Test Bank for Business Analytics 6th Edition by Camm, Cochran, Fry, Ohlmann

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Name:____ Class:_________________________ Date:_____________

Chapter 01: Introduction to Business Analytics

Multiple Choice

1. Which of the following best represents a strategic decision made by a company?
    a. Determining the number of staff to schedule next week
    b. Deciding the type of aircraft to purchase for future fleet expansion
    c. Selecting the supplier for this month's raw materials
    d. Adjusting the sales target for the current quarter

ANSWER: b

2. A store manager deciding how many cashiers to schedule is making which type of decision?
    a. Strategic
    b. Tactical
    c. Operational
    d. Predictive

ANSWER: c

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

4. What 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

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

6. Data-driven decision making tends to decrease a firm's _____.
    a. market value
    b. productivity
    c. risk
    d. profit

ANSWER: c

7. An airline uses simulation to evaluate pricing strategies. This is an example of _____ analytics.
   a. predictive
   b. descriptive
   c. prescriptive
   d. decision

ANSWER: c

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

9. Which of the following do 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. Cross-tabulations
   c. Data dashboards
   d. Tables

ANSWER: c

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

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

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

13. Which of the following is used in the pharmaceutical industry to assess the risk of introducing a new drug?

a. Data dashboard

b. Chart

c. Spreadsheet model

d. Simulation

ANSWER: d

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

15. What makes Generative AI different from traditional AI?

a. It does not require data.

b. It generates new content such as text, images, or audio.

c. It only works in manufacturing.

d. It requires manual coding for every function.

ANSWER: b

16. A decision maker faced with several alternatives and an uncertain set of future events uses what to develop an optimal strategy?

a. Utility theory

b. Predictive analytics

c. Data mining

d. Decision analysis

ANSWER: d

17. Which of the following is an example of AI being used behind the scenes in business?

a. Using ChatGPT to write reports

b. Recommendation engines suggesting online products

c. Handwriting notes in meetings

d. Filing taxes manually

ANSWER: b

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

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

20. A company analyzes customer tweets and call recordings. This demonstrates which "V" of big data?

a. Volume
b. Variety
c. Veracity
d. Velocity

ANSWER: b

21. In the financial sector, what models are used to construct financial instruments such as derivatives?

a. Descriptive and prescriptive
b. Predictive
c. Descriptive
d. Prescriptive

ANSWER: b

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

23. What does utility theory study that basically means the 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

24. What is the main concern addressed by the veracity characteristic of big data?

a. The ethical use of algorithms
b. The real-time nature of streaming data
c. The uncertainty or trustworthiness of data
d. The size and scope of data

ANSWER: c

25. Which of the following best defines artificial intelligence in business analytics?
    a. Making decisions with no human involvement
    b. Using rules and formulas to make graphs
    c. Using data and algorithms to enhance or automate decision making
    d. Outsourcing decision making to external consultants

ANSWER: c

26. An open-source programming environment that supports big data processing through distributed storage and distributed processing on clusters of computers is _____.
    a. Hadoop
    b. Excel
    c. Java
    d. MapReduce

ANSWER: a

27. What techniques use models, constructed from past data, to predict the future or to ascertain the impact of one variable on another?
    a. Predictive analytics
    b. Descriptive analytics
    c. Simulation
    d. Prescriptive analytics

ANSWER: a

28. Which type of 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

29. Which type of 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

30. What type of analytics uses techniques that take input data and yield a best course of action?
    a. Prescriptive
    b. Simulation
    c. Strategic

d. Operational

ANSWER: a

31. In the spectrum of business analytics, which is the most complex?

a. Descriptive
b. Predictive
c. Prescriptive
d. Operational

ANSWER: c

32. In order to manage an organization's human resources activities, such as hiring employees, tracking, and influencing employee retention, HR personnel use _____.

a. both descriptive and predictive analytics
b. both descriptive and prescriptive analytics
c. both predictive and prescriptive analytics
d. only predictive analytics

ANSWER: a

33. A clearer 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

34. A light bulb manufacturer uses descriptive analytics to _____.

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

ANSWER: a

35. What does the U.S. Internal Revenue Service use 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

36. Which analytics technique is used by HR departments to forecast employee turnover?

a. Prescriptive analytics
b. Predictive analytics
c. Descriptive analytics

d. Supervised robotics

ANSWER: b

37. How do Coca-Cola Freestyle machines use business analytics?
    a. To conduct employee evaluations
    b. To track competitor pricing
    c. To collect customer drink preference data
    d. To encrypt beverage formulas

ANSWER: c

38. In supply chain analytics, what is the new focus beyond efficiency?
    a. Employee training
    b. Resiliency under disruption
    c. Merging with HR analytics
    d. Sentiment forecasting

ANSWER: b

39. According to INFORMS ethics, analytics professionals should _____.
    a. prioritize speed over accuracy
    b. withhold analysis from stakeholders
    c. be objective and transparent
    d. focus only on profits

ANSWER: c

40. What ethical problem arises from using biased data in modeling?
    a. Models perform faster.
    b. Models reflect outdated software.
    c. Models lead to unfair decisions.
    d. Models become more secure.

ANSWER: c

41. What concern does Zeynep Tufecki raise about algorithmic recommendation systems?
    a. They fail to collect enough data.
    b. They are too expensive to implement.
    c. They unintentionally promote extreme content.
    d. They violate consumer purchase rights.

ANSWER: c

Subjective Short Answer

42. _____ 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

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

ANSWER: security

44. _____ are analytical tools that describe what has happened.
ANSWER: Descriptive analytics

45. The use of analytical techniques for better understanding patterns and relationships that exist in large data sets is _____.
ANSWER: data mining

46. A dashboard is a collection of tables, charts, and maps to help management _____ selected aspects of the company's performance.
ANSWER: monitor

47. A decision concerned with how the organization is run from day to day is known as a(n) _____.
ANSWER: operational decision

48. A mathematical model that gives the best decision, subject to the situation's constraints, is a(n) _____.
ANSWER: optimization model

49. A data _____ is a request to obtain information with certain characteristics from a database.
ANSWER: query

50. Business analytics is the _____ process of transforming data into insight for making better decisions.
ANSWER: scientific

51. A data _____ is trained in both computer science and statistics and knows how to effectively process and analyze large amounts of data.
ANSWER: scientist

52. 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

53. Predictive and prescriptive analytics can also be referred to as _____.
ANSWER: advanced analytics

54. _____ analytics is the analysis of online activity, such as visits to websites or social media.
ANSWER: Web

55. 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

56. 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

57. Veracity has to do with how much _____ is in the data.

ANSWER: uncertainty

58. What are the four Vs of big data?
ANSWER: Volume, Velocity, Variety, Veracity