DP-900: Microsoft Azure Data Fundamentals

Overview

Microsoft Certified: Azure Data Fundamentals validates foundational knowledge of core data concepts and Azure data services for analytics, databases, and business intelligence.

Exam Details

- **Exam Code:** DP-900
- **Duration:** 60 minutes
- **Questions:** 40-50 multiple choice
- **Passing Score:** ~700/1000
- **Cost:** $99 USD
- **Prerequisites:** None required

Core Skills Tested

1. Core Data Concepts

- Relational vs non-relational data
- Data analytics and visualization
- Batch vs streaming data processing
- Data warehouse fundamentals

2. Azure Relational Data

- Azure SQL Database and Managed Instance
- Azure Database for PostgreSQL/MySQL
- Database backup and recovery
- Data replication and scaling

3. Azure Non-Relational Data

- Azure Cosmos DB document databases
- Azure Table Storage
- Azure Blob Storage for data lakes
- NoSQL concepts and use cases

4. Analytics & Visualization

- Azure Synapse Analytics
- Azure Data Factory pipelines
- Power BI fundamentals
- Real-time analytics with Stream Analytics

5. Data Security & Compliance

- Data encryption and access control
- Privacy and compliance requirements
- Auditing and monitoring
- GDPR and data protection

Study Topics

Data Types - Structured, semi-structured, unstructured data; schema design

Database Services - OLTP vs OLAP, scaling strategies, replication patterns

Big Data Processing - Batch processing, real-time streaming, data pipelines

Analytics Tools - Power BI dashboards, Azure Synapse, data exploration

Security Principles - Encryption, authentication, role-based access, compliance

Recommended Study Path

1. Review Microsoft Learn modules (20+ hours)
2. Complete DP-900 study guide and flashcards
3. Explore Azure data services in portal
4. Take practice exams
5. Review real-world data scenarios

Key Resources

- Microsoft Learn: learn.microsoft.com
- Official Study Guide: Microsoft Docs
- Practice Tests: Whizlabs, Examtopics
- Azure Portal: Free tier for exploration

Success Tips

- Understand data concept terminology clearly
- Know appropriate service for each scenario
- Master relational vs non-relational differences
- Review analytics and visualization basics
- Focus on foundational concepts, not advanced topics