Lesson -1

Topic: Introduction to Power BI
Prerequisites: Download Sales_Data.csv file

1. What is Power BI, and what are its three main components?
Power BI is a data visualization and business intelligence tool from Microsoft. It helps people turn data into useful charts and reports. The three main components are: Power BI Desktop, Power BI Service, and Power BI Mobile.

2. Name two business use cases for Power BI dashboards.
A sales team can track daily sales and trends. An HR department can monitor employee performance and headcount.

3. How do you download and install Power BI Desktop?
Go to the Power BI website, click "Download Power BI Desktop," and install the file like regular software.

4. What is the difference between Power BI Desktop and Power BI Service?
Power BI Desktop is used to create reports, while Power BI Service is used to publish and share them online.

5. What file extension does a Power BI project use?
It uses the .pbix file extension.

6. Explain the role of Power Query in Power BI.
Power Query helps to import, clean, and prepare data before building visual reports.

7. Why would a business prefer Power BI over Excel for reporting?
Because Power BI can handle large data, update in real time, and create interactive dashboards more easily than Excel.

8. Describe one limitation of the free version of Power BI.
You cannot share reports with others unless you have a Pro license.

9. What is a "published report" in Power BI Service?
It's a report uploaded from Power BI Desktop to the Power BI online platform for sharing.

10. How does Power BI Mobile enhance accessibility?
It allows users to view reports on their phones or tablets anytime, anywhere.

11. Compare Power BI with Tableau—pros and cons.
Power BI is cheaper, easier for beginners, and integrates with Microsoft tools. Tableau

offers better visuals and handles big data well, but it's more expensive and harder to learn.

12. Explain how Power BI integrates with Azure services.
 Power BI connects to Azure databases like Azure SQL and Data Lake to pull real-time cloud data for reporting.

13. What are "gateways" in Power BI, and when are they needed?
 Gateways connect Power BI to local (on-premises) data sources. They're needed when data isn't stored in the cloud.

14. How would you convince a company to adopt Power BI? (ROI argument)
 Power BI helps make faster and smarter decisions, saves time, reduces errors, and improves profits through clear and real-time reporting.

15. What security features does Power BI offer for sensitive data?
 It offers data encryption, row-level security, access control, and compliance with Microsoft's cloud protection standards.