1. What is Power BI, and what are its three main components?
   - Power BI is a business analytics tool by Microsoft that lets you visualize data, share insights, and make smart decisions.
   - It transforms raw data from various sources into meaningful, easy-to-understand visuals.
   - Three components:
      a. Power BI Desktop (free Windows app used to transform data and create reports, data models)
      b. Power BI Service (cloud-based platform to view, share, and collaborate on reports and dashboards)
      c. Power BI Mobile App (available for iOS and Android, easy to access anytime)

2. Name two business use cases for Power BI dashboards.
   a. Sales performance tracking (monitor sales by region, best/worst products, profits, etc.)
   b. Customer support tracking (monitor common issues, support agent performance, average resolution time, etc.)

3. How do you download and install Power BI Desktop?
   - From Microsoft Store or the official Microsoft website

4. What is the difference between Power BI Desktop and Power BI Service?
   - Power BI Desktop: used to build and design reports and dashboards on your Windows PC. After building, you publish them to Power BI Service.
   - Power BI Service: web-based platform to view, share, and collaborate on reports. Supports automated data refreshes for real-time insights.

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

6. Explain the role of Power Query in Power BI.
   - Helps you import, clean, and prep data easily so visuals are based on accurate, polished info.

7. Why would a business prefer Power BI over Excel for reporting?
   - Interactive dashboards instead of static reports
   - Automatic data refresh instead of manual updates
   - Handles big data better
   - More professional, modern look

8. Describe one limitation of the free version of Power BI.
   - Cannot share reports with others unless upgraded to Power BI Pro or Premium.

9. What is a "published report" in Power BI Service?
   - A report created in Power BI Desktop and uploaded ("published") to the Power BI Service (cloud).

10. How does Power BI Mobile enhance accessibility?
    - Allows anywhere, anytime access to reports and sends alerts.

11. Compare Power BI with Tableau — pros and cons.
    - Power BI Pros: Affordable, user-friendly, deep Microsoft integration, frequent updates
    - Power BI Cons: Limited custom visuals, can slow down with very large data models
    - Tableau Pros: Great visuals, handles big data well, highly customizable
    - Tableau Cons: Expensive, steeper learning curve, more setup required

12. Explain how Power BI integrates with Azure services.
    - Seamlessly integrates with Azure services for secure, scalable, advanced analytics
    - Connects to Azure SQL Database / Azure Synapse Analytics for live data reporting

- Uses Azure Data Lake to analyze large datasets
        - Uses Azure Active Directory for secure authentication

    13. What are "gateways" in Power BI, and when are they needed?
        - Gateways let Power BI access your local files or servers to update cloud reports,
acting like a tunnel between your computer and Power BI Service.

    14. How would you convince a company to adopt Power BI? (ROI argument)
        - Power BI helps companies make faster, smarter decisions by turning raw data into
clear, interactive visuals.
        - It reduces time spent on manual reporting, lowers errors, and boosts productivity.
        - Features like real-time dashboards, automated refreshes, and cost-effective
pricing deliver strong ROI by saving time, improving efficiency, and uncovering growth
opportunities.

    15. What security features does Power BI offer for sensitive data?
        - Strong security like Row-Level Security (RLS) to control data access
        - Azure Active Directory for user authentication
        - Audit logs to track access and activities