EDUSUM

#1 Online Certification Guide

MICROSOFT DP-300

Microsoft Administering Relational Databases on Azure Certification Questions & Answers

Exam Summary – Syllabus –Questions

DP-300

Microsoft Certified - Azure Database Administrator Associate

40-60 Questions Exam – 700/1000 Cut Score – Duration of 120 minutes

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Know Your DP-300 Certification Well:

The DP-300 is best suitable for candidates who want to gain knowledge in the Microsoft Azure. Before you start your DP-300 preparation you may struggle to get all the crucial Administering Relational Databases on Azure materials like DP-300 syllabus, sample questions, study guide.

But don't worry the DP-300 PDF is here to help you prepare in a stress free manner.
The PDF is a combination of all your queries like-

- What is in the DP-300 syllabus?
- How many questions are there in the DP-300 exam?
- Which Practice test would help me to pass the DP-300 exam at the first attempt?

Passing the DP-300 exam makes you Microsoft Certified - Azure Database Administrator Associate. Having the Administering Relational Databases on Azure certification opens multiple opportunities for you. You can grab a new job, get a higher salary or simply get recognition within your current organization.

Microsoft DP-300 Administering Relational Databases on Azure Certification Details:

Exam Name	Microsoft Certified - Azure Database Administrator Associate
Exam Code	DP-300
Exam Price	$165 (USD)
Duration	120 mins
Number of Questions	40-60
Passing Score	700 / 1000
Books / Training	**DP-300T00-A: Administering Relational Databases on Microsoft Azure**
Schedule Exam	**Pearson VUE**
Sample Questions	**Microsoft Administering Relational Databases on Azure Sample Questions**
Practice Exam	**Microsoft DP-300 Certification Practice Exam**

DP-300 Syllabus:

Topic	Details
Plan and Implement Data Platform Resources (15-20%)	
Deploy resources by using manual methods	- deploy database offerings on selected platforms - configure customized deployment templates - apply patches and updates for hybrid and IaaS deployment
Recommend an appropriate database offering based on specific requirements	- evaluate requirements for the deployment - evaluate the functional benefits/impact of possible database offerings - evaluate the scalability of the possible database offering - evaluate the HA/DR of the possible database offering - evaluate the security aspects of the possible database offering
Configure resources for scale and performance	- configure Azure SQL Database for scale and performance - configure Azure SQL Managed Instance for scale and performance - configure SQL Server in Azure VMs for scale and performance - calculate resource requirements - evaluate database partitioning techniques, such as database sharding - set up SQL Data Sync
Evaluate a strategy for moving to Azure	- evaluate requirements for the migration - evaluate offline or online migration strategies - evaluate requirements for the upgrade - evaluate offline or online upgrade strategies
Implement a migration or upgrade strategy for moving to Azure	- implement an online migration strategy - implement an offline migration strategy - implement an online upgrade strategy - implement an offline upgrade strategy
Implement a Secure Environment (15-20%)	
Configure database authentication by using platform and database tools	- configure Azure AD authentication - create users from Azure AD identities - configure security principals
Configure database authorization by using platform and database tools	- configure database and object-level permissions using graphical tools - apply principle of least privilege for all securables

Topic	Details
Implement security for data at rest	- implement Transparent Data Encryption (TDE) - implement object-level encryption - implement Dynamic Data Masking - implement Azure Key Vault and disk encryption for Azure VMs
Implement security for data in transit	- configure server and database-level firewall rules - implement Always Encrypted
Implement compliance controls for sensitive data	- apply a data classification strategy - configure server and database audits - implement data change tracking - perform a vulnerability assessment
Monitor and Optimize Operational Resources (15-20%)	
Monitor activity and performance	- prepare an operational performance baseline - determine sources for performance metrics - interpret performance metrics - configure and monitor activity and performance at the infrastructure, server, service, and database levels
Implement performance-related maintenance tasks	- implement index maintenance tasks - implement statistics maintenance tasks - configure database auto-tuning - manage storage capacity
Identify performance-related issues	- configure Query Store to collect performance data - identify sessions that cause blocking - assess growth/fragmentation of databases and logs - assess performance-related database configuration parameters
Configure resources for optimal performance	- configure storage and infrastructure resources - configure server and service account settings for performance - configure Resource Governor for performance
Configure a user database for optimal performance	- implement database-scoped configuration - configure compute resources for scaling - configure Intelligent Query Processing (IQP)
Optimize Query Performance (5-10%)	
Review query plans	- determine the appropriate type of execution plan - identify problem areas in execution plans - extract query plans from the Query Store
Evaluate performance improvements	- determine the appropriate Dynamic Management Views (DMVs) to gather query performance information - identify performance issues using DMVs - identify and implement index changes for queries

Topic	Details
	- recommend query construct modifications based on resource usage - assess the use of hints for query performance
Review database table and index design	- identify data quality issues with duplication of data - identify normal form of database tables - assess index design for performance - validate data types defined for columns - recommend table and index storage including filegroups - evaluate table partitioning strategy - evaluate the use of compression for tables and indexes
Perform Automation of Tasks (10-15%)	
Create scheduled tasks	- manage schedules for regular maintenance jobs - configure multi-server automation - configure notifications for task success/failure/non-completion
Evaluate and implement an alert and notification strategy	- create event notifications based on metrics - create event notifications for Azure resources - create alerts for server configuration changes - create tasks that respond to event notifications
Manage and automate tasks in Azure	- perform automated deployment methods for resources - implement policies by using automated evaluation modes
Plan and Implement a High Availability and Disaster Recovery (HADR) Environment (15-20%)	
Recommend an HADR strategy for a data platform solution	- recommend HADR strategy based on RPO/RTO requirements - evaluate HADR for hybrid deployments - evaluate Azure-specific HADR solutions - identify resources for HADR solutions
Test an HADR strategy by using platform, OS, and database tools	- test HA by using failover - test DR by using failover or restore
Perform backup and restore a database by using database tools	- perform a database backup with options - perform a database restore with options - perform a database restore to a point in time - configure long-term backup retention
Configure HA/DR by using OS, platform, and database tools	- configure replication - create an Always On Availability Group - configure auto-failover groups - integrate a database into an Always On Availability Group

Topic	Details
	- configure quorum options for a Windows Server Failover Cluster - configure an Always On Availability Group listener - configure failover cluster instances on Azure VMs
Perform Administration by Using T-SQL (10-15%)	
Examine system health	- evaluate database health using DMVs - evaluate server health using DMVs - perform database consistency checks by using DBCC
Monitor database configuration by using T-SQL	- assess proper database autogrowth configuration - report on database free space - review database configuration options
Perform backup and restore a database by using T-SQL	- prepare databases for Always On Availability Groups - perform transaction log backup - perform restore of user databases - perform database backups with options
Manage authentication by using T-SQL	- manage certificates - manage security principals
Manage authorization by using T-SQL	- configure permissions for users to access database objects - configure permissions by using custom roles

Microsoft DP-300 Sample Questions:

Question: 1

You have 20 Azure SQL databases provisioned by using the vCore purchasing model. You plan to create an Azure SQL Database elastic pool and add the 20 databases.

Which three metrics should you use to size the elastic pool to meet the demands of your workload?

Each correct answer presents part of the solution.

a) total size of all the databases
b) geo-replication support
c) number of concurrently peaking databases * peak CPU utilization per database
d) maximum number of concurrent sessions for all the databases
e) total number of databases * average CPU utilization per database

Answer: a, c, e

Question: 2

You have a Microsoft SQL Server 2019 instance in an on-premises datacenter. The instance contains a 4-TB database named DB1. You plan to migrate DB1 to an Azure SQL Database managed instance.
What should you use to minimize downtime and data loss during the migration?

a) distributed availability groups
b) database mirroring
c) log shipping
d) Database Migration Assistant

Answer: a

Question: 3

You have a new Azure SQL database. The database contains a column that stores confidential information.
You need to track each time values from the column are returned in a query. The tracking information must be stored for 365 days from the date the query was executed.
Which three actions should you perform?
Each correct answer presents part of the solution.

a) Turn on auditing and write audit logs to an Azure Storage account
b) Add extended properties to the column.
c) Turn on Advanced Data Security for the Azure SQL server
d) Apply sensitivity labels named Highly Confidential to the column.
e) Turn on Azure Advanced Threat Protection (ATP).

Answer: a, c, d

Question: 4

You need to recommend an availability strategy for an Azure SQL database. The strategy must meet the following requirements:
- Support failovers that do not require client applications to change their connection strings.
- Replicate the database to a secondary Azure region.
- Support failover to the secondary region.

What should you include in the recommendation?

a) failover groups
b) transactional replication
c) Availability Zones
d) geo-replication

Answer: d

Question: 5

You have SQL Server on an Azure virtual machine that contains a database named DB1. DB1 contains a table named CustomerPII.
You need to record whenever users query the CustomerPII table. Which two options should you enable?
Each correct answer presents part of the solution

a) server audit specification
b) SQL Server audit
c) database audit specification
d) a server principal

Answer: a, c

Question: 6

You plan to move two 100-GB databases to Azure. You need to dynamically scale resources consumption based on workloads. The solution must minimize downtime during scaling operations. What should you use?

a) An Azure SQL Database elastic pool
b) SQL Server on Azure virtual machines
c) an Azure SQL Database managed instance
d) Azure SQL databases

Answer: a

Question: 7

You receive numerous alerts from Azure Monitor for an Azure SQL database. You need to reduce the number of alerts. You must only receive alerts if there is a significant change in usage patterns for an extended period.

Which two actions should you perform?

Each correct answer presents part of the solution.

a) Set Threshold Sensitivity to High
b) Set the Alert logic threshold to Dynamic
c) Set the Alert logic threshold to Static
d) Set Threshold Sensitivity to Low
e) Set Force Plan to On

Answer: b, d

Question: 8

You have a version-8.0 Azure Database for MySQL database. You need to identify which database queries consume the most resources. Which tool should you use?

a) Query Store
b) Metrics
c) Query Performance Insight
d) Alerts

Answer: a

Question: 9

You are building a database backup solution for a SQL Server database hosted on an Azure virtual machine.

In the event of an Azure regional outage, you need to be able to restore the database backups. The solution must minimize costs.

Which type of storage accounts should you use for the backups?

a) locally-redundant storage (LRS)
b) read-access geo-redundant storage (RA-GRS)
c) zone-redundant storage (ZRS)
d) geo-redundant storage

Answer: b

Question: 10

You deploy a database to an Azure SQL Database managed instance. You need to prevent read queries from blocking queries that are trying to write to the database.

Which database option should set?

a) PARAMETERIZATION to FORCED
b) PARAMETERIZATION to SIMPLE
c) Delayed Durability to Forced
d) READ_COMMITTED_SNAPSHOT to ON

Answer: d

Study Guide to Crack Microsoft Administering Relational Databases on Azure DP-300 Exam:

- Getting details of the DP-300 syllabus, is the first step of a study plan. This pdf is going to be of ultimate help. Completion of the syllabus is must to pass the DP-300 exam.
- Making a schedule is vital. A structured method of preparation leads to success. A candidate must plan his schedule and follow it rigorously to attain success.
- Joining the Microsoft provided training for DP-300 exam could be of much help. If there is specific training for the exam, you can discover it from the link above.
- Read from the DP-300 sample questions to gain your idea about the actual exam questions. In this PDF useful sample questions are provided to make your exam preparation easy.
- Practicing on DP-300 practice tests is must. Continuous practice will make you an expert in all syllabus areas.