1. What do you mean by BI? Explain.

Power BI is a business analytics solution that lets you visualise your data and share insights across your organisation, or embed them in your app or website. Connect to hundreds of data sources and bring your data to life with live dashboards and reports.
It provides interactive visualizations with self-service business intelligence capabilities, where end users can create reports and dashboards alone, without having to depend on any information technology staff or database administrator.

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

Microsoft Power BI is used to find insights within an organisation's data. Power BI can help connect disparate data sets, transform and clean the data into a data model and create charts or graphs to provide visuals of the data. All this can be shared with other Power BI users within the organization.
One of the main strengths of Power BI is its intuitive user interface that allows both technical and non-technical analysts to build data visualisations and analyses efficiently.
The user-friendly drag-and-drop interface makes it easy to answer complex data-related questions without the need for programming skills.

3. Explain Descriptive analytics?

Descriptive analytics is the process of using current and historical data to identify trends and relationships. It’s sometimes called the simplest form of data analysis because it describes trends and relationships but doesn’t dig deeper.
Descriptive analytics is relatively accessible and likely something your organization uses daily. Basic statistical software, such as Microsoft Excel or data visualization tools, such as Google Charts and Tableau, can help parse data, identify trends and relationships between variables, and visually display information.
Descriptive analytics is especially useful for communicating change over time and uses trends as a springboard for further analysis to drive decision-making.

4. Explain Predictive analytics?

Predictive analytics is a branch of advanced analytics that makes predictions about future outcomes using historical data combined with statistical modelling, data mining techniques and machine learning. Companies employ predictive analytics to find patterns in this data to identify risks and opportunities. Predictive analytics is often associated with big data and data science.
Today, companies today are inundated with data from log files to images and video, and all of this data resides in disparate data repositories across an organization. To gain insights from this data, data scientists use deep learning and machine learning algorithms to find patterns and make predictions about future events. Some of these statistical techniques include logistic and linear regression models, neural networks and decision trees. Some of these modelling techniques use initial predictive learnings to make additional predictive insights.

5. Explain perspective analytics?

Prescriptive analytics is the process of using data to determine an optimal course of action. By considering all relevant factors, this type of analysis yields recommendations for next steps. Because of this, prescriptive analytics is a valuable tool for data-driven decision-making.
Machine-learning algorithms are often used in prescriptive analytics to parse through large amounts of data faster—and often more efficiently—than humans can. Using “if” and “else” statements, algorithms comb through data and make recommendations based on a specific combination of requirements. For instance, if at least 50 percent of customers in a dataset selected that they were “very unsatisfied” with your customer service team, the algorithm may recommend additional training.
It’s important to note: While algorithms can provide data-informed recommendations, they can’t replace human discernment. Prescriptive analytics is a tool to inform decisions and strategies and should be treated as such. Your judgment is valuable and necessary to provide context and guard rails to algorithmic outputs.

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

1. E-commerce websites can do an analysis of why customers return their product right after ordering it and make the necessary changes to minimize this issue to avoid waste of resources and time and provide a better customer experience.
2. A Telephone network organization may look around for a reason "why do customers shift to other networks?" by using the details of customers and their feedback who changed their network to other network operators.
3. A software product company may need to know "Why should users opt for competitor company products/services?" to maintain their current product sustainability and provide better service to their users.A software product company may need to know "Why should users opt for competitor company products/services?" to maintain their current product sustainability and provide better service to their users.
4. The government may need to know "About what topic is most people talking about?" during any social evil event occurs that led to bursts in protests and revolts to stop the spread of false information or to mute people's voices in specific regions to outside regions.
5. A Dataware warehouse will need to know "Why a security breach occurred in the database? what data is lost?" to concentrate on data recovery and tightening the security layer of the database.