## CH 01 - Introduction

### Multiple Choice

1. The decisions concerning an organization's goals and future plans are called

| | |
|---|---|
| a. financial decisions. | b. tactical decisions. |
| c. strategic decisions. | d. operational decisions. |

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | Strategic decisions involve higher-level issues concerned with the overall direction of the organization. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | DECISION MAKING |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
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2. Tactical decisions are concerned with
   a. the day-to-day activities of the organization.
   b. the goals and plans of the organization.
   c. the domain of operations managers, who are close to the customer.
   d. how the organization should achieve the goals and objectives set by its strategy.

| | |
|---|---|
| *ANSWER:* | d |
| *RATIONALE:* | Tactical decisions concern how the organization should achieve the goals and objectives set by its strategy. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | DECISION MAKING |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
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3. Picks and Axes Inc. is an Internet-based retail seller of hiking boots and mountaineering gear. The company decides to open retail stores across the major areas of the city to help complement its Internet-based strategy. This activity would be categorized as a(n)

a. tactical decision.
b. operational decision.
c. strategic decision.
d. financial decision.

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | Strategic decisions involve higher-level issues concerned with the overall direction of the organization. These decisions define the organization’s overall goals and aspirations for the future. Strategic decisions are usually the domain of higher-level executives and have a time horizon of three to five years. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | DECISION MAKING |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Apply |
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4. __________ is the most critical step of the decision-making process.

a. Choosing an alternative
b. Identifying and defining the problem
c. Evaluating the alternatives
d. Determining the set of alternatives

| | |
|---|---|
| *ANSWER:* | b |
| *RATIONALE:* | Step 1 of decision making, identifying and defining the problem, is the most critical. Only if the problem is well-defined, with clear metrics of success or failure (step 2), can a proper approach for solving the problem (steps 3 and 4) be devised. Decision making concludes with the choice of an alternative (step 5). |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | DECISION MAKING |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Understand |
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| *DATE MODIFIED:* | 3/7/2018 1:40 PM |

5. Which of the following is not an approach to making decisions?

| | |
|---|---|
| a. Tradition | b. Rules of thumb |
| c. Intuition | d. Guess and check |

| | |
|---|---|
| *ANSWER:* | d |
| *RATIONALE:* | There are a number of approaches to making decisions: tradition (“We’ve always done it this way”), intuition (“gut feeling”), and rules of thumb (“As the restaurant owner, I schedule twice the number of waiters and cooks on holidays”). |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BUSINESS ANALYTICS DEFINED |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Understand |
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6. Data-driven decision making tends to decrease a firm's

| | |
|---|---|
| a. market value. | b. productivity. |
| c. risk. | d. profit. |

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | Firms guided by data-driven decision making have higher productivity and market value and increased output and profitability. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BUSINESS ANALYTICS DEFINED |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Understand |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 10:56 AM |

7. Data dashboards are a type of _________ analytics.

| | |
|---|---|
| a. predictive | b. descriptive |
| c. prescriptive | d. decision |

| | |
|---|---|
| *ANSWER:* | b |
| *RATIONALE:* | Descriptive analytics encompass the set of techniques that describes what has happened in the past. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
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8. The extraction of information on the number of shipments, how much was included in each shipment, the date each shipment was sent, and so on from the manufacturing plant's database exemplifies

a. spreadsheet models.
b. data dashboards.
c. data mining.
d. data queries.

| | |
|---|---|
| *ANSWER:* | d |
| *RATIONALE:* | A data query is a request for information with certain characteristics from a database. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
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9. Corporate-level managers use ______ to summarize sales by region, current inventory levels, and other company-wide metrics all in a single screen.

a. simulations
b. crosstabulation
c. data dashboards
d. tables

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | For corporate-level managers, daily data dashboards might summarize sales by region, current inventory levels, and other company-wide metrics. |
| *POINTS:* | 1 |

| | |
|---|---|
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
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10. A forecast that helps direct police officers to areas where crimes are likely to occur based on past data is an example of

a. predictive analytics.
b. decision analysis.
c. prescriptive analytics.
d. descriptive analytics.

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | Predictive analytics consists of techniques that use models constructed from past data to predict the future. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
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11. Which one of the following is used in predictive analytics?

a. Data dashboard
b. Linear regression
c. Data visualization
d. Optimization model

| | |
|---|---|
| *ANSWER:* | b |
| *RATIONALE:* | Linear regression, time series analysis, some data-mining techniques, and simulation, often referred to as risk analysis, all fall under the banner of predictive analytics. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |

| | |
|---|---|
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Understand |
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12. A retail store owner offers a discount on product A and predicts that the customers would purchase products B and C in addition to product A. Identify the technique used to make such a prediction.

a. Data query b. Simulation
c. Data mining d. Data dashboards

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | Data mining is a technique used to find patterns or relationships among elements of the data in a large database. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Apply |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 10:56 AM |

13. __________ are used in the pharmaceutical industry to assess the risk of introducing a new drug.

a. Data dashboards b. Charts
c. Spreadsheet models d. Simulations

| | |
|---|---|
| *ANSWER:* | d |
| *RATIONALE:* | Simulation involves the use of probability and statistics to construct a computer model to study the impact of uncertainty on a decision. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Apply |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/28/2018 2:27 PM |

14. Which of the following analytical techniques helps us arrive at the best decision?

a. Predictive analytics
b. Data mining
c. Prescriptive analytics
d. Descriptive analytics

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | Prescriptive analytics indicate a best course of action to take; that is, the output of a prescriptive model is a best decision. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Understand |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
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15. Simulation optimization helps

a. in identifying the constraints of the situation.
b. to find good decisions in highly complex and highly uncertain settings.
c. in assigning values to outcomes.
d. to model certainty using optimization techniques.

| | |
|---|---|
| *ANSWER:* | b |
| *RATIONALE:* | Simulation optimization combines the use of probability and statistics to model uncertainty with optimization techniques to find good decisions in highly complex and highly uncertain settings. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
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16. When a decision maker is faced with several alternatives and an uncertain set of future events, s/he uses __________ to develop an optimal strategy.

a. utility theory
b. predictive analytics
c. data mining
d. decision analysis

| | |
|---|---|
| *ANSWER:* | d |
| *RATIONALE:* | The techniques of decision analysis can be used to develop an optimal strategy when a decision maker is faced with several decision alternatives and an uncertain set of future events. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Understand |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/28/2018 2:27 PM |

17. __________ assigns values to outcomes based on the decision maker’s attitude toward risk, loss, and other factors.

a. Simulation optimization
b. Utility theory
c. Optimization model
d. Data dashboard

| | |
|---|---|
| *ANSWER:* | b |
| *RATIONALE:* | Decision analysis employs utility theory, which assigns values to outcomes based on the decision maker’s attitude toward risk, loss, and other factors. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
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18. Which of the following best exemplifies big data?

a. Five hundred Facebook users upload one thousand pictures per day.
b. Cellphone owners around the world generate vast amounts of data by calling, texting, tweeting, and browsing the Web on a daily basis.
c. A local grocery store collects data from those that scan their loyalty card.

d. A pharmacy keeps track of customer purchases to send its customers coupons.

| | |
|---|---|
| *ANSWER:* | b |
| *RATIONALE:* | Big data is simply a set of data that cannot be managed, processed, or analyzed with commonly available software in a reasonable amount of time. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Apply |
| *DATE CREATED:* | 3/7/2018 12:25 PM |
| *DATE MODIFIED:* | 3/28/2018 2:27 PM |

19. Which of the following sources of big data is not publicly available?
    a. Twitter
    b. Weather data
    c. Medical records
    d. Sports records

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | While some sources of big data are publicly available (Twitter, weather data, etc.), other sources contain private information. Medical records, bank account information, and credit card transactions, for example, are all highly confidential and must be protected from computer hackers. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Apply |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
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20. Advanced analytics generally refers to
    a. descriptive and prescriptive analytics.
    b. simulation.
    c. predictive and prescriptive analytics.
    d. decision analysis.

*ANSWER:* c
*RATIONALE:* Predictive and prescriptive analytics are sometimes referred to as advanced analytics.
*POINTS:* 1
*DIFFICULTY:* Easy
*REFERENCES:* BUSINESS ANALYTICS IN PRACTICE
*QUESTION TYPE:* Multiple Choice
*HAS VARIABLES:* False
*NATIONAL STANDARDS:* United States - BUSPROG: Analytic
United States - DISC: - Descriptive Statistics
*KEYWORDS:* Bloom's: Remember
*DATE CREATED:* 1/23/2018 10:15 AM
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21. In the financial sector, __________ are used to construct financial instruments such as derivatives.
   a. descriptive and prescriptive models
   b. predictive models
   c. descriptive models
   d. prescriptive models

*ANSWER:* b
*RATIONALE:* Predictive models are used to forecast future financial performance and to construct financial instruments such as derivatives.
*POINTS:* 1
*DIFFICULTY:* Moderate
*REFERENCES:* BUSINESS ANALYTICS IN PRACTICE
*QUESTION TYPE:* Multiple Choice
*HAS VARIABLES:* False
*NATIONAL STANDARDS:* United States - BUSPROG: Analytic
United States - DISC: - Descriptive Statistics
*KEYWORDS:* Bloom's: Understand
*DATE CREATED:* 1/23/2018 10:15 AM
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22. Optimization models can be used to
   a. assess the risk of investment portfolios.
   b. forecast future financial performance.
   c. successfully manage commercial real estate risk.
   d. decide on how to invest cash received from insurance policies.

*ANSWER:* d
*RATIONALE:* GE Asset Management uses optimization models to decide how to invest its own cash received from insurance policies and other financial products.
*POINTS:* 1
*DIFFICULTY:* Moderate

| | |
|---|---|
| *REFERENCES:* | BUSINESS ANALYTICS IN PRACTICE |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Understand |
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23. Utility theory is the study of the __________ or relative desirability of a particular outcome that reflects the decision maker's attitude toward a collection of factors, such as profit, loss, and risk.

a. total worth
b. total cost
c. feasibility
d. financial wellness

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | Utility theory is the study of the total worth or relative desirability of a particular outcome that reflects the decision maker's attitude toward a collection of factors, such as profit, loss, and risk. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
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24. __________ refers to the technology that allows data, collected from sensors in all types of machines, to be sent over the Internet to repositories where it can be stored and analyzed.

a. Internet of Things (IoT)
b. MapReduce
c. Hadoop
d. Advanced analytics

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | Internet of Things (IoT) refers to the technology that allows data, collected from sensors in all types of machines, to be sent over the Internet to repositories where it can be stored and analyzed. |

| | |
|---|---|
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
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25. __________ refers to a programming model used within Hadoop that performs the two major steps for which it is named: the map step and the reduce step.

a. MapReduce
b. Internet of Things (IoT)
c. Advanced analytics
d. Optimization model

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | MapReduce refers to a programming model used within Hadoop that performs the two major steps for which it is named: the map step and the reduce step. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
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26. __________ is an open-source programming environment that supports big data processing through distributed storage and distributed processing on clusters of computers.

a. Hadoop
b. Excel
c. Java
d. MapReduce

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | Hadoop is an open-source programming environment that supports big data processing through distributed storage and distributed processing on clusters of computers. |
| *POINTS:* | 1 |

| | |
|---|---|
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
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27. _________ analytics are techniques that use models, constructed from past data, to predict the future or to ascertain the impact of one variable on another.

a. Predictive
b. Descriptive
c. Simulation
d. Prescriptiv
e

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | Predictive analytics are techniques that use models, constructed from past data, to predict the future or to ascertain the impact of one variable on another. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
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28. A __________ decision involves higher-level issues and is concerned with the overall direction of the organization, defining the overarching goals and aspirations for the organization’s future.

a. strategic
b. tactical
c. intuitive
d. operational

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | A strategic decision involves higher-level issues and is concerned with the overall direction of the organization, defining the overarching goals and aspirations for the organization’s future. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |

| | |
|---|---|
| *REFERENCES:* | DECISION MAKING |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
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29. A __________ decision is concerned with how the organization should achieve the goals and objectives set by its strategy.

a. tactical
b. strategic
c. intuitive
d. operational

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | A tactical decision is concerned with how the organization should achieve the goals and objectives set by its strategy. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | DECISION MAKING |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
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30. __________ analytics use techniques that take input data and yield a best course of action.

a. Prescriptive
b. Simulation
c. Strategic
d. Operational

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | Predictive analytics uses techniques that take input data and yield a best course of action. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |

| | |
|---|---|
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 12:49 PM |

31. In the spectrum of business analytics, which is the most complex?
    a. Descriptive
    b. Predictive
    c. Prescriptive
    d. Operational

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | Prescriptive analytics is the most complex in the spectrum of business analytics. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Understand |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 12:50 PM |

32. In order to manage an organization’s human resource activities, such as hiring employees, tracking, and influencing employee retention, HR personnel use
    a. descriptive and predictive analytics.
    b. descriptive and prescriptive analytics.
    c. predictive and prescriptive analytics.
    d. predictive analytics.

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | The HR analytics team uses descriptive and predictive analytics to support employee hiring and to track and influence retention. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Understand |

| | |
|---|---|
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 10:56 AM |

33. A better understanding of consumer behavior through analytics directly leads to

a. more profits.
b. better pricing strategies.
c. reduced advertising costs.
d. reduced risk.

| | |
|---|---|
| *ANSWER:* | b |
| *RATIONALE:* | A better understanding of consumer behavior through analytics leads to the better use of advertising budgets, more effective pricing strategies, improved forecasting of demand, improved product line management, and increased customer satisfaction and loyalty. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Understand |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 10:56 AM |

34. A light bulb manufacturer uses descriptive analytics

a. to present supply chain to managers visually.
b. to achieve efficiency in delivery of goods.
c. to schedule staff and vehicle for delivery.
d. to plan capacity utilization by incorporating the inherent uncertainty in commodities pricing.

| | |
|---|---|
| *ANSWER:* | a |
| *RATIONALE:* | The light bulb manufacturer has successfully used descriptive analytics to present the status of its supply chain to managers visually. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BUSINESS ANALYTICS IN PRACTICE |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Apply |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:01 PM |

35. The U.S. Internal Revenue Service uses _____________ to identify patterns that distinguish questionable annual personal income tax filings.

| | |
|---|---|
| a. utility theory | b. prescriptive analytics |
| c. data mining | d. decision analysis |

| | |
|---|---|
| *ANSWER:* | c |
| *RATIONALE:* | The U.S. Internal Revenue Service uses data mining to identify patterns that distinguish questionable annual personal income tax filings. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | BUSINESS ANALYTICS IN PRACTICE |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:03 PM |

**Subjective Short Answer**

36. __________ may be used to develop an optimal strategy when a decision maker is faced with several decision alternatives and an uncertain set of future events.

| | |
|---|---|
| *ANSWER:* | Decision analysis |
| *RATIONALE:* | Decision analysis is a technique used to develop an optimal strategy when a decision maker is faced with several decision alternatives and an uncertain set of future events. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BUSINESS ANALYTICS IN PRACTICE |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Understand |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:05 PM |

37. An increase in data __________ would help to protect stored data from destructive forces or unauthorized users.

| | |
|---|---|
| *ANSWER:* | security |
| *RATIONALE:* | Data security helps to protect stored data from destructive forces or unauthorized users. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BUSINESS ANALYTICS IN PRACTICE |

| | |
|---|---|
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:07 PM |

38. __________ are analytical tools that describe what has happened.

| | |
|---|---|
| *ANSWER:* | Descriptive analytics |
| *RATIONALE:* | Descriptive analytics are analytical tools that describe what has happened. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:11 PM |

39. The use of analytical techniques for better understanding patterns and relationships that exist in large data sets is ______________.

| | |
|---|---|
| *ANSWER:* | data mining |
| *RATIONALE:* | Data mining is a technique used to find patterns or relationships among elements of the data in a large database. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:14 PM |

40. A dashboard is a collection of tables, charts, and maps to help management ____________ selected aspects of the company’s performance.

| | |
|---|---|
| *ANSWER:* | monitor |
| *RATIONALE:* | A dashboard is a collection of tables, charts, and maps to help management monitor selected aspects of the company’s performance. |

| | |
|---|---|
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:16 PM |

41. A decision concerned with how the organization is run from day to day is known as a(n) _______________.

| | |
|---|---|
| *ANSWER:* | operational decision |
| *RATIONALE:* | An operational decision is a decision concerned with how the organization is run from day to day. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | DECISION MAKING |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:17 PM |

42. A mathematical model that gives the best decision, subject to the situation's constraints, is an a(n) _________.

| | |
|---|---|
| *ANSWER:* | optimization model |
| *RATIONALE:* | An optimization model is a mathematical model that gives the best decision, subject to the situation's constraints. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:18 PM |

43. A data __________ is a request to obtain information with certain characteristics from a database.

| | |
|---|---|
| *ANSWER:* | query |

| | |
|---|---|
| *RATIONALE:* | A data query is a request to obtain information with certain characteristics from a database. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:22 PM |

44. Business analytics is the __________ process of transforming data into insight for making better decisions.

| | |
|---|---|
| *ANSWER:* | scientific |
| *RATIONALE:* | Business analytics is the scientific process of transforming data into insight for making better decisions. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BUSINESS ANALYTICS DEFINED |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:24 PM |

45. A data __________ is trained in both computer science and statistics and knows how to effectively process and analyze large amounts of data.

| | |
|---|---|
| *ANSWER:* | scientist |
| *RATIONALE:* | A data scientist is trained in both computer science and statistics and knows how to effectively process and analyze large amounts of data. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:27 PM |

46. The use of probability and statistics to construct a computer model to study the impact of uncertainty on the decision at hand is called __________.

| | |
|---|---|
| *ANSWER:* | simulation |
| *RATIONALE:* | Simulation is the use of probability and statistics to construct a computer model to study the impact of uncertainty on the decision at hand. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:28 PM |

47. Predictive and prescriptive analytics can also be referred to as __________.

| | |
|---|---|
| *ANSWER:* | advanced analytics |
| *RATIONALE:* | Advanced analytics generally refers to predictive and prescriptive analytics. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | A CATEGORIZATION OF ANALYTICAL METHODS AND MODELS |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:30 PM |

48. __________ analytics is the analysis of online activity, such as visits to websites or social media.

| | |
|---|---|
| *ANSWER:* | Web |
| *RATIONALE:* | Web analytics is the analysis of online activity, such as visits to websites or social media. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | BUSINESS ANALYTICS IN PRACTICE |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:33 PM |

49. One of the 4 Vs of big data that refers to uncertainty due to data inconsistency and incompleteness, ambiguities, latency, deception, and model approximations is _________.

| | |
|---|---|
| *ANSWER:* | veracity |
| *RATIONALE:* | Veracity refers to uncertainty due to data inconsistency and incompleteness, ambiguities, latency, deception, and model approximations. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:34 PM |

50. Data that are too large or too complex to be handled by standard data-processing techniques and typical desktop software are called __________.

| | |
|---|---|
| *ANSWER:* | big data |
| *RATIONALE:* | When data is too large or too complex to be handled by standard data-processing techniques and typical desktop software, this is referred to as big data. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom’s: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/7/2018 1:36 PM |

51. Veracity has to do with how much __________ is in the data.

| | |
|---|---|
| *ANSWER:* | uncertainty |
| *RATIONALE:* | Veracity has to do with how much uncertainty is in the data. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |

| | |
|---|---|
| *KEYWORDS:* | Bloom's: Remember |
| *DATE CREATED:* | 1/23/2018 10:15 AM |
| *DATE MODIFIED:* | 3/28/2018 2:30 PM |

52. What are the four V's of big data?

| | |
|---|---|
| *ANSWER:* | Volume, Velocity, Variety, Veracity |
| *RATIONALE:* | The four V's of big data are volume, velocity, variety, and veracity. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *REFERENCES:* | BIG DATA |
| *QUESTION TYPE:* | Subjective Short Answer |
| *HAS VARIABLES:* | False |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic<br>United States - DISC: - Descriptive Statistics |
| *KEYWORDS:* | Bloom's: Remember |
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