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

PowerBI is Microsoft's business analytics service, designed to help users connect to, analyze, and visualize data from various sources.

It allows users to create interactive dashboards and reports, transforming row data to actionable insights

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

Customer behaviour analysis, operation and process monitoring

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

Open Microsoft Store on your Windows computer

Search for "Power BI Desktop"

Click Install

Once installed, launch it from the Start Menu

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

Power BI Desktop is for building and designing reports

Power BI Service is for sharing, publishing, and collaboration in the cloud

- 5. What file extension does a Power BI project use? .pbix extension
 - 6. Explain the role of Power Query in Power BI.

Power Query is the data transformation engine within Power BI, acting as the primary tool for extracting, transforming, and loading (ETL) data from various sources.

It enables users to connect to diverse data sources, clean and shape data, and prepare it for analysis and reporting within Power BI.

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

Businesses often prefer Power BI over Excel for reporting due to Power BI's superior capabilities in handling large datasets,

providing advanced visualizations, automating reporting processes, and enabling better collaboration and security

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

A significant limitation of the free version of Power BI is the inability to share reports and dashboards with other users,

or collaborate with them on workspaces

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

In Power BI Service, a "published report" refers to a report that has been uploaded from Power BI Desktop or another source to the Power BI service,

making it accessible online and available for collaboration and sharing with others.

10. How does Power BI Mobile enhance accessibility?

Power BI Mobile gives users fast, flexible, and secure access to their business data anytime,

anywhere — improving decision-making and responsiveness on the move.

11. Compare Power BI with Tableau—pros and cons.

Choose Power BI if you want affordability, Microsoft integration, and ease of use.

Choose Tableau if you need stunning visuals, cross-platform support, and work with very large datasets.

12. Explain how Power BI integrates with Azure services.

Power BI integrates with Azure by connecting directly to cloud data sources like Azure SQL and Synapse for fast access to large datasets.

It uses Azure Data Lake for handling big data, and Azure Machine Learning to bring predictive insights into reports.

User security and access are managed through Azure Active Directory. Altogether, this integration makes Power BI more powerful, scalable, and secure—without needing extra tools.

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

In Power BI, gateways are bridge tools that let Power BI Service access data stored on-premises (like in your company's local server or a private database).

They're needed when your data isn't in the cloud but stored locally, and you still want to:

Refresh the data automatically in Power BI Service

Keep reports up to date without uploading files again and again

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

To convince a company to adopt Power BI, focus on its return on investment (ROI):

Power BI helps businesses save time, reduce costs, and make faster, data-driven decisions.

It replaces manual reporting with automated, real-time dashboards—cutting hours of work into minutes. This improves productivity and reduces errors.

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

Power BI offers a comprehensive suite of security features to protect sensitive data, including encryption, access controls, and data loss prevention policies.

It also provides tools for auditing and monitoring data usage, ensuring compliance with data protection regulation