1. What is Power BI, and what are its three main components?

Power BI is a business analytics tool developed by Microsoft that allows users to **visualize data**, **share insights**, and make informed decisions based on interactive reports and dashboards. It helps transform raw data from various sources into meaningful information through easy-to-understand visuals.

Three main components of Power BI:

- Power BI Desktop
- Power BI Service/Online
- Power BI Mobile

2. Name two business use cases for Power BI dashboards.

Sales Performance Tracking - monitors the sale trends, performance by region, product, salesperson.

Human Resources Analytics - monitors and analysis employee data to manage the working environment.

3. How do you download and install Power BI Desktop?

Go to official website PowerBI.com click on Product then POwer BI Desktop and Click download free.

4. What is the difference between Power BI Desktop and Power BI Service?

Power BI Desktop creates reports builds reporting graphs and tables while Power BI Service give the chance to share and discuss the results online.

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

6. Explain the role of Power Query in Power BI. Power Query is the data connection and transformation tool within Power BI.

It allows users to connect to various data sources, clean, transform, and load data before building visualizations

7. Why would a business prefer Power BI over Excel for reporting?

Power BI is purpose-built for modern, scalable, and interactive reporting, while Excel is best for ad-hoc analysis and individual use.

A business would prefer Power BI when it needs:

- Interactive dashboards
- Scalable performance
- Cloud sharing and collaboration
- Real-time or automated data refresh

8. Describe one limitation of the free version of Power BI.

Limitation of the free version you can't share those reports with others or collaborate in shared workspaces. Sharing and collaboration require a Power BI Pro or Premium license.

9. What is a "published report" in Power BI Service?

A published report in Power BI Service is a report that has been created in Power BI Desktop and then uploaded to the Power BI Service

10. How does Power BI Mobile enhance accessibility?

Power BI Mobile enhances accessibility by giving users secure, real-time, interactive access to data insights from anywhere, improving decision-making speed and flexibility

11. Compare Power BI with Tableau—pros and cons.Power BI is cost-effective, easy to use BI, has wide use in microsoft community. Tableau handles good with large heavy databases, deep customization but is costly.

12. Explain how Power BI integrates with Azure services.

Power BI integrates tightly with Azure to support secure, scalable, and intelligent analytics, empowering organizations to extract deeper insights from complex cloud data environments.

13. What are "gateways" in Power BI, and when are they needed?

A gateway is required when Power BI Service (cloud) needs to connect to on-premises data sources securely—especially for scheduled refreshes or real-time data access.

14. How would you convince a company to adopt Power BI? (ROI argument)

Power BI provides fast, flexible, and affordable analytics that empower smarter decisions, increase efficiency, and deliver measurable financial return—making it a strategic asset, not just a reporting tool.

15. What security features does Power BI offer for sensitive data? Security Features:

- Row-Level Security
- Azure Active Directory Integration
- Data Encryption
- Sensitivity Labels
- Service-Level Security

- Auditing and Monitoring
- Secure Gateways for On-Premises Data