

# Power BI Assignment 1 (solutions)

## 1. What do you mean by BI? Explain.

Power BI is a business analytics tool used to analyze performance visually. BI in Power BI stands for business analytics. It provides various features of collecting, organizing, and analyzing data from various sources such as Excel, SQL, etc, and identifies trends, patterns, and relationships. Using BI, helps organizations to make data-driven decisions, improve performance, and identify opportunities for growth. It helps businesses gain a deeper understanding of their operations, customers, and market dynamics and work efficiently by directing resources to the most crucial

## 2. How Power-BI helps in BI, and how does it help Analysts? Explain.

Power BI helps in business intelligence by providing features for data integration, modelling, visualization, and collaboration. It enables analysts to work on a single project by pooling their inputs collectively and integrate data from multiple sources, shape and model data, create interactive visualizations, which provide a critical and detailed overview of their functioning and helps in further analysis by detecting the problems and provide the right direction for utilisation of limited and useful resources. Power BI empowers analysts to efficiently analyze data, make informed decisions, and communicate findings effectively.

## 3. Explain Descriptive analytics?

Descriptive analytics is a branch of analytics. Its primary goal is to provide a summary and understanding of historical data, enabling businesses to identify patterns, trends, and relationships within the data. It involves analyzing and interpreting data to describe what has happened in the past. Descriptive analytics utilizes various techniques such as data visualization, basic statistical measures to present a clear picture of the data. It serves as a foundation for further analysis and decision-making processes in business intelligence.

## 4. Explain Predictive analytics?

Predictive analytics is a branch of analytics that utilizes historical data, statistical algorithms, and machine learning techniques to make predictions about future events. It involves analyzing past data patterns and trends to identify and create models that can be used to predict future behavior or trends. Businesses can gain insights into potential future scenarios, make informed decisions, and take early precautions.

## 5. Explain perspective analytics?

Perspective analytics is a branch of analytics. Its primary goal is to provide create visuals and analysis reports for various categories of the organisation such as top, middle and lower level management in order to ensure every one's say in the process and analyse which one is the

most efficient one in terms of various resources such as machine , manpower, management and raw materials.

6. Write five real-life questions that PowerBi can solve.

Power BI's flexibility and data visualization capabilities make it a valuable tool for solving a wide range of real-life business questions across various domains.

1. Sales Performance Analysis: It enables businesses to identify top-performing products, regions, or sales representatives, enabling better resource allocation and better decision-making.
2. Marketing performance: It allows businesses to identify distinct customer groups based on demographics, purchasing behavior,. This insight helps tailor marketing strategies, improve customer satisfaction, and target specific segments with personalized offerings.
3. Inventory Management: It enables businesses to monitor inventory metrics, identify the amount and direction of stock and to maintain required inventory levels to ensure timely smooth functioning of operations .
4. Financial Analysis: It allows businesses to track key financial metrics, identify patterns, and gain insights into profitability, cash flow, and cost drivers. This information aids in financial planning, budgeting, and decision-making.
5. Monitor efficiency in operations: It allows businesses to monitor operational KPIs, and optimize processes. Power BI dashboards provide real-time visibility into performance, enabling businesses to identify areas for improvement and implement data-driven operational strategies.