1. How does Power BI handle large datasets in the Online Service, and what is the role of Premium Capacity in this?

   Power BI Online handles large datasets through data compression and columnar storage. Premium Capacity provides dedicated cloud resources, enabling larger models (up to 400 GB), incremental refresh, and optimized query performance, unlike shared resources with 1 GB limits.

2. What are the differences between Import mode, DirectQuery, and Live Connection in Power BI Service?

   Import mode copies data into Power BI, enabling full DAX/visuals but requires scheduled refresh. DirectQuery queries live data sources directly with limited DAX but no data import. Live Connection links to Analysis Services models (e.g., Azure AS), leveraging the source's logic without importing data.

3. Explain deployment pipelines in Power BI Online. What stages do they include?

   Deployment pipelines automate moving Power BI content through three stages: Development (build/test), Test (user validation), and Production (end users). They enable version control, conflict resolution, and one-click promotion between stages.

4. How can Power BI Service integrate with Microsoft Teams or SharePoint for collaboration?

   Power BI reports embed directly in Microsoft Teams via tabs or chats and integrate with SharePoint using the "Web Part" feature. This allows real-time collaboration, alerts in Teams channels, and centralized access via SharePoint.

5. What is the XMLA endpoint in Premium and how does it benefit developers or enterprise BI teams?

   The XMLA endpoint offers read/write access to Power BI datasets via an open protocol. It benefits developers by enabling advanced scripting (e.g., Tabular Editor), automated deployments, partitioning, and real-time monitoring via SQL Profiler.

6. Describe how usage metrics and audit logs work in Power BI Service.

Usage metrics auto-generate reports on report views, user engagement, and performance per workspace. Audit logs (via Microsoft 365 Admin Center) track activities like exports or logins, requiring admin access.

7. How do you manage workspace access and permissions for different users?

   Workspace access is managed by assigning roles (Admin, Member, Contributor, Viewer) to users/groups via Microsoft 365 or manual settings. Apps publish content to end users with controlled permissions.

8. How can data governance be enforced in Power BI Service?

   Governance uses sensitivity labels (Microsoft Purview) to classify data, endorsements (certified/promoted datasets), tenant settings to restrict exports/sharing, and DLP policies to block risky actions.

9. What are the limitations of Row-Level Security when using DirectQuery or Live Connection?

   RLS in DirectQuery/Live Connection applies filters at query time, risking slower performance; complex filters may generate inefficient source queries. Dynamic RLS is unsupported in some sources, and testing requires publishing to the service.

10. Explain how you can refresh a dataset via Power Automate or REST API.

    Power Automate refreshes datasets using the "Refresh a dataset" action (requiring Premium). The REST API triggers refreshes via POST /datasets/{id}/refreshes with Azure AD authentication, enabling scheduled/on-demand updates.