strategic decisions focus on long-term objectives which are typically of three to five years, Operational decisions focus on short-term objectives which are typically weekly or monthly.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #13 Difficulty: Medium Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

14. Operational decisions focus on \_\_\_\_\_-term objectives.

A. long

**<u>B.</u>** short

C. medium

D. None of the above

Strategic decisions focus on long-term objectives which are typically of three to five years, Operational decisions focus on short-term objectives which are typically weekly or monthly.

Accessibility: Keyboard Navigation

Baltzan - Chapter 02 #14

Difficulty: Medium

Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

- 15. Which of the following is an example of a neural network?
- A. Banks use neural networks to find opportunities in financial markets.
- B. Police use neural network software to fight crime.
- C. Fraud detection widely uses neural networks.
- **D.** All are examples of neural networks.

All are examples of neural networks.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #15 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

16. Which feature can a neural network possess?

- A. Learning and adjusting to new circumstances on their own.
- B. Functioning without complete or well-structured information.
- C. Coping with huge volumes of information with many dependent variables.
- **D.** All are features of neural networks.

Neural networks can possess many features including: learning and adjusting to new circumstances on their own, lending themselves to massive parallel processing, functioning without complete or well-structured information, coping with huge volumes of information with many dependent variables, and analyzing nonlinear relationships (they have been called fancy regression analysis systems).

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #16 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

- 17. What does examining business processes helps an organization determine?
- A. Bottlenecks
- B. Create duplicate activities
- C. Separate related activities
- D. All of the above

Examining business processes helps an organization determine bottlenecks, eliminate duplicate activities, combine related activities, and identify smooth-running processes.

Accessibility: Keyboard Navigation

Baltzan - Chapter 02 #17 Difficulty: Medium

18. What does examining business processes helps an organization determine?

- A. Bottlenecks
- B. Eliminate duplicate activities
- C. Combine related activities

**D.** All of the above

Examining business processes helps an organization determine bottlenecks, eliminate duplicate activities, combine related activities, and identify smooth-running processes.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #18 Difficulty: Medium Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

19.

result in a product or service that is received by an organization's

external customer.

A. Business-facing processes

**B.** Customer-facing processes

C. Product-facing processes

D. Supplier-facing processes

Customer-facing processes result in a product or service that is received by an organization's external customer and can be specific to an industry.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #19 Difficulty: Medium Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

20. What is a graphic description of a process, showing the sequence of process tasks, which is developed for a specific purpose and from a selected viewpoint?

- A. Information process model
- B. Leadership process model
- C. Business process model
- D. Graphic process model

This is the definition of a business process model.

Accessibility: Keyboard Navigation

Baltzan - Chapter 02 #20

Difficulty: Medium

21. What represents the current state of the operation that has been mapped, without any specific improvements or changes to existing processes?

A. As-Is process models

B. To-Be process models

C. Past process models

D. Future process models

This is the definition of As-Is process models.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #21 Difficulty: Medium Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

22. What is a business process?

A. The analysis and redesign of workflow within and between enterprises

**<u>B.</u>** A standardized set of activities that accomplish as specific task, such as processing a customer's order C. Integrates all departments and functions throughout an organization into a single TI system so that employees can make decisions by viewing enterprise-wide information on all business operations D. None of the above

This is the definition of business process.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #22 Difficulty: Easy Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

23. What is business process re-engineering?

A. The analysis and redesign of workflow within and between enterprises

B. A standardized set of activities that accomplish as specific task, such as processing a customer's order
C. Integrates all departments and functions throughout an organization into a single TI system so that employees can make decisions by viewing enterprise-wide information on all business operations
D. None of the above

This is the definition of BPR.

Accessibility: Keyboard Navigation

Baltzan - Chapter 02 #23

Difficulty: Easy

- 24. What is the purpose of business process re-engineering?
- A. To make all business processes best-in-class
- B. To make all employees best-in-class
- C. To make all business partners best-in-class
- D. All of the above

The purpose of BPR is to make all business processes best-in-class.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #24 Difficulty: Easy Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

25. Which company used BPR to change its industry by implementing a mobile claims process? A. Saab

- **B.** Progressive Insurance
- C. Trek
- D. Charles Schwab

Progressive Insurance used BPR to change its industry by implementing a mobile claims process.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #25 Difficulty: Medium Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

26. What encompasses all summarized or aggregated transactional data, and its primary purpose is to support performing analysis tasks?

- A. Transactional information
- **B.** Analytical information
- C. Timeliness
- D. Quality

Analytical information encompasses all summarized or aggregated transactional data, and its primary purpose is to support performing analysis tasks.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #26 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP). 27. Which of the following is an example of transactional data?

A. Trend projection

B. Sales projection

<u>C.</u> Purchasing stock

D. All of the above

Purchasing stock is an example of transactional data.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #27 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

28. Which of the following is not a reason for the growth of decision-making information systems?

- A. People need to analyze large amounts of information
- B. People must make decisions quickly
- C. People must apply sophisticated analysis techniques to make good decisions

**D.** People no longer have to worry about protecting the corporate asset of organizational information

People must protect the corporate asset of organizational information; it is one of their competitive advantages.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #28 Difficulty: Easy Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

29. Which of the following is a quantitative model typically used by a DSS?

- A. Sensitivity analysis
- B. What-if analysis
- C. Goal-seeking analysis
- **D.** All of the above

#### A DSS can perform all of these.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #29 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP). 30. What is the study of the impact that changes in one (or more) parts of the model have on other parts of the model?

A. Drill-down

**<u>B.</u>** Sensitivity analysis

C. Statistical analysis

D. Goal-seeking analysis

This is the definition of sensitivity analysis.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #30 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

31. What finds the inputs necessary to achieve a goal, such as a desired level of output?

- A. Drill-down
- B. Sensitivity analysis
- C. What-if analysis
- **<u>D.</u>** Goal-seeking analysis

This is the definition of goal-seeking analysis.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #31 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

32. What is consolidation?

<u>A.</u> Involves the aggregation of information and features simple roll-ups to complex groupings of interrelated information.

B. The ability to look at information from different perspectives

C. Enables users to get details, and details of details, of information

D. Finds the inputs necessary to achieve a goal such as a desired level of output

This is the definition of consolidation.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #32 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP). 33. What is drill-down capability?

A. Involves the aggregation of information and features simple roll-ups to complex groupings of interrelated information.

B. The ability to look at information from different perspectives

C. Enables users to get details, and details of details, of information

D. Finds the inputs necessary to achieve a goal such as a desired level of output

This is the definition of drill-down.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #33 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

34. What is slice-and-dice capability?

A. Involves the aggregation of information and features simple roll-ups to complex groupings of interrelated information.

**<u>B.</u>** The ability to look at information from different perspectives

C. Enables users to get details, and details of details, of information

D. Finds the inputs necessary to achieve a goal such as a desired level of output

This is the definition of slice-and-dice.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #34 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

35. What are the capabilities of OLAP?A. consolidation of dataB. drill-down dataC. slice-and-dice dataD. All of the above

A few of the capabilities associated with OLAP are consolidation, drill-down, and slice-and-dice.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #35 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP). 36. Which of the following is not a measure of efficiency IS metric?

- A. Throughput
- **B.** Usability
- C. Transaction speed
- D. Response time

Usability is the ease of performing transactions and/or finding information, which is an IS metric for effectiveness. A popular usability metric on the Internet is the number of clicks required to find desired information.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #36 Difficulty: Hard Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

37. Which of the following is not a measure of effectiveness IS metric?
A. Usability
B. Customer satisfaction
C. Financial Return on Investment
D. System availability

System availability is the number of hours an IS system is available to users. It is an IS metric for efficiency.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #37 Difficulty: Hard Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

38. What integrates information from multiple components and tailors the information to individual preferences?A. Drill-down

- B. Sensitivity analysis
- C. What-if analysis
- **D.** Digital dashboard

This is the definition of digital dashboards.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #38 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP). 39. A digital dashboard is an example of \_\_\_\_\_.

<u>**A.</u> EIS**</u>

B. DSS

C. TPS

D. None of the above

EIS systems, such as digital dashboards, allow executives to move beyond reporting to using information to directly impact business performance.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #39 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

40. What are various commercial applications of artificial intelligence?

- A. Drill-down
- B. Sensitivity analysis
- C. Digital dashboard
- **D.** Intelligent systems

This is the definition of intelligent systems.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #40 Difficulty: Easy Learning Objective: 02-03 Describe what artificial intelligence (AI) is and the five types of artificial intelligence systems used by organizations today.

41. What is a category of AI that attempts to emulate the way the human brain works?

- A. Intelligent system
- B. Artificial intelligence
- C. Expert systems
- **D.** Neural network

This is the definition of neural network.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #41 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS. 42. Which of the following is the most commonly used form of AI in the business arena?

A. Intelligent system

B. Artificial intelligence

**<u>C.</u>** Expert system

D. Neural network

Expert systems are the most common.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #42 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

43. Which system imitates the reasoning processes of a skilled professional in solving difficult problems?

- A. Intelligent system
- B. Artificial intelligence
- **<u>C.</u>** Expert system
- D. Neural network

Expert systems are computerized advisory programs that imitate the reasoning processes of experts in solving difficult problems.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #43 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

44. What is a special-purpose knowledge-based information system that accomplishes specific tasks on behalf of its users?

- A. Intelligent system
- B. Artificial intelligence
- C. Neural network
- **D.** Intelligent agent

This is the definition of intelligent agent.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #44 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS. 45. What is an artificial intelligence system that mimics the evolutionary, survival-of-the-fittest process to generate increasingly better solutions to a problem?

- A. Intelligent system
- B. Artificial intelligence
- C. Neural network
- **D.** Genetic algorithm

This is the definition of genetic algorithm.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #45 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

46. Which artificial intelligence system enables telepresence, where users can be anywhere in the world and the system allows them to work alone or together at a remote site?

- A. Expert System
- B. Intelligent Agent
- C. Multi-Agent Systems and Agent-Based Modeling
- **D.** Virtual Reality

This is an application of virtual reality system.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #46 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

47. Which of the following is the computer simulation software that allows a surgeon from a remote location to perform a surgery operation by using the equipment that can be controlled remotely?

- A. Expert System
- B. Intelligent Agent
- C. Multi-Agent Systems and Agent-Based Modeling
- **D.** Virtual Reality

This is an application of virtual reality system.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #47 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS. 48. Which of the following represents the top-down (executives to analysts) organizational levels of information technology systems?

A. TPS, DSS, EIS
B. DSS, TPS, EIS
C. EIS, DSS, TPS
D. None of these choices are correct; it varies from organization to organization

Executive information systems, decision support systems, and transaction processing systems is the top-down organizational levels of information technology systems.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #48 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

49. Which of the following is an incorrect enterprise view of information technology?

- A. Processes are analytical for executives and transactional for analysts
- B. Granularity is coarse for executives and fine for analysts
- C. Processing is OLTP for executives and OLAP for analysts
- D. None of the above

Processing is OLAP for executives and OLTP for analysts.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #49 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

50. Which of the following is a type of transaction processing system?

- A. Order processing
- B. Sales
- C. Manufacturing
- D. Transportation

Order processing is a transaction processing system.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #50 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP). 51. Which of the following is a type of decision support system?

A. Order processing

B. Inventory tracking

C. Manufacturing

D. All of the above

Manufacturing is a type of decision support system.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #51 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

52. Which system differentiates an executive information system from a decision support system and a transaction processing system?

A. Order processing system

B. Manufacturing system

- C. Stock market information system
- D. Transportation system

A stock market information system is only found in an executive information system since it is an external source of information, the rest are internal sources of information.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #52 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

53. Which company has "The Wall of Shaygan", which is a digital dashboard that tracks 100-plus IT systems on a single screen?

A. Burlington Northern and Santa Fe Railroad

B. BostonCoach

C. Verizon Communications

D. RivalWatch

Verizon Communications has "The Wall of Shaygan."

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #53 Difficulty: Hard Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP). 54. Which company offers a strategic business information service using artificial intelligence that enables organizations to track the product offering, pricing policies, and promotions of online competitors?

- A. Burlington Northern and Santa Fe Railroad
- B. BostonCoach
- C. Verizon Communications
- D. RivalWatch

RivalWatch offers the above service.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #54 Difficulty: Easy Learning Objective: 02-03 Describe what artificial intelligence (AI) is and the five types of artificial intelligence systems used by organizations today.

- 55. Which of the following represents a mathematical method of handling imprecise or subjective information?
- A. Genetic algorithm
- **<u>B.</u>** Fuzzy logic
- C. Market basket analysis
- D. Statistical analysis

This is the definition of fuzzy logic.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #55 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

56. What encompasses all of the information contained within a single business process or unit of work and its primary purpose is to support the performing of daily operational tasks?

- A. Transactional data
- B. Analytical information
- C. Timeliness
- D. Quality

This is the definition of transactional data.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #56 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

- 57. Which of the following is an example of transactional data?
- A. Withdrawing cash from an ATM
- B. Making an airline reservation
- C. Purchasing stock
- **D.** All of the above

All are examples of transactional data.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #57 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

58. Key performance indicators (KPIs) are the crucial steps companies perform to achieve their goals and objectives and implement their strategies. **FALSE** 

Critical success factors (CSFs) are the crucial steps companies perform to achieve their goals and objectives and implement their strategies.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #58

Difficulty: Medium

Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

59. Strategic decisions focus on short-term objectives whereas operational decisions focus on long-term objectives.

#### **FALSE**

Strategic decisions focus on long-term objectives which are typically of three to five years, operational decisions focus on short-term objectives which are typically weekly or monthly.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #59 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

# 60. Key performance indicators (KPIs) are the measures that are tied to business drivers. **TRUE**

This is the definition of KPIs.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #60 Difficulty: Medium Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

61. Critical success factors (CSFs) are the crucial steps companies perform to achieve their goals and objectives and implement their strategies. **TRUE** 

Critical success factors (CSFs) are the crucial steps companies perform to achieve their goals and objectives and implement their strategies.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #61 Difficulty: Medium Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

62. With information systems, efficiency IS metrics measure the performance of information system itself whereas effectiveness IS metrics measure the impact that IS has on business processes. <u>TRUE</u>

These are definitions.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #62 Difficulty: Medium Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

63. "Doing things right" addresses effectiveness whereas "Doing the right things" addresses efficiency. **FALSE** 

"Doing things right" addresses efficiency whereas "Doing the right things" addresses effectiveness.

### 64. Benchmarks are baseline values the system seeks to attain. **TRUE**

This is the definition of benchmarks.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #64 Difficulty: Medium Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

65. Key performance indicators (KPIs) are the quantifiable metrics a company uses to evaluate progress toward critical success factors. **TRUE** 

Key performance indicators (KPIs) are the quantifiable metrics a company uses to evaluate progress toward critical success factors.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #65 Difficulty: Medium Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

66. Companies frequently strive to improve their business processes by performing tasks faster, cheaper, and better. **TRUE** 

Companies frequently strive to improve their business processes by performing tasks faster, cheaper, and better.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #66 Difficulty: Medium Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

67. As-Is process models show the results of applying change improvement opportunities to the current (As-Is) process model. **FALSE** 

To-Be process models show the results of applying change improvement opportunities to the current (As-Is) process model.

# 68. Purchasing stocks is an example of analytical information. **FALSE**

Purchasing stocks is an example of transactional data.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #68 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

69. Transactional data is used when performing operational tasks and repetitive decisions such as analyzing daily sales reports and production schedules to determine how much inventory to carry. **TRUE** 

Transactional data is used to perform operational tasks.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #69 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

70. A business process is the analysis and redesign of workflow within and between enterprises. **FALSE** 

This is the definition for business process re-engineering, not business process.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #70 Difficulty: Easy Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

### 71. Progressive Insurance used CRM to revamp its insurance claims process. **FALSE**

Progressive Insurance used BPR to revamp its insurance claims process.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #71 Difficulty: Easy Learning Objective: 02-05 Describe

72. A genetic algorithm is an artificial intelligence system that mimics the evolutionary, survival-of-the-fittest process to generate increasingly better solutions to a problem. <u>TRUE</u>

This is the definition of genetic algorithm.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #72 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

73. Virtual reality is a computer-simulated environment that can be a simulated world or an imaginary world. **TRUE** 

*Virtual reality* is a computer-simulated environment that can be a simulation of the real world or an imaginary world.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #73 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

74. The ultimate goal of AI is the ability to build a system that can mimic human intelligence. **TRUE** 

This is the ultimate goal of AI.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #74 Difficulty: Easy Learning Objective: 02-03 Describe what artificial intelligence (AI) is and the five types of artificial intelligence systems used by organizations today.

75. Sensitivity analysis, what-if analysis, and market basket analysis are the three quantitative models typically used by a DSS.

#### **FALSE**

Sensitivity analysis, what-if analysis, and goal-seeking analysis are the three quantitative models typically used by a DSS.

76. Consolidation, drill-down, and slice-and-dice are the three most common capabilities offered in an OLAP-based system. **TRUE** 

These are the three most common capabilities offered in an OLAP.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #76 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

77. A shopping bot is one of the simplest examples of an intelligent agent. **TRUE** 

A shopping bot is a simple example of an intelligent agent.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #77 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

78. A common example of TPS is an operational accounting system such as a payroll system. **TRUE** 

The most common example of a TPS is an operational accounting system such as a payroll system or an order-entry system.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #78 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

79. Data stored in transaction processing systems is rarely used to source the data and information contained in decision support and executive information systems. **FALSE** 

The underlying data found in a TPS must be accurate and reliable for higher-level decision-making systems to be effective and the reason for this is that data stored in transaction processing systems are often used to source the data and information contained in decision support and executive information systems.

80. Mail-order companies use neural networks to determine which customers are and are not likely to order from their catalogues. **TRUE** 

Mail-order companies use neural networks to determine which customers are and are not likely to order from their catalogues.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #80 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

81. A neural network is able to derive results without complete or well-structured information. **TRUE** 

Functioning without complete or well-structured information is a feature of neural networks.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #81 Difficulty: Hard Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

82. Examining business processes helps an organization determine bottlenecks, eliminate duplicate activities, combine related activities, and identify smooth-running processes. **TRUE** 

Examining business processes helps an organization determine bottlenecks, eliminate duplicate activities, combine related activities, and identify smooth-running processes.

Accessibility: Keyboard Navigation

Baltzan - Chapter 02 #82

Difficulty: Medium

83. Business-facing processes are invisible to the external customer but essential to the effective management of the business and include goal setting, day-to-day planning, performance feedback, rewards, and resource allocation.

#### <u>TRUE</u>

Business-facing processes are invisible to the external customer but essential to the effective management of the business and include goal setting, day-to-day planning, performance feedback, rewards, and resource allocation.

Accessibility: Keyboard Navigation Baltzan - Chapter 02 #83 Difficulty: Medium Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

### 84. \_\_\_\_\_ are the three quantitative models typically used by a DSS. Sensitivity analysis, what-if analysis, and goal-seeking analysis

Baltzan - Chapter 02 #84 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

### 85. \_\_\_\_\_ are baseline values the system seeks to attain. Benchmarks

Baltzan - Chapter 02 #85 Difficulty: Easy

Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

86. A(n) \_\_\_\_\_\_ agent is a special-purpose knowledge-based information system that accomplishes specific tasks on behalf of its users. **intelligent** 

Baltzan - Chapter 02 #86 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

87. A(n) \_\_\_\_\_\_ bot is software that will search several retailer websites and provide a comparison of each retailer's offerings including price and availability. **shopping** 

Baltzan - Chapter 02 #88 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

Baltzan - Chapter 02 #89 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

90. Police use \_\_\_\_\_\_ network software to fight crime. \_\_\_\_\_\_

Baltzan - Chapter 02 #90 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

91. A \_\_\_\_\_\_ is an artificial intelligence system that mimics the evolutionary, survival-of-the-fittest process to generate increasingly better solutions to a problem. genetic algorithm

Baltzan - Chapter 02 #91 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

#### 92. Coping with huge volumes of information with many dependent variables is a feature of

#### neural networks

Baltzan - Chapter 02 #92 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

#### 93. \_\_\_\_\_ world. <u>Virtual reality</u>

Baltzan - Chapter 02 #93 Difficulty: Medium Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

# 94. A \_\_\_\_\_ is one of the simplest examples of an intelligent agent. shopping bot

Baltzan - Chapter 02 #94 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

95. Examining \_\_\_\_\_\_ helps an organization determine bottlenecks, eliminate duplicate activities, combine related activities, and identify smooth-running processes. **business processes** 

Baltzan - Chapter 02 #95 Difficulty: Medium

Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

96. \_\_\_\_\_\_ are invisible to the external customer but essential to the effective management of the business and include goal setting, day-to-day planning, performance feedback, rewards, and resource allocation.

#### **Business-facing processes**

Baltzan - Chapter 02 #96 Difficulty: Medium Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

97. A \_\_\_\_\_\_\_ is a graphic description of a process, showing the sequence of process tasks, which is developed for a specific purpose and from a selected viewpoint. **business process model** 

Baltzan - Chapter 02 #97 Difficulty: Medium

98.

represent the current state of the operation that has been mapped,

without any specific improvements or changes to existing processes.

#### As-Is process models

Baltzan - Chapter 02 #98 Difficulty: Medium

Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

# 99. \_\_\_\_\_ addresses efficiency—getting the most from each resource. **"Doing things right"**

Baltzan - Chapter 02 #99

Difficulty: Medium Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

### 100. \_\_\_\_\_ addresses effectiveness—setting the right goals and objectives and ensuring they are accomplished. **"Doing the right things"**

Baltzan - Chapter 02 #100

Difficulty: Medium Learning Objective: 02.01 Explain how organizations use transact

Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

101. \_\_\_\_\_\_ data encompasses all of the information contained within a single business process or unit of work and its primary purpose is to support the performing of daily operational tasks. **Transactional** 

Baltzan - Chapter 02 #101 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

102. \_\_\_\_\_\_ information encompasses all organizational information and its primary purpose is to support the performing of managerial analysis tasks. <u>Analytical</u>

Baltzan - Chapter 02 #102 Difficulty: Easy

Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

### 103. Organizations use **transactional**

103. Organizations use information to make repetitive decisions.

Baltzan - Chapter 02 #103 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

104. Organizations use	information to make ad hoc decisions.
analytical	

Baltzan - Chapter 02 #104 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

105. Business process re-engineering is the analysis and \_\_\_\_\_\_ of workflow within and between enterprises. **redesign** 

Baltzan - Chapter 02 #105 Difficulty: Medium

Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

106. A decision support system models \_\_\_\_\_\_ to support managers and business professionals during the decision-making process. **information** 

Baltzan - Chapter 02 #106 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

107. \_\_\_\_\_ checks the impact of a change in an assumption on the proposed solution. What-if analysis

Baltzan - Chapter 02 #107 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

# 108. \_\_\_\_\_\_ analysis occurs when users change the value of one variable repeatedly and observe the resulting changes in other variables. <u>Sensitivity</u>

Baltzan - Chapter 02 #108 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

109. What-if analysis checks the impact of a \_\_\_\_\_\_ in an assumption on the proposed solution. change

Baltzan - Chapter 02 #109 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

110. \_\_\_\_\_\_-seeking analysis could answer the question "How many customers are required to purchase our new product line to increase gross profits to \$5 million?" Goal

Baltzan - Chapter 02 #110 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

111. \_\_\_\_\_ logic is a mathematical method of handling imprecise or subjective information. **Fuzzy** 

Baltzan - Chapter 02 #111 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

112. \_\_\_\_\_\_ systems are various commercial applications of artificial intelligence. Intelligent

Baltzan - Chapter 02 #112 Difficulty: Easy Learning Objective: 02-03 Describe what artificial intelligence (AI) is and the five types of artificial intelligence systems used by organizations today.

### 113. Artificial intelligence simulates human

Baltzan - Chapter 02 #113 Difficulty: Easy Learning Objective: 02-03 Describe what artificial intelligence (AI) is and the five types of artificial intelligence systems used by organizations today.

114. \_\_\_\_\_\_\_\_\_ systems are computerized advisory programs that imitate the reasoning processes of experts in solving difficult problems. **Expert** 

Baltzan - Chapter 02 #114 Difficulty: Easy Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.

115. \_\_\_\_\_ processes are invisible to the external customer but essential to the effective management of the business and include goal setting, day-to-day planning, performance feedback, rewards, and resource allocation.

#### **Business-facing**

Baltzan - Chapter 02 #115

Difficulty: Hard

116. Distinguish between transactional data and analytical data.

Transactional data encompass all the raw facts contained within a single business process or unit of work, and their primary purpose is to support performing daily operational tasks.

Examples of events where transactional data are captured include purchasing stocks, making an airline reservation, or withdrawing cash from an ATM. Examples of transactional data for these events include a stock purchase price, an airline reservation number, and a bank account balance. Organizations use transactional data when performing operational tasks and routine decisions, such as analyzing daily sales reports to determine how much inventory to carry.

Analytical information encompasses all summarized or aggregated transactional data, and its primary purpose is to support performing analysis tasks. Analytical information also includes external information such as that obtained from outside market and industry sources. Examples of analytical information include trends, aggregated sales amounts by region, product statistics, and future growth projections. Specific examples of analytical information include the largest growing basket of stocks over the last quarter on the TSX (e.g., energy stocks, technology stocks), the most popular destination of travel for British Columbia residents, and projections use analytical information when making important ad hoc decisions such as whether the organization should build a new manufacturing plant or hire additional sales personnel.

Baltzan - Chapter 02 #116 Difficulty: Medium

Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

117. What are KPIs, and how they are used?

Key performance indicators (KPIs) are the measures that are tied to business drivers that improve both efficiency and effectiveness of business. Metrics are the detailed measures that feed those KPIs. With information systems, efficiency IS metrics measure the performance of the information system itself such as throughput, speed, and availability. Effectiveness IS metrics measure the impact IS has on business processes and activities including customer satisfaction, conversion rates, and sell-through increases.

Baltzan - Chapter 02 #117

Difficulty: Medium

Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

118. Distinguish between OLTP and OLAP with respect to the types of decisions made.

Online transaction processing (OLTP) is the capturing of transaction and event data using information systems to (1) process the data according to defined business rules, (2) store the data, and (3) update existing data to reflect the new data entered. OLTP helps companies to arrive at operational decisions. Online analytical processing (OLAP) is the analysis of summarized or aggregated information sourced from transaction processing systems data, and sometimes external information from outside industry sources, to create business intelligence in support of analytical and strategic (non-operational) decision making at managerial or executive level. OLAP is capable of consolidation, drill-down details, and slicing/dicing of data to arrive at decisions that recognize the developing trends and patterns by conducting a complex analysis.

Baltzan - Chapter 02 #118 Difficulty: Medium Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

119. Briefly explain the capabilities of OLAP.

A few of the capabilities associated with OLAP are consolidation, drill-down, and slice-and-dice.

(a) Consolidation involves the aggregation of information and features simple roll-ups to complex groupings of interrelated information. Many organizations track financial information at a regional level and then consolidate the information at a single global level.

(b) Drill-down enables users to view details, and details of details, of information. Viewing monthly, weekly, daily, or even hourly information represents drill-down capability.

(c) Slice-and-dice is the ability to look at information from different perspectives. One slice of information could display all product sales during a given promotion. Another slice could display a single product's sales for all promotions.

Baltzan - Chapter 02 #119 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

120. List and define the five most common categories of AI.

(1) Expert systems are computerized advisory programs that imitate the reasoning processes of experts in solving difficult problems. (2) Neural Networks attempt to emulate the way the human brain works. (3) Genetic algorithm-system that mimics the evolutionary, survival-of-the-fittest process to generate increasingly better solutions to a problem. (4) Intelligent agents are special-purposed knowledge-based information system that accomplishes specific tasks on behalf of its users. (5) Virtual Reality is a computer simulated environment that can be a simulated world or an imaginary world. Virtual reality enables telepresence where users can be anywhere in the world and use virtual reality systems to work alone or together at a remote site.

121. Define the ultimate goal of AI and describe a few current examples of how AI is being used throughout industries.

At Manchester Airport in England the Hefner ASI Robot Cleaner alerts passengers to security and nonsmoking rules while it scrubs up to 65,600 square feet of floor per day. A SmartPump keeps drivers in their cars on cold, wet days. The SmartPump can service any automobile built after 1987 that has been fitted with a special gas cap and a windshield-mounted transponder that tells the robot where to insert the pump. The Miami Police Bomb squad's AI robot that is used to locate and deactivate bombs. Matsushita's courier robot navigates hospital hallways, delivering patient files, X-ray films, and medical supplies. FireFighter AI Robots can extinguish flames at chemical plants and nuclear reactors with water, foam, powder, or inert gas.

Baltzan - Chapter 02 #121 Difficulty: Medium Learning Objective: 02-03 Describe what artificial intelligence (AI) is and the five types of artificial intelligence systems used by organizations today.

#### 122. Discuss why organizations would undertake Business Process Re-engineering?

Examining business processes helps an organization determine bottlenecks, eliminate duplicate activities, combine related activities, and identify smooth-running processes. To stay competitive, organizations must optimize and automate their business processes. Organizations are only as effective as their business processes. Developing logical business processes can help an organization achieve its goals. For example, an automobile manufacturer might have a goal to reduce the time it takes to deliver a car to a customer. The automobile manufacturer cannot hope to meet this goal with an inefficient ordering process or a convoluted distribution process. Sales representatives might be making mistakes when completing order forms, data-entry clerks might not accurately code order data, and dock crews might be inefficiently loading cars onto trucks. All of these errors increase the time it will take to get the car to the customer. Improving any one of these business processes can have a significant effect on the total distribution process, made up of the order entry, production scheduling, and transportation processes.

Baltzan - Chapter 02 #122

Difficulty: Medium

Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

123. Discuss why business processes should drive information systems choices?

Business processes should drive information systems choices. Not the other way around. Businesses that choose information systems and then attempt to implement business processes based on the information systems typically fail. All business processes should be based on business strategies and goals. After determining the most efficient and effective business process, an organization can find the information system that can be used to support the business process. Of course, this does not always happen and often individuals find themselves in the difficult position of changing a business process because the information system cannot support the ideal solution.

Difficulty: Medium

Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

124. Identify how an organization can use business process re-engineering to improve its business.

The purpose of BPR is to make all your processes the best-in-class. Companies frequently strive to improve their business processes by performing tasks faster, cheaper, and better. Companies often follow the same indirect path for doing business, not realizing there might be a different, faster, and more direct way of doing business. BPR provides companies with a way to find the different, more direct way of doing business, such as Progressive Insurance.

Baltzan - Chapter 02 #124 Difficulty: Easy Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.

125. List and define the four primary reasons for the growth of decision-making information systems.

(1) People need to analyze large amounts of information. (2) People must make decisions quickly. (3) People must apply sophisticated analysis techniques, such as modeling and forecasting, to make good decisions. (4) People must protect the corporate asset of organizational information.

Baltzan - Chapter 02 #125

Difficulty: Medium

Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and executive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structured decisions.

126. Describe the three capabilities commonly offered by an EIS.

Consolidation involves the aggregation of information and features simple roll-ups to complex groupings.
 Drill-down enables users to get details, and details of details.
 Slice-and-dice looks at information from different perspectives.

Baltzan - Chapter 02 #126 Difficulty: Easy Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).

### c2 Summary

<u>Category</u>	
	<u>uestio</u>
	<u>ns</u>
Accessibility: Keyboard Navigation	83
Baltzan - Chapter 02	126
Difficulty: Easy	57
Difficulty: Hard	5
Difficulty: Medium	64
Learning Objective: 02-01 Explain how organizations use transaction processing systems (TPS); decision support systems (DSS); and ex ecutive information systems (EIS) to make decisions and how each can be used to help make unstructured; semi-structured; and structure d decisions.	24
Learning Objective: 02-02 Explain the difference between transactional data and analytical information; and between online transaction processing (OLTP) and online analytical processing (OLAP).	• 47
Learning Objective: 02-03 Describe what artificial intelligence (AI) is and the five types of artificial intelligence systems used by organizations today.	6
Learning Objective: 02-04 Describe how the five types of AI systems differ from TPS; DSS; and EIS.	25
Learning Objective: 02-05 Describe the importance of business process improvement; business process re-engineering; business process modelling; and business process management to an organization and how information systems can help in these areas.	24