**Q1. What do you mean by BI? Explain.**

Ans. Business intelligence (BI) are the set of strategies and intelligence used to analyze business information and transform the relevant information into actionable insights

BI is the technology driven process for analyzing data and delivering actionable information that helps executives.

BI data can include historical information and real time data gathered from source systems as it is generating, enabling the BI tools to support both strategic and tactical decision-making processes.

BI represents the technical infrastructure that collects, stores, and analyzes company data. Software companies produce BI solutions for companies that wish to make better use of their data. The need of BI was derived from the concept that managers with inaccurate or incomplete information will tend, on average, to make worse decisions than if they had better information.

**Q2. How Power-BI helps in BI, and how does it help analysts? Explain.**

Ans. As we have already discussed the meaning of BI, now we will discuss how Power BI do these things as discussed. Power BI is a new cloud-based Business Intelligence service provided by Microsoft. It is a business Intelligence platform that allows businesses to clean and completely transform raw data into meaning data. Here are some reasons to why Power BI is the best BI platform for visualization of the data:

1. Ease of use – Power BI is easy to use Interface. No programming experience is required to use the Power BI. It has inbuilt intelligence which helps you to select attributes for your reports by suggesting the best reporting element. It has a very simple user interface (UI) to connect to the data source. Upon selection of data source, it allows selection of attributes by a simple drag and drop for your reports. Among other features, QA is where we can write a question and power BI will return a result with value or graph depending on the question. E.g. “What was this year’s revenue by month” generates a graph for you displaying a month-wise revenue.
2. Easy to learn – Power BI is developed on the founding platform of Excel and it follows a similar approach to design a report and it makes Power BI easy to learn. Power BI comes with learning guides on their website.
3. Easy to collaborate – Power BI comes with easy to collaborate options. The user can collaborate with co-workers to create interactive reports and dashboards in “app” workspaces. Sharing dashboards or reports with small audience is facilitates even the mobile app with Power BI.
4. Cost Effective – Power BI desktop is free and the user can develop reports and dashboards that are easy and complex. The pro license of Power BI is within the affordable range (USD 10 per month). For a larger audience, Power BI ha a premium option which allows you to customize coasting based on your audience usage.
5. Wide Coverage of Data Sources - Power BI comes with a wide range of connectors for data sources like Microsoft Excel, SQL Server database, MySQL database, Oracle database, IBM DB2 database, IBM Netezza, IBM Informix, PostgreSQL database, Sybase database, SAP Hana, Amazon Redshift, Azure SQL database, Azure SQL database warehouse, Azure Analysis services database, Azure Blog Storage, MailChimp, Facebook, GitHub, Salesforce and many more.

**Q3. Explain Descriptive Analytics?**

Ans. Descriptive Analytics is the Process of using current and historical data to identify trends and relationship. Descriptive analytics allows companies to understand how well it is performing and where there may be inefficiency. Descriptive analytics takes a full range of raw data and parses it to draw conclusion that managers, investors, and other stakeholders may find useful and understandable. This data provides an accurate picture of past performance and how that differs other comparable periods. It is also used to compare the performance with others within the same industry.

**Q4. Explain Predictive Analytics?**

Ans. Predictive analytics is the process of using data to forecast future outcomes. Historically, it required major infrastructure investments and hard to find data science expertise to develop proprietary algorithms. Today, cloud warehouse like Azure, AWS, etc. can now cost effectively deliver the storage, power, and speed as needed.

**Q4. Explain Perspective Analytics?**

Ans. Perspective analytics is the use of advanced processes and tools to analyze data and content to recommend the optimal course of action or strategy moving forward.

**Q4. Write five real questions that PowerBi can solve?**

Ans. PowerBi can do a lot of things to solve the real-life problems, some of these are as follows:

1. Preparing presentation for urgent meeting – PowerBi helps in preparing the quick presentation for the urgent meetings. The ppt prepared by the PowerBi are purely based on the data provided to the PowerBi data source.
2. Real time performance – Through PowerBi we can create the real time dashboard. For instance, a dashboard of a bank that consists of lists all of the loans that are active or due right now, with just single click.
3. Sales analysis – These dashboards can show all kinds of products that are sold according to the concentration of sales with very clear and beautiful representation.
4. Improving marketing strategies – Suppose one want to create a new marketing strategy for launch of a product of his company. With the help of these dashboards he can make a clear move with effective results.
5. Product development - Suppose a company’s product sales is dropping continuously day by day. Means when to pull off the product rom the market or introduce some other new product in place of it, is done by product development through the use of PowerBi.