Topic: Publishing and Sharing in Power BI
Prerequisites: Give a written brief explanation for all questions.

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

   Pro license: Up to 1 GB per dataset. Premium Capacity: Allows datasets up to 100 GB or more with enhanced performance.

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

   Import Data stored in PBIX & Service, fastest; cached in-memory, best for static/periodic data. Direct Query, Data queried live from source, Dependent on source performance, Near real-time data; large data sources. Live Connection Report connects to a published model (no model in PBIX) Model performance impacts reports Use for Analysis Services / published semantic models

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

   Deployment Pipelines are a feature in Power BI Service for controlled, staged content promotion. They include three stages: Development (Dev): For building and testing reports, datasets. Test: For validation, testing security, and user acceptance. Production (Prod): For end-user access, official reports. Pipelines help ensure consistent content promotion and reduce manual errors during deployment.

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

   Microsoft Teams: Power BI reports can be embedded in Teams channels using the Power BI app for Teams. It allows users to: View reports inside Teams. Discuss data insights collaboratively. Share links to reports or dashboards within Teams chats. SharePoint: Reports can be embedded using the Power BI web part in SharePoint Online. Viewers must have the necessary Power BI access. Useful for sharing reports in intranet portals or documentation sites.

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

   The XMLA Endpoint allows external tools (e.g., SQL Server Management Studio, Tabular Editor) to connect directly to datasets. Enables advanced modeling, script automation, and direct querying of models. Benefits: Supports programmatic model changes. Enables enterprise-scale deployment, integration with CI/CD. Useful for large-scale data management and advanced DAX analysis.

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

   Usage Metrics Reports: Available for dashboards and reports. Show user activity, view counts, sharing, and trends. Help report creators understand adoption. Audit Logs (via Microsoft Purview / Compliance Center): Track detailed actions like sharing, viewing, downloading, publishing. Support compliance, security, and auditing. Accessible via Microsoft 365 Security & Compliance Center.

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

   Workspace access is role-based: Admin: Full control, including permissions and settings. Member: Can edit content. Contributor: Can add content but limited editing. Viewer: Read-only access. Permissions can be managed via: Power BI Service UI. Azure AD Security Groups for scaling user management. Governance policies within Power BI Admin Portal.

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

   Governance can be enforced through: Sensitivity Labels: Apply Microsoft Purview labels to classify data. Data Loss Prevention (DLP) Policies: Control sharing sensitive data externally. Endorsements: Mark datasets and reports as Certified or Promoted. Usage Monitoring: Using audit logs and activity reports. Workspace Governance: Limit creation of workspaces and monitor sharing settings.

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

   DirectQuery: RLS is enforced at Power BI level, but query performance can be impacted. Underlying data source security might need alignment. Live Connection: If connected to Analysis Services or shared datasets, RLS must be defined at the data model level (not in Power BI). Power BI cannot override RLS on external models.

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

    Power Automate: Use the “Refresh a dataset” Power BI connector action. Can be triggered on schedule, or event-based (e.g., data update in SharePoint). REST API: POST https://api.powerbi.com/v1.0/myorg/groups/{groupId}/datasets/{datasetId}/refreshes Requires authentication and service principal or user token. Suitable for automated workflows, CI/CD pipelines. Both methods allow automation of dataset refreshes beyond manual or scheduled options within Power BI Service.