**Azure Data Fundamentals (DP-900)**

**Skills at a glance**

* Describe core data concepts (25–30%)
* Identify considerations for relational data on Azure (20–25%)
* Describe considerations for working with non-relational data on Azure (15–20%)
* Describe an analytics workload on Azure (25–30%)

**Describe core data concepts (25–30%)**

**Describe ways to represent data**

* Describe features of structured data
* Describe features of semi-structured
* Describe features of unstructured data

**Identify options for data storage**

* Describe common formats for data files
* Describe types of databases

**Describe common data workloads**

* Describe features of transactional workloads
* Describe features of analytical workloads

**Identify roles and responsibilities for data workloads**

* Describe responsibilities for database administrators
* Describe responsibilities for data engineers
* Describe responsibilities for data analysts

**Identify considerations for relational data on Azure (20–25%)**

**Describe relational concepts**

* Identify features of relational data
* Describe normalization and why it is used
* Identify common structured query language (SQL) statements
* Identify common database objects

**Describe relational Azure data services**

* Describe the Azure SQL family of products including Azure SQL Database, Azure SQL Managed Instance, and SQL Server on Azure Virtual Machines
* Identify Azure database services for open-source database systems

**Describe considerations for working with non-relational data on Azure (15–20%)**

**Describe capabilities of Azure storage**

* Describe Azure Blob storage
* Describe Azure File storage
* Describe Azure Table storage

**Describe capabilities and features of Azure Cosmos DB**

* Identify use cases for Azure Cosmos DB
* Describe Azure Cosmos DB APIs

**Describe an analytics workload (25–30%)**

**Describe common elements of large-scale analytics**

* Describe considerations for data ingestion and processing
* Describe options for analytical data stores
* Describe Microsoft cloud services for large-scale analytics, including Azure Databricks and Microsoft Fabric

**Describe consideration for real-time data analytics**

* Describe the difference between batch and streaming data
* Identify Microsoft cloud services for real-time analytics

**Describe data visualization in Microsoft Power BI**

* Identify capabilities of Power BI
* Describe features of data models in Power BI
* Identify appropriate visualizations for data