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. People must protect the corporate asset of organizational information

   E. 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 _____ decision.

   A. Operational

   B. Managerial

   C. Strategic

   D. All of the above

4. 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

5. 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

6. Which system is used for day-to-day business operational decisions?

   A. Transactional Processing System (TPS)

   B. Decision Support System (DSS)

   C. Executive Information System (EIS)

   D. None of the above

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

   A. Transactional Processing System (TPS)

   B. Decision Support System (DSS)

   C. Executive Information System (EIS)

   D. None of the above

8. The Executive Information System analyzes information to help executives in making _____ business decisions.

   A. Operational

   B. Managerial

   C. Strategic

   D. None of the above

9. 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

10. 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.

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

   A. Bottlenecks

   B. Create duplicate activities

   C. Separate related activities

   D. All of the above

12. _____ 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

13. 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

14. 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

15. 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 enterprisewide information on all business operations

    D. None of the above

16. What is business process reengineering?

    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 enterprisewide information on all business operations
    D. None of the above

17. What is the purpose of business process reengineering?

    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

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

    A. Saab
    B. Progressive Insurance
    C. Trek
    D. Charles Schwab

19. What encompasses all organizational information and its primary purpose is to support the performing of managerial analysis tasks?

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

20. Which of the following is an example of transactional data?

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

21. 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

22. 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

23. 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

24. 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

25. 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

26. 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

27. 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

28. Which of the following is <u>not</u> a measure of efficiency IS metric?

    A. Throughput

    B. Usability

    C. Transaction speed

    D. Response time

29. Which of the following is <u>not</u> a measure of effectiveness IS metric?

    A. Usability

    B. Customer satisfaction

    C. Financial Return on Investment

    D. System availability

30. 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

31. What are various commercial applications of artificial intelligence?

    A. Drill-down

    B. Sensitivity analysis

    C. Digital dashboard

    D. Intelligent system

32. 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

33. 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

34. 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

35. 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

36. 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

37. 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

38. 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 the above, it varies from organization to organization

39. 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

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

    A. Order processing

    B. Sales

    C. Manufacturing

    D. Transportation

41. Which of the following is a type of decision support system?

    A. Order processing

    B. Inventory tracking

    C. Manufacturing

    D. All of the above

42. 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

43. 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

44. 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

45. 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

46. 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

47. 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

48. Strategic decisions focus on short term objectives whereas Operational decisions focus on long term objectives.

   True   False

49. Key performance indicators (KPIs) are the measures that are tied to business drivers.

    True   False

50. 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

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

    True   False

52. Benchmarks are baseline values the system seeks to attain.

    True   False

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

    True   False

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

    True   False

55. Purchasing stocks is an example of analytical information.

    True   False

56. 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

57. A business process is the analysis and redesign of workflow within and between enterprises.

    True   False

58. Progressive Insurance used CRM to revamp its insurance claims process.

    True   False

59. 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

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

    True   False

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

    True   False

62. Consolidation, drill-down, and slice-and-dice are the three most common capabilities offered in an EIS.

    True   False

63. A shopping bot is one of the simplest examples of an intelligent agent.

   True   False

64. The most common example of a TPS is an operational accounting system such as a payroll system.

   True   False

65. 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

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

   True   False

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

   True   False

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

   True   False

69. 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

70. _____ are baseline values the system seeks to attain.

    _____

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

    _____

72. A(n) _____ bot is software that will search several retailer Web sites and provide a comparison of each retailer's offerings including price and availability.

    _____

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

    _____

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

    _____

75. Police use _____ network software to fight crime

_____

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

_____.

_____

77. _____ is a computer-simulated environment that can be a simulated world or an imaginary world.

_____

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

_____

79. _____ 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

_____

80. 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.

_____

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

_____

82. _____ information 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.

_____

83. _____ information encompasses all organizational information and its primary purpose is to support the performing of managerial analysis tasks.

_____

84. Organizations use _____ information to make repetitive decisions.

_____

85. Organizations use _____ information to make ad hoc decisions.

_____

86. Business process reengineering is the analysis and _____ of workflow within and between enterprises.

_____

87. A decision support system models _____ to support managers and business professionals during the decision-making process.

_____

88. _____ analysis occurs when users change the value of one variable repeatedly and observe the resulting changes in other variables.

_____

89. What-if analysis checks the impact of a _____ in an assumption on the proposed solution.

_____

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

_____

91. _____ logic is a mathematical method of handling imprecise or subjective information.

_____

92. _____ systems are various commercial applications of artificial intelligence.

_____

93. Artificial intelligence simulates _____ intelligence such as the ability to reason and learn.

_____

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

_____

95. Distinguish between transactional data and analytical data.

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

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

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

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

100. Discuss why organizations would undertake Business Process Reengineering?

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

102.Identify how an organization can use business process reengineering to improve its business.

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

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

c2 Key

1. What is the primary reason for growth of Decision-Making Information Systems?
(p. 29)

   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. People must protect the corporate asset of organizational information

   E. All of the above

   The primary reason for growth in information systems is the availability of a large amount of data which can be analyzed for understanding the business trend, and to arrive at better business decisions quickly. It is also important for organizations to protect their information assets. The current decision-making information systems offer a better data security and protection mechanisms.

2.   Which of the following represents a top-down structure for decision-making in a typical
(p. 30)   organization?

    A. Operational, Managerial, and Strategic

    B. Managerial, Operational, and Strategic

    C. Strategic, Operational, and Managerial

    D. Strategic, Managerial, and Operational

A typical organization is structured to perform the strategic decisions by top management, managerial decisions by middle management, and operational decisions by direct managers or employees.

3.   When a company is evaluating whether or not to produce a new product, it is typically a
(p. 30)   _____ decision.

    A. Operational

    B. Managerial

    C. Strategic

    D. All of the above

A company revamps its products in a medium term, which involves discontinuing some of the products and introducing new products.

4. 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.

5. 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

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.

6.
Which system is used for day-to-day business operational decisions?

A. Transactional 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.

7.
The basic building block of data is provided by _____ system which is further used by other systems for deriving analytical information.

A. Transactional 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.

8.   The Executive Information System analyzes information to help executives in making _____
(p. 39)   business decisions.

    A. Operational

    B. Managerial

    C. Strategic

    D. None of the above

    The Executive Information System analyzes information to help executives in making strategic
    business decisions.

9.   Which of the following is an example of a neural network?
(p. 41)

    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

10. 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, Analysing non-linear relationships (they have been called fancy regression analysis systems).

Chapter - Chapter 02 #10
Gradable: automatic
Learning Outcome: 2.3
Level: Medium

11. 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.

Chapter - Chapter 02 #11
Gradable: automatic
Learning Outcome: 2.5
Level: Medium

12. _____ result in a product or service that is received by an
(p. 45)   organization's external customer.

    A. Business facing processes

    B. Customer facing processes

    C. Product facing processes

    D. Supplier facing processes

    Customer facing processes

13. What is a graphic description of a process, showing the sequence of process tasks, which is
(p. 48)   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

    Definition of a business process model

14.   What represents the current state of the operation that has been mapped, without any specific
(p. 49)   improvements or changes to existing processes.

   A. As-Is process models

   B. To-Be process models

   C. Past process models

   D. Future process models

   Definitions of As-Is process models

15.   What is a business process?
(p. 44)

   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 enterprisewide information on all
   business operations

   D. None of the above

   This is the definition of business process.

16.   What is business process reengineering?

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 enterprisewide information on all
   business operations

D. None of the above

This is the definition of BPR.

17.   What is the purpose of business process reengineering?

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.

18. Which company used BPR to change its industry by implementing a mobile claims process?
(p. 47)

    A. Saab

    B. Progressive Insurance

    C. Trek

    D. Charles Schwab

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

19. What encompasses all organizational information and its primary purpose is to support the
(p. 31) performing of managerial analysis tasks?

    A. Transactional information

    B. Analytical information

    C. Timeliness

    D. Quality

This is the definition of analytical information.

20. Which of the following is an example of transactional data?

A. Trend projection

B. Sales projection

C. Purchasing stock

D. All of the above

Purchasing stock is an example of transactional data

21. 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.

22. 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 the above.

23. 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

Feedback: This is the definition of sensitivity analysis.

24. 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

This is the definition of goal-seeking analysis.

25. 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

This is the definition of consolidation.

26.   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

    <u>C.</u> 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.

27.   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.

28. Which of the following is <u>not</u> 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.

29. Which of the following is <u>not</u> 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.

30.   What integrates information from multiple components and tailors the information to individual

preferences?

    A. Drill-down

    B. Sensitivity analysis

    C. What-if analysis

    <u>D.</u> Digital dashboard

This is the definition of digital dashboards.

Chapter - Chapter 02 #30
Gradable: automatic
Learning Outcome: 2.2
Level: Easy

31.   What are various commercial applications of artificial intelligence?

    A. Drill-down

    B. Sensitivity analysis

    C. Digital dashboard

    <u>D.</u> Intelligent system

This is the definition of intelligent systems.

Chapter - Chapter 02 #31
Gradable: automatic
Learning Outcome: 2.3
Level: Easy

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

(p. 40)

     A. Intelligent system

     B. Artificial intelligence

     C. Expert systems

     D. Neural network

This is the definition of neural network.

33. Which of the following is the most commonly used form of AI in the business arena?

(p. 40)

     A. Intelligent system

     B. Artificial intelligence

     C. Expert system

     D. Neural network

Expert systems are the most common.

34. What is a special-purpose knowledge-based information system that accomplishes specific
(p. 42) 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.

35. What is an artificial intelligence system that mimics the evolutionary, survival-of-the-fittest
(p. 41) 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.

36. Which artificial intelligence system enables telepresence, where users can be anywhere in the
(p. 43) 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.

37. Which of the following is the computer simulation software that allows a surgeon from a
(p. 43) 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.

38.   Which of the following represents the top-down (executives to analysts) organizational levels
^{(p. 31)} of information technology systems?

    A. TPS, DSS, EIS

    B. DSS, TPS, EIS

    C. EIS, DSS, TPS

    D. None of the above, 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.

39.   Which of the following is an incorrect enterprise view of information technology?
^{(p. 32)}

    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.

40. 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.

41. 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.

42. Which system differentiates an executive information system from a decision support system
^{(p. 37)} 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.

^{Chapter - Chapter 02 #42}
^{Gradable: automatic}
^{Learning Outcome: 2.2}
^{Level: Medium}

43. Which company has "The Wall of Shaygan", which is a digital dashboard that tracks 100-plus
^{(p. 38)} 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.

^{Chapter - Chapter 02 #43}
^{Gradable: automatic}
^{Learning Outcome: 2.2}
^{Level: Hard}

44. Which company offers a strategic business information service using artificial intelligence that
(p. 40) 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.

45. Which of the following represents a mathematical method of handling imprecise or subjective
(p. 41) information?

A. Genetic algorithm

B. Fuzzy logic

C. Market basket analysis

D. Statistical analysis

This is the definition of fuzzy logic.

46. What encompasses all of the information contained within a single business process or unit of
(p. 31) 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.

47. Which of the following is an example of transactional data?
(p. 31)

A. Withdrawing cash from an ATM

B. Making an airline reservation

C. Purchasing stock

D. All of the above

All of the above are examples of transactional data

48.   Strategic decisions focus on short term objectives whereas Operational decisions focus on

(p. 30)   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.

49.   Key performance indicators (KPIs) are the measures that are tied to business drivers.

(p. 32)

TRUE

It is the definition of KPIs.

50.   With information systems, efficiency IS metrics measure the performance of information

(p. 32)   system itself whereas effectiveness IS metrics measure the impact that IS has on business

processes.

TRUE

These are definitions.

51.   "Doing things right" addresses effectiveness whereas "Doing the right things" addresses
(p. 32)   efficiency.

FALSE

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

52.   Benchmarks are baseline values the system seeks to attain.
(p. 32)

TRUE

It is the definition.

53.   Companies frequently strive to improve their business processes by performing tasks faster,
(p. 47)   cheaper, and better.

TRUE

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

54.   As-Is process models show the results of applying change improvement opportunities to the
(p. 49)   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.

55.   Purchasing stocks is an example of analytical information.
(p. 31)

FALSE

Purchasing stocks is an example of transactional information.

56. Transactional data is used when performing operational tasks and repetitive decisions such as
(p. 31) analyzing daily sales reports and production schedules to determine how much inventory to carry.

TRUE

Transactional data is used to perform operational tasks.

57. A business process is the analysis and redesign of workflow within and between enterprises.
(p. 44)

FALSE

This is the definition for business process reengineering, not business process.

58. Progressive Insurance used CRM to revamp its insurance claims process.
(p. 47)

FALSE

Progressive Insurance used BPR to revamp its insurance claims process.

59. A genetic algorithm is an artificial intelligence system that mimics the evolutionary, survival-of-
(p. 41) the-fittest process to generate increasingly better solutions to a problem.

TRUE

This is the definition of genetic algorithm.

60. The ultimate goal of AI is the ability to build a system that can mimic human intelligence.
(p. 40)

TRUE

This is the ultimate goal of AI.

61. Sensitivity analysis, what-if analysis, and market basket analysis are the three quantitative
(p. 35) 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.

62.   Consolidation, drill-down, and slice-and-dice are the three most common capabilities offered in
(p. 35) an EIS.

TRUE

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

63.   A shopping bot is one of the simplest examples of an intelligent agent.
(p. 42)

TRUE

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

64.   The most common example of a TPS is an operational accounting system such as a payroll
(p. 35) system.

TRUE

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

65.   Data stored in transaction processing systems is rarely used to source the data and
(p. 35) information contained in decision support and executive information systems.

FALSE

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.

66.   Mail-order companies use neural networks to determine which customers are and are not
(p. 41) 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.

67.   Functioning without complete or well-structured information is a feature of neural networks.
(p. 40)

TRUE

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

68.   Examining business processes helps an organization determine bottlenecks, eliminate
(p. 44) 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.

69.   Business facing processes are invisible to the external customer but essential to the effective
(p. 45) management of the business and include goal setting, day-to-day planning, performance
         feedback, rewards, and resource allocation

TRUE

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

70.   _____ are baseline values the system seeks to attain.
(p. 42)

Benchmarks

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

Intelligent

72. A(n) _____ bot is software that will search several retailer Web sites and provide a
comparison of each retailer's offerings including price and availability.

Shopping

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

TPS

74. _____ stored in transaction processing systems are often used to source the

(p. 35) data and information contained in decision support and executive information systems.

Data

75. Police use _____ network software to fight crime

(p. 41)

neural

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

(p. 40) _____.

neural networks

77. _____ is a computer-simulated environment that can be a simulated world or an

(p. 43) imaginary world.

Virtual Reality

78. Examining _____ helps an organization determine bottlenecks,
(p. 44) eliminate duplicate activities, combine related activities, and identify smooth-running

processes.

business processes

79. _____ are invisible to the external customer but essential to the
(p. 45) effective management of the business and include goal setting, day-to-day planning,

performance feedback, rewards, and resource allocation

Business facing processes

80. A _____ is a graphic description of a process, showing the sequence of
(p. 48) process tasks, which is developed for a specific purpose and from a selected viewpoint.

business process model

81. _____ represent the current state of the operation that has been
(p. 49) mapped, without any specific improvements or changes to existing processes.

As-Is process models

82. _____ information encompasses all of the information contained within a single
(p. 31) business process or unit of work and its primary purpose is to support the performing of daily operational tasks.

Transactional

83. _____ information encompasses all organizational information and its primary purpose
(p. 31) is to support the performing of managerial analysis tasks.

Analytical

84. Organizations use _____ information to make repetitive decisions.
(p. 31)

Transactional

85. Organizations use _____ information to make ad hoc decisions.
(p. 31)

Analytical

86. Business process reengineering is the analysis and _____ of workflow within and between
(p. 46) enterprises.

Redesign

87. A decision support system models _____ to support managers and business
(p. 35) professionals during the decision-making process.

Information

88. _____ analysis occurs when users change the value of one variable repeatedly and
(p. 35) observe the resulting changes in other variables.

Sensitivity

89.   What-if analysis checks the impact of a _____ in an assumption on the proposed
(p. 35)   solution.

   Change

90.   _____ seeking analysis could answer the question "How many customers are required to
(p. 36)   purchase our new product line to increase gross profits to $5 million?"

   Goal

91.   _____ logic is a mathematical method of handling imprecise or subjective information.
(p. 42)

   Fuzzy

92.   _____ systems are various commercial applications of artificial intelligence.
(p. 40)

   Intelligent

93. Artificial intelligence simulates _____ intelligence such as the ability to reason and
(p. 40) learn.

Human

94. _____ systems are computerized advisory programs that imitate the reasoning
(p. 40) processes of experts in solving difficult problems.

Expert

95.   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 of cash withdrawals made from chequing accounts for the upcoming holiday weekend. Organizations 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.

Chapter - Chapter 02 #95
Gradable: manual
Learning Outcome: 2.1
Level: Medium

96. 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.

97. 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.

98.   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.

Chapter - Chapter 02 #98
Gradable: manual
Learning Outcome: 2.3
Level: Easy

99.   Define the ultimate goal of AI and describe a few current examples of how AI is being used
(p. 40)   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.

100. Discuss why organizations would undertake Business Process Reengineering?

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

Chapter - Chapter 02 #100
Gradable: manual
Learning Outcome: 2.5
Level: Medium

101. Discuss why business processes should drive information systems choices?
(p. 44)

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.

102. Identify how an organization can use business process reengineering to improve its business.
(p. 47)

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.

103. List and define the four primary reasons for the growth of decision-making information
(p. 29) 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.

104. Describe the three capabilities commonly offered by an EIS.
(p. 32)

(1) Consolidation involves the aggregation of information and features simple roll-ups to
complex groupings. (2) Drill-down enables users to get details, and details of details. (3) Slice-
and-dice looks at information from different perspectives.

c2 Summary

Category	# of Questions
Chapter - Chapter 02	104
Gradable: automatic	94
Gradable: manual	10
Learning Outcome: 2.1	27
Learning Outcome: 2.2	27
Learning Outcome: 2.3	28
Learning Outcome: 2.5	22
Level: Easy	48
Level: Hard	3
Level: Medium	53