Certified Business Data Analyst

1. The analytics team has been asked to determine if the organization should launch their highest

revenue generating product into the North American market. To date, this has only been available in Eastern Europe. To answer this, the team formulates several research questions, including:
A. What product launch related costs can we expect?
B. How much revenue does the product generate in Eastern Europe?
C. Why does management need to know this?
D. Do existing customers really like the product?
Answer(s): D
2. An analyst has just completed building a data model that shows the table structures including table names, table relationships with primary and foreign keys and column names with respective data types. What type of data model has the analyst just built?
A. Physical
B. Hierarchical
C. Conceptual
D. Logical
Answer(s): A
3. The analytics team is identifying research questions to address a business problem. The

business analysis professional reminds the team that the most important dimension to consider is

the:

A. Sources of data
B. Quality of the data
C. Timeframe of analysis
D. Measurement scale
Answer(s): B
4. An analyst at a supermarket chain has been asked to extract data from multiple data sources to complete a study on customer spending habits. The analyst is going to query data from various databases. Which statement is true about database querying?
A. Querying can be used to create predictive data models
B. Irrespective of the querying language used, data results retrieved are always in a tabular format
C. A querying language is independent of the type of database being used
D. Querying is a structured way of searching, manipulating and managing data
Answer(s): D
5. A lab is conducting a study on protein interactions. They have used the data to create a graph visualization. In graph visualization, what would a layout be?
A. A single data point
B. A link between two data points
C. A dedicated algorithm that calculates the node positions
D. A collection of data points and links

6. An analyst at a bank is trying to identify research questions for an analytical study on top
customer issues across branches. During an interview with a branch manager, the analyst asks
the manager what their top customer concerns are relating to this branch?
After the manager's reply, the analyst asks a follow up question on how their top customer
concerns compare against the top customer concerns across all branches? Was the analyst's
follow-up question valid?

- A. No, there is no value comparing the results of a single branch with results across all branches
- B. Yes, it builds on the previous question and allows the analyst to identify branch-specific concerns
- C. No, the question is not valid in this particular scenario
- D. Yes, only for the purpose of ensuring that the manager is aware of the company-wide reports

Answer(s): B

7. Interested in experimenting with analytics, a manufacturing company hires an analyst to see how the capability can be developed within its organization. The analyst is getting started and recognizes the need to show value from the onset of their work to gain upper management's trust and future funding.

What action will accomplish these objectives?

- A. Solve the biggest problem the organization has first to quickly grab the support and attention of senior management
- B. Develop a question that can be answered quickly regardless of alignment to strategy, just to get started
- C. Develop a meaningful question that can be answered with data the company already has in its possession
- D. Perform a market analysis to understand how competitors are using analytics and then launch a similar initiative

Answer(s): C

8. A large car manufacturer is interested in comparing the number of sales for a specific model of electric car across all 50 US states.

The data analytics team sourced and acquired the data, and the business analyst created the model to compare sales across states.

In a meeting to review the results, the feedback received included several complaints concerning an inability to distinguish the number of sales per state.

What model would result in such confusion?

A. Bullet chart

B. Dual axis chart

C. Bar chart

Answer(s): D

D. Pie chart

9. The definition of data elements is different across various data sources. The organization is looking to improve the usability of data across the organization.

Which practice would help address this problem?

A. Data governance

B. Data quality

C. Data architecture

D. Data ethics

Answer(s): A

10. Insights based on the data collected indicate that a multi-national company could increase its sales of a mature product by reducing its price by 20% which would result in increased revenues of 2% over a 6-month period. The team recommends this as an appropriate goal for its organization. This is considered a good goal because:

A. It meets all the criteria for a well-defined objective

B. The organization can derive additional revenue from the product	
C. It indicates that the company does not have to incur costs associated with retiring this pro	oduct
D. Management will be pleased that the mature product can still contribute to revenue	
Answer(s): A	
11. The marketing department for a major restaurant chain is interested in testing a Recampaign to determine if it will help to increase sales. They are interested in piloting campaign to determine which day of the week will improve sales the most. The cample launched across 7 cities with each city promoting a different day of the week. The sat collected and provided to a team for analysis. What concern might the analytics team have regarding data quality across cities?	the paign is
A. Normality	
B. Heteroskedacity	
C. Linearity	
D. Variation	
Answer(s): D	
12. A call center has requested to review their sales conversion data for the month. Tworking on this request is trying to identify the chart that will effectively present the dincludes: the number of leads, the number of calls made, the number of calls comple number of customers interested and the number of sales. What chart should the analyst use to show the values across each stage of the pipel	ata, which eted, the
A. Pie chart	
B. Funnel chart	
C. Bar chart	

Answer(s): B
13. A government agency is conducting a study on the performance of 12th grade students' in mathematics across the country. In particular, they want to understand if there is a relationship between intelligence and scores, as well as the difference in performance between various ocations. Which combination of inferential statistics procedures should be used?
A. Range, standard deviation
B. Mean, median
C. Correlation co-efficient, analysis of variance
D. Frequency distribution, time-series
Answer(s): C
14. An organization's customers are categorized based on the amount of purchases completed over the last 12 months. The analytics team would like to ensure the accuracy of their survey results and decide to randomly select 500 customers to participate in a survey from this large cool of customers. This is an example of:
A. Stratified sampling
B. Quota sampling
C. Purposive sampling
D. Snowball sampling
Answer(s): A

D. Bullet chart

being considered with announcements and implementation in the next 6 months. Under these conditions the team decides to:
A. Recommend no action be taken at this time and revisit in 6 months
B. Reassess their results to ensure their validity and then decide what to do
C. Identify and carefully document assumptions for their recommendation
D. Postpone recommendations for 6 months until the announcements are made
Answer(s): C
16. A colleague proposes measuring job satisfaction by asking the question "What is your salary?". What is the concerning factor about this question?
A. Validity
B. Clarity
C. Reproducibility
D. Subjectivity
Answer(s): A
17. A marketing director has asked the question 'How many product purchases are expected this coming year given the current marketing campaign?". What type of analytics would be performed to answer this question?

15. The results of the data analytics work led to some clear and strongly supported outcomes and the analytics team is very confident in their recommendations; particularly given that the payback

on the required changes are a short 3 months. However, there is concern because the

A. Descriptive
B. Predictive
C. Diagnostic
D. Prescriptive
Answer(s): B
18. An insurance company has seen an upward trend in winter-related accidents over the past three years. The company has just completed an analytics study to better understand the primary reasons for these accidents and assess how many of the drivers were using winter tires. This analysis will help the company decide how to move forward with drivers not taking precautionary measures during winter. What type of analysis will help in determining the primary reasons and percentage of those drivers with winter tires?
A. Prescriptive
B. Descriptive and Predictive
C. Descriptive
D. Descriptive and Diagnostic
Answer(s): D
19. A Human Resource manager recently learned that their competitor reduced employee attrition rates by 20% after implementing personality tests as part of their screening process. Intrigued by the idea, the manager suggests collecting data on personality tests and attrition rates over the next year. The data from this year is then analyzed to explore possible relationships. What type of analytics has the team been asked to perform?
A. Predictive
B. Descriptive

C. Prescriptive
D. Diagnostic
Answer(s): B
20. A large telecommunications company wants to increase their Average Revenue Per User per month by 5%, by end of year, to increase revenue in a highly competitive market. From a SMART arget perspective, what is missing?
A. T - The increase should be seen sooner
B. A - It is too easy of a target to attain
C. R - Since competition is high, focus should be on increasing customer base and not on ARPU
D. S - There is no mention of which product group/line the target pertains to
Answer(s): D