

IIBA

CBDA Exam

Certification in Business Data Analytics

**Questions & Answers
Demo**

Version: 5.0

Topic 1, Exam Pool A

Question: 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: D

Explanation:

One of the steps in identifying the research questions for business data analytics is to assess the feasibility and desirability of the proposed solution or change¹. This involves understanding the needs, preferences, and satisfaction of the existing and potential customers. Therefore, asking whether the existing customers really like the product is a relevant research question for the analytics team. Reference: 1: Guide to Business Data Analytics, IIBA, 2020, p. 22.

Question: 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: A

Explanation:

A physical data model is the most detailed and specific type of data model, which shows how the data is stored, accessed, and manipulated in the database. It includes the table structures, column names, data types, primary and foreign keys, constraints, indexes, and other physical attributes of the data¹². Reference: 1: Guide to Business Data Analytics, IIBA, 2020, p. 542: Data Modeling Essentials, Graeme Simsion and Graham Witt, 2005, p. 15.

Question: 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: B

Explanation:

The quality of the data is the most important dimension to consider when identifying research questions, as it affects the validity, reliability, and accuracy of the analysis and the results. Data quality refers to the degree to which the data meets the requirements and expectations of the stakeholders and the purpose of the analysis¹². Poor data quality can lead to erroneous conclusions, ineffective decisions, and wasted resources³. Reference: 1: Guide to Business Data Analytics, IIBA, 2020, p. 282: Data Quality Assessment, Arkady Maydanchik, 2007, p. 33: Data Quality: The Field Guide, Thomas C. Redman, 2001, p. 1.

Question: 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: D

Explanation:

Querying is a technique that allows analysts to access, filter, join, aggregate, and transform data from various databases using a specific syntax and logic¹. Querying can be used for different purposes, such as data exploration, data preparation, data analysis, and data visualization². Querying is not limited to creating predictive data models, nor does it always produce tabular results. Moreover, querying languages may vary depending on the type and structure of the database, such as relational, hierarchical, or document-based³. Reference: 1: Guide to Business Data Analytics, IIBA, 2020, p. 552; Data Analysis Using SQL and Excel, Gordon S. Linoff, 2016, p. 33; Database Systems: Design, Implementation, and Management, Carlos Coronel and Steven Morris, 2019, p. 17.

Question: 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

Answer: C

Explanation:

A layout is a way of arranging the nodes and links of a graph visualization to convey meaningful information about the data. A layout is determined by a dedicated algorithm that calculates the node positions based on certain criteria, such as minimizing edge crossings, maximizing node spacing, or emphasizing clusters¹². A layout can also be influenced by user interaction, such as zooming, panning, or dragging³. Reference: 1: Guide to Business Data Analytics, IIBA, 2020, p. 642; Graph Drawing: Algorithms for the Visualization of Graphs, Giuseppe Di Battista et al., 1999, p. 33; Interactive Data Visualization: Foundations, Techniques, and Applications, Matthew O. Ward et al.,

2015, p. 227.