1. What do you mean by BI? Explain.

Business Intelligence (BI) refers to the tools, technologies, and practices used to analyze and transform data into meaningful insights and information that drive business decisions. BI helps organizations make data-driven decisions by providing access to information, data analysis, and reporting. The goal of BI is to support informed decision-making by providing insights into an organization's data and performance.

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

Power BI is a suite of business analytics tools from Microsoft that provides interactive visualizations and business intelligence capabilities with an interface easy to use for end users to create their own reports and dashboards.

Power BI helps in BI by providing a comprehensive solution for data analysis, visualization, and reporting. It allows analysts to connect to multiple data sources, perform data transformations and manipulations, and create interactive dashboards and reports to visualize insights. Power BI also includes built-in machine learning capabilities, enabling analysts to gain predictive insights and perform data analysis with a few clicks.

3. Explain Descriptive analytics?

Descriptive analytics is a branch of data analysis that focuses on summarizing and describing patterns and trends in data. The goal of descriptive analytics is to understand what has happened in the past by analyzing historical data. Descriptive analytics typically involves the use of statistical methods and data visualization tools to summarize and present data in a way that is easy to understand. This includes techniques such as frequency analysis, central tendency measures (such as mean, median, and mode), and data visualizations (such as histograms, bar charts, and line charts).

4. Explain Predictive analytics

Predictive analytics is a type of data analysis that uses statistical models and machine learning algorithms to identify patterns and relationships in historical data, and then uses those insights to make predictions about future events. The goal of predictive analytics is to predict future outcomes based on past behavior and current data, allowing organizations to make informed decisions and proactively respond to changes in the business environment.

Predictive analytics uses a variety of techniques, including regression analysis, decision trees, and neural networks, to build predictive models. These models are then trained on historical data to identify patterns and relationships, and are used to make predictions about future events.

5. Explain perspective analytics?

Prescriptive analytics is a type of advanced analytics that goes beyond descriptive and predictive analytics by not only providing insights about what has happened and what might happen, but also offering specific recommendations on what to do about it. Prescriptive analytics combines optimization, simulation, and decision-making techniques to identify the best course of action for a particular problem or decision.

The goal of prescriptive analytics is to provide organizations with a roadmap for action, based on data-driven insights and recommendations. This type of analytics uses mathematical algorithms and optimization models to determine the best decision in a given scenario, taking into account multiple constraints and objectives.

5. Write five real-life questions that PowerBI can solve.

a. Visualization of Yearly expenditure of company

b. Determining most and least important clients

c. Predicting market trends to evaluate future investments

d. Analysing the performance of a whole company

e. Visualizing penetration in various regions