

## Exam Questions DP-300

Administering Relational Databases on Microsoft Azure (beta)

<https://www.2passeasy.com/dumps/DP-300/>



## NEW QUESTION 1

- (Exam Topic 5)

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.

NOTE:Each correct selection is worth one point.

- 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:** ACD

### Explanation:

C: Advanced Data Security (ADS) is a unified package for advanced SQL security capabilities. ADS is available for Azure SQL Database, Azure SQL Managed Instance, and Azure Synapse Analytics. It includes functionality for discovering and classifying sensitive data

D: You can apply sensitivity-classification labels persistently to columns by using new metadata attributes that have been added to the SQL Server database engine. This metadata can then be used for advanced, sensitivity-based auditing and protection scenarios.

A: An important aspect of the information-protection paradigm is the ability to monitor access to sensitive data. Azure SQL Auditing has been enhanced to include a new field in the audit log called data\_sensitivity\_information. This field logs the sensitivity classifications (labels) of the data that was returned by a query. Here's an example:

d	client_ip	application_name	duration_milliseconds	response_rows	affected_rows	connection_id	data_sensitivity_information
	7.125	Microsoft SQL Server Management Studio - Query	1	847	847	C244A066-2271-...	Confidential - GDPR
	7.125	Microsoft SQL Server Management Studio - Query	2	32	32	C244A066-2271-...	Confidential
	7.125	Microsoft SQL Server Management Studio - Query	41	32	32	A7088FD4-759E-...	Confidential, Confidential - GDPR

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/data-discovery-and-classification-overview>

## NEW QUESTION 2

- (Exam Topic 5)

You have an Azure SQL database named db1 that contains an Azure Active Directory (Azure AD) user named user1.

You need to test impersonation of user1 in db1 by running aSELECTstatement and returning to the original execution context.

How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

EXECUTE AS  = 'user1@contoso.com'

CALLER  
 LOGIN  
 OWNER  
 USER

GO

SELECT SUSER\_SNAME ()

REVERT  
 REVOKE  
 ROLLBACK

GO

- A. Mastered
- B. Not Mastered

**Answer:** A

### Explanation:

Graphical user interface Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/execute-as-transact-sql?view=sql-server-ver15> <https://docs.microsoft.com/en-us/sql/t-sql/functions/suser-sname-transact-sql?view=sql-server-ver15>

### NEW QUESTION 3

- (Exam Topic 5)

Your company analyzes images from security cameras and sends alerts to security teams that respond to unusual activity. The solution uses Azure Databricks.

You need to send Apache Spark level events, Spark Structured Streaming metrics, and application metrics to Azure Monitor.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions in the answer area and arrange them in the correct order.

#### Actions

#### Answer Area

Deploy Grafana to an Azure virtual machine.

Build a **spark-listeners-loganalytics-1.0-SNAPSHOT.jar** JAR file.

Create Dropwizard counters in the application code.

Create a data source in Azure Monitor.

Configure the Databricks cluster to use the Databricks monitoring library.



- A. Mastered
- B. Not Mastered

**Answer:** A

#### Explanation:

Graphical user interface, text, application Description automatically generated with medium confidence

Send application metrics using Dropwizard.

Spark uses a configurable metrics system based on the Dropwizard Metrics Library.

To send application metrics from Azure Databricks application code to Azure Monitor, follow these steps: Step 1: Configure your Azure Databricks cluster to use the Databricksmonitoring library.

Prerequisite: Configure your Azure Databricks cluster to use the monitoring library. Step 2: Build the spark-listeners-loganalytics-1.0-SNAPSHOT.jar JAR file

Step 3: Create Dropwizard counters in your application code Create Dropwizard gauges or counters in your application code

### NEW QUESTION 4

- (Exam Topic 5)

You have an Azure SQL managed instance named SQL1 and two Azure web apps named App1 and App2. You need to limit the number of IOPs that App2 queries generate on SQL1.

Which two actions should you perform on SQL1? Each correct answer presents part of the solution.

NOTE:Each correct selection is worth one point.

- A. Enable query optimizer fixes.
- B. Enable Resource Governor.
- C. Enable parameter sniffing.
- D. Create a workload group.
- E. Configure In-memory OLTP.
- F. Run the Database Engine Tuning Advisor.
- G. Reduce the Max Degree of Parallelism value.

**Answer:** BD

#### Explanation:

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/resource-governor/resource-governor?view=sql-server>

### NEW QUESTION 5

- (Exam Topic 5)

You have an Azure Data Factory that contains 10 pipelines.

You need to label each pipeline with its main purpose of either ingest, transform, or load. The labels must be available for grouping and filtering when using the monitoring experience in Data Factory.

What should you add to each pipeline?

- A. an annotation
- B. a resource tag
- C. a run group ID
- D. a user property
- E. a correlation ID

**Answer:** A

#### Explanation:

Azure Data Factory annotations help you easily filter different Azure Data Factory objects based on a tag. You can define tags so you can see their performance or find errors faster.

Reference:  
<https://www.techtalkcorner.com/monitor-azure-data-factory-annotations/>

NEW QUESTION 6

- (Exam Topic 5)  
You have an Azure SQL database named DB 1 in the General Purpose service tier. You need to monitor DB 1 by using SQL Insights.  
What should you include in the solution? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

To collect monitoring data, use:

A virtual machine

An Azure function

The Azure Monitor agent

To store monitoring data, create:

A Log Analytics workspace

An Azure SQL database

An Azure Storage account

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:  
Box 1 = Azure Monitor Agent Box 2 = An Azure SQL database  
<https://docs.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql>

NEW QUESTION 7

- (Exam Topic 5)  
You have an instance of SQL Server on Azure Virtual Machines named SQL1. SQL1 contains a database named DB1.  
You need to enable Transparent Data Encryption (TDE) for DB1.  
Which three objects should you create in sequence? To answer, move the appropriate objects from the list of objects to the answer area and arrange them in the correct order.

Objects

a database encryption key in the master database

a master key in DB1

a certificate in DB1

a master key in the master database

a certificate in the master database

a database encryption key in DB1

Answer Area

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Objects

a database encryption key in the master database

a master key in DB1

a certificate in DB1

a master key in the master database

a certificate in the master database

a database encryption key in DB1

Answer Area

a master key in the master database

a certificate in the master database

a database encryption key in DB1

NEW QUESTION 8

- (Exam Topic 5)  
You have an on-premises Microsoft SQL Server 2016 server named Server1 that contains a database named DB1.  
You need to perform an online migration of DB1 to an Azure SQL Database managed instance by using Azure Database Migration Service.  
How should you configure the backup of DB1? To answer, select the appropriate options in the answer area. NOTE:Each correct selection is worth one point.



## Answer Area

Backup type:

	▼
Full and log backups only	
Full backup only	
Log backup only	

Backup option:

	▼
WITH CHECKSUM	
WITH NOINIT	
WITH UNLOAD	

- A. Mastered
- B. Not Mastered

**Answer:** A

### Explanation:

Box 1: Full and log backups only

Make sure to take every backup on a separate backup media (backup files). Azure Database Migration Service doesn't support backups that are appended to a single backup file. Take full backup and log backups to separate backup files.

Box 2: WITH CHECKSUM

Azure Database Migration Service uses the backup and restore method to migrate your on-premises databases to SQL Managed Instance. Azure Database Migration Service only supports backups created using checksum.

Reference:

<https://docs.microsoft.com/en-us/azure/dms/known-issues-azure-sql-db-managed-instance-online>

### NEW QUESTION 9

- (Exam Topic 5)

You have an Azure SQL database named db1 on a server named server1.

The Intelligent Insights diagnostics log identifies that several tables are missing indexes. You need to ensure that indexes are created for the tables.

What should you do?

- A. Run the DBCC SQLPERF command.
- B. Run the dbcc dbreindex command.
- C. Modify the automatic tuning settings for db1.
- D. Modify the Query Store settings for db1.

**Answer:** C

### Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/automatic-tuning-overview>

### NEW QUESTION 10

- (Exam Topic 5)

You need to migrate an on-premises Microsoft SQL Server database to Azure SQL Database. The solution must minimize downtime.

What should you do?

- A. Configure Transaction Log Shipping.
- B. Implement Always On availability groups.
- C. Configure transactional replication.
- D. Import a BACPAC.

**Answer:** C

### Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/migrate-to-database-from-sql-server#method-1-migra>

### NEW QUESTION 10

- (Exam Topic 5)

You have SQL Server 2019 on an Azure virtual machine that runs Windows Server 2019. The virtual machine has 4 vCPUs and 28 GB of memory.

You scale up the virtual machine to 16 vCPUs and 64 GB of memory. You need to provide the lowest latency for tempdb.

What is the total number of data files that tempdb should contain?

- A. 2
- B. 4
- C. 8
- D. 64

Answer: D

**Explanation:**

The number of files depends on the number of (logical) processors on the machine. As a general rule, if the number of logical processors is less than or equal to eight, use the same number of data files as logical processors. If the number of logical processors is greater than eight, use eight data files and then if contention continues, increase the number of data files by multiples of 4 until the contention is reduced to acceptable levels or make changes to the workload/code.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/databases/tempdb-database>

**NEW QUESTION 11**

- (Exam Topic 5)

You have an Azure Databricks resource.

You need to log actions that relate to changes in compute for the Databricks resource. Which Databricks services should you log?

- A. clusters
- B. jobs
- C. DBFS
- D. SSH
- E. workspace

Answer: E

**Explanation:**

Cloud Provider Infrastructure Logs.

Databricks logging allows security and admin teams to demonstrate conformance to data governance standards within or from a Databricks workspace.

Customers, especially in the regulated industries, also need records on activities like:

- > User access control to cloud data storage
- > Cloud Identity and Access Management roles
- > User access to cloud network and compute

Azure Databricks offers three distinct workloads on several VM Instances tailored for your data analytics workflow—the Jobs Compute and Jobs Light Compute workloads make it easy for data engineers to build and execute jobs, and the All-Purpose Compute workload makes it easy for data scientists to explore, visualize, manipulate, and share data and insights interactively.

Reference:

<https://databricks.com/blog/2020/03/25/trust-but-verify-with-databricks.html>

**NEW QUESTION 16**

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine that contains a database named DB1. DB1 is 30 TB and has a 1-GB daily rate of change.

You back up the database by using a Microsoft SQL Server Agent job that runs Transact-SQL commands. You perform a weekly full backup on Sunday, daily differential backups at 01:00, and transaction log backups every five minutes.

The database fails on Wednesday at 10:00.

Which three backups should you restore in sequence? To answer, move the appropriate backups from the list of backups to the answer area and arrange them in the correct order.

Actions	Answer Area
Monday, Tuesday, and then Wednesday differential backups	
Wednesday, Tuesday, and then Monday log backups	
full backup	
Monday, Tuesday, and then Wednesday log backups	
Wednesday, Tuesday, and then Monday differential backups	
Wednesday log backups	
Wednesday differential backup	

- A. Mastered
- B. Not Mastered

Answer: A

**Explanation:**

## Actions

Monday, Tuesday, and then Wednesday differential backups

Wednesday, Tuesday, and then Monday log backups

full backup

Monday, Tuesday, and then Wednesday log backups

Wednesday, Tuesday, and then Monday differential backups

Wednesday log backups

Wednesday differential backup

## Answer Area

full backup

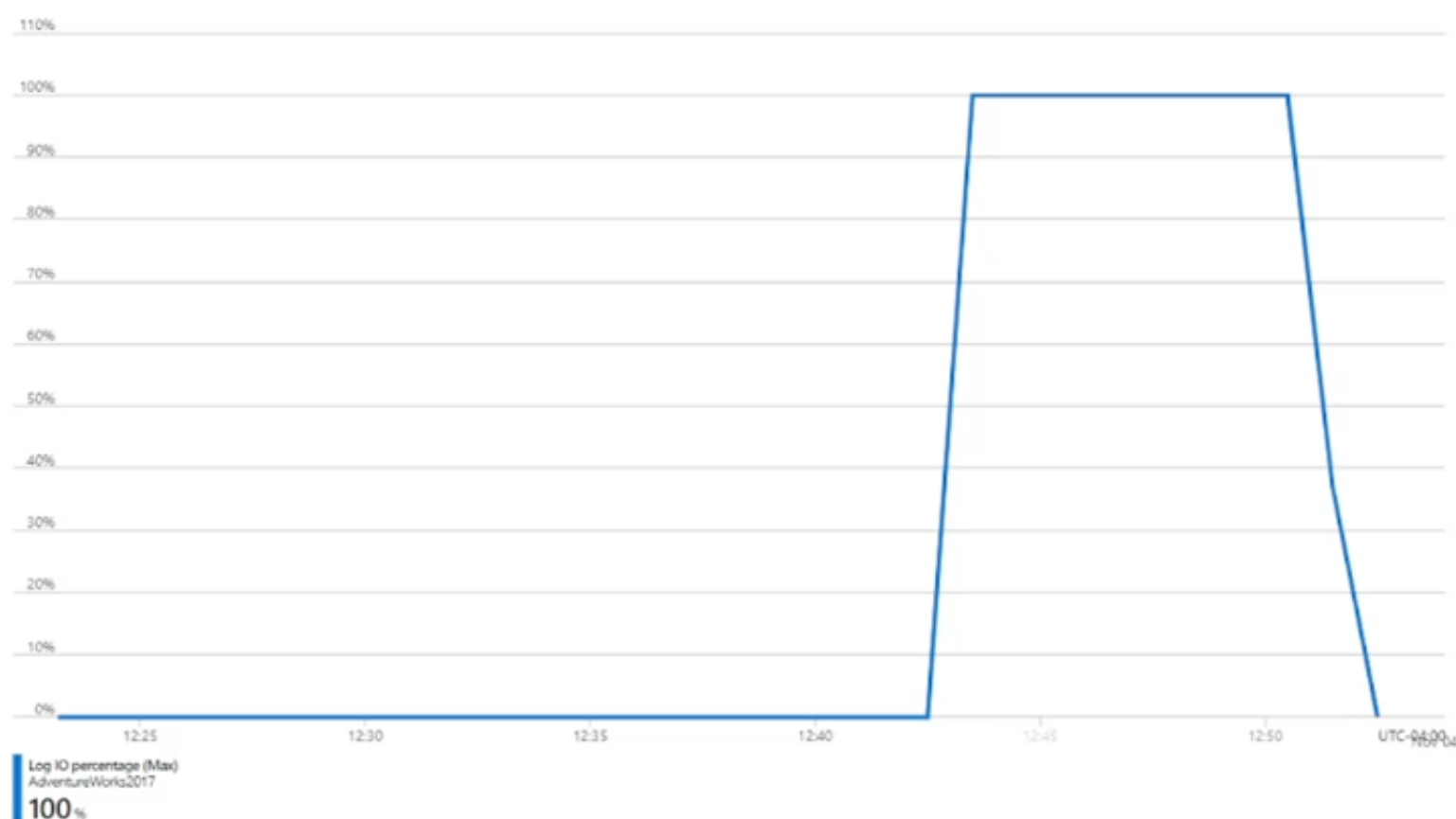
Wednesday differential backup

Wednesday log backups

### NEW QUESTION 17

- (Exam Topic 5)

You have an Azure SQL database named DB1 in the General Purpose service tier. The performance metrics for DB1 are shown in the following exhibit.



You need to reduce the Log 10 percentage. The solution must minimize costs. What should you do?

- A. Increase the number of vCores.
- B. Change Recoverymodel to Simple.
- C. Perform checkpoint operation.
- D. Change Service tier to Business Critical.

**Answer: D**

### NEW QUESTION 19

- (Exam Topic 5)

You manage 100 Azure SQL managed instances located across 10 Azure regions.

You need to receive voice message notifications when a maintenance event affects any of the 10 regions. The solution must minimize administrative effort. What should you do?

- A. From the Azure portal, create a service health alert.
- B. From the Azure portal, create an Azure Advisor operational excellence alert.
- C. From Microsoft SQL Server Management Studio (SSMS), configure a SQL Server agent job.
- D. From the Azure portal, configure an activity log alert.

**Answer: C**



NEW QUESTION 21

- (Exam Topic 5)

You have a new Azure SQL database named DB1 on an Azure SQL server named AzSQL1. The only user who was created is the server administrator. You need to create a contained database user in DB1 who will use Azure Active Directory (Azure AD) for authentication. Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Connect to DB1 by using the Active Directory admin account.

Create a user by using the FROM EXTERNAL PROVIDER clause.

Connect to DB1 by using the server administrator account.

Set the Active Directory Admin for AzSQL1.

From the Azure portal, assign the SQL DB Contributor role to the user.

Create a login in the master database.

Answer Area

>

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- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: Set up the Active Directory Admin for AzSQL1. Step 2: Connect to DB1 by using the server administrator. Sign into your managed instance with an Azure AD login granted with the sysadmin role. Step 3: Create a user by using the FROM EXTERNAL PROVIDER clause. FROM EXTERNAL PROVIDER is available for creating server-level Azure AD logins in SQL Database managed instance. Azure AD logins allow database-level Azure AD principals to be mapped to server-level Azure AD logins. To create an Azure AD user from an Azure AD login use the following syntax: CREATE USER [AAD\_principal] FROM LOGIN [Azure AD login] Reference: <https://docs.microsoft.com/en-us/sql/t-sql/statements/create-user-transact-sql>

NEW QUESTION 26

- (Exam Topic 5)

You have an Azure SQL managed instance. You need to restore a database named DB1 by using Transact-SQL. Which command should you run? To answer, select the appropriate options in the answer area. NOTE:Each correct selection is worth one point.

RESTORE

DATABASE

FILE

LOG

DB1 FROM

DISK = N'\\NAS01\SSQLBackups\DB1.bak';

TAPE = N'\\Tape0'

URL = N'https://mybackups.blob.core.windows.net/bkups/DB1.bak'

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

NEW QUESTION 31

- (Exam Topic 5)

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



**Explanation:**

The Query Store feature in Azure Database for MySQL provides a way to track query performance over time. Query Store simplifies performance troubleshooting by helping you quickly find the longest running and most resource-intensive queries. Query Store automatically captures a history of queries and runtime statistics, and it retains them for your review. It separates data by time windows so that you can see database usage patterns. Data for all users, databases, and queries is stored in the mysql schema database in the Azure Database for MySQL instance. Reference:  
<https://docs.microsoft.com/en-us/azure/mysql/concepts-query-store>

**NEW QUESTION 35**

- (Exam Topic 5)

You have an Azure SQL database named DB1 in the General Purpose service tier. You need to monitor DB1 by using SQL insights.

What should you include in the solution? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

**Answer Area**

To collect monitoring data, use:

	▼
A virtual machine	
An Azure function	
The Azure Monitor agent	

To store monitoring data, create:

	▼
A Log Analytics workspace	
An Azure SQL database	
An Azure Storage account	

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

**Answer Area**

To collect monitoring data, use:

	▼
A virtual machine	
An Azure function	
The Azure Monitor agent	

To store monitoring data, create:

	▼
A Log Analytics workspace	
An Azure SQL database	
An Azure Storage account	

**NEW QUESTION 40**

- (Exam Topic 5)

You have an Azure SQL database.

Users report that the executions of a stored procedure are slower than usual. You suspect that a regressed query is causing the performance issue.

You need to view the query execution plan to verify whether a regressed query is causing the issue. The solution must minimize effort.

What should you use?

- A. Performance Recommendations in the Azure portal
- B. Extended Events in Microsoft SQL Server Management Studio (SSMS)
- C. Query Store in Microsoft SQL Server Management Studio (SSMS)
- D. Query Performance Insight in the Azure portal

**Answer: C**

**Explanation:**

Use the Query Store Page in SQL Server Management Studio.

Query performance regressions caused by execution plan changes can be non-trivial and time consuming to resolve.

Since the Query Store retains multiple execution plans per query, it can enforce policies to direct the Query Processor to use a specific execution plan for a query.

This is referred to as plan forcing. Plan forcing in Query Store is provided by using a mechanism similar to the USE PLAN query hint, but it does not require any change in user applications. Plan forcing can resolve a query performance regression caused by a plan change in a very short period of time.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/performance/monitoring-performance-by-using-the-qu>

**NEW QUESTION 41**

- (Exam Topic 5)

You have an instance of SQL Server on Azure Virtual Machines.

You need to ensure that a user named User1 can configure proxy accounts for SQL Server Agent jobs. The solution must use the principle of least privilege. Which role should you assign to User1?

- A. sysadmin
- B. SQLAgentUserRole
- C. SQLAgentReaderRole
- D. SQLAgentOperatorRole

Answer: A

NEW QUESTION 43

- (Exam Topic 5)

You create a new Azure SQL managed instance named SQL1 and enable Database Mail extended stored You need to ensure that SQ Server Agent jobs running on SQL 1 can notify when a failure Occurs  
Which three actions should you perform in sequence 7 TO answer. move the appropriate actions from the list Of actions to answer area and arrange them in correct order.

Actions

Create a Database Mail account.

Enable pager notifications upon failure.

Create a profile named AzureManagedInstance\_dbmail\_profile.

Enable email notifications upon failure.

Create a profile named application\_dbmail\_profile.

Answer Area

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- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Actions

Create a Database Mail account.

Enable pager notifications upon failure.

Create a profile named AzureManagedInstance\_dbmail\_profile.

Enable email notifications upon failure.

Create a profile named application\_dbmail\_profile.

Answer Area

Create a Database Mail account.

Create a profile named AzureManagedInstance\_dbmail\_profile.

Enable email notifications upon failure.

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NEW QUESTION 45

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine that contains a database named Db1. You need to enable automatic tuning for Db1. How should you complete the statements? To answer, select the appropriate answer in the answer area.  
NOTE:Each correct selection is worth one point.

ALTER DATABASE [Db1]

SET AUTOMATIC\_TUNING (FORCE\_LAST\_GOOD\_PLAN=OFF)  
 SET AUTOMATIC\_TUNING (FORCE\_LAST\_GOOD\_PLAN=ON)  
 SET AUTOMATIC\_TUNING=AUTO  
 SET QUERY\_STORE=OFF  
 SET QUERY\_STORE=ON(OPERATION\_MODE=READ\_ONLY)  
 SET QUERY\_STORE=ON(OPERATION\_MODE=READ\_WRITE)

GO

ALTER DATABASE [Db1]

SET AUTOMATIC\_TUNING (FORCE\_LAST\_GOOD\_PLAN=OFF)  
 SET AUTOMATIC\_TUNING (FORCE\_LAST\_GOOD\_PLAN=ON)  
 SET AUTOMATIC\_TUNING=AUTO  
 SET QUERY\_STORE=OFF  
 SET QUERY\_STORE=ON(OPERATION\_MODE=READ\_ONLY)  
 SET QUERY\_STORE=ON(OPERATION\_MODE=READ\_WRITE)

GO

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Box 1: SET AUTOMATIC\_TUNING = AUTO

To enable automatic tuning on a single database via T-SQL, connect to the database and execute the following query:

ALTER DATABASE current SET AUTOMATIC\_TUNING = AUTO

Setting automatic tuning to AUTO will apply Azure Defaults.

Box 2: SET AUTOMATIC\_TUNING (FORCE\_LAST\_GOOD\_PLAN = ON)

To configure individual automatic tuning options via T-SQL, connect to the database and execute the query such as this one:

ALTER DATABASE current SET AUTOMATIC\_TUNING (FORCE\_LAST\_GOOD\_PLAN = ON)

Setting the individual tuning option to ON will override any setting that database inherited and enable the tuning option. Setting it to OFF will also override any setting that database inherited and disable the tuning option.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/automatic-tuning-enable>

**NEW QUESTION 48**

- (Exam Topic 5)

You have an Azure subscription that contains a SQL Server on Azure Virtual Machines instance named SQLVMI. SQLVMI hosts a database named OBI.

You need to retrieve query plans from the Query Store on DBI. What should you do first?

- A. On SQLVM1, install the SQL Server IaaS Agent extension.
- B. From Microsoft SQL Server Management Studio, modify the properties of the SQL Server instance.
- C. From Microsoft SQL Server Management Studio, modify the properties of DB 1.
- D. On SQLVM1, install the Azure Monitor agent for Windows.

**Answer:** B

**NEW QUESTION 49**

- (Exam Topic 5)

You have an Azure subscription that contains a storage account named databasebackups. You have an Azure SQL managed instance named DB1.

You need to back up DB1 to databasebackups.

How should you complete the commands? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.



## Answer Area

CREATE CREDENTIAL

[https://databasebackups.blob.core.windows.net/Backups]

WITH IDENTITY =

'SHARED ACCESS SIGNATURE'

'DatabaseBackups'

'KeyVault1'

'SHARED ACCESS SIGNATURE'

SECRET = 'sp=r&st=2023-02-02T19:23:08Z&se=2033-02-02T19:30:08Z&spr=https&sv=2021-06-08&sr=b&sig=B%2FxEYQi0C%4BqyYCeqlwHSz2QpRI%2FKcg3ZABz78J2kix3JZjk%3D'

BACKUP DATABASE DB1

TO URL =

'https://databasebackups.blob.core.windows.net/Backups/db1.bak'

WITH

COPY\_ONLY

CHECKSUM

COMPRESSION

COPY\_ONLY

DIFFERENTIAL

- A. Mastered  
 B. Not Mastered

Answer: A

Explanation:

## Answer Area

CREATE CREDENTIAL

[https://databasebackups.blob.core.windows.net/Backups]

WITH IDENTITY =

'SHARED ACCESS SIGNATURE'

'DatabaseBackups'

'KeyVault1'

'SHARED ACCESS SIGNATURE'

SECRET = 'sp=r&st=2023-02-02T19:23:08Z&se=2033-02-02T19:30:08Z&spr=https&sv=2021-06-08&sr=b&sig=B%2FxEYQi0C%4BqyYCeqlwHSz2QpRI%2FKcg3ZABz78J2kix3JZjk%3D'

BACKUP DATABASE DB1

TO URL =

'https://databasebackups.blob.core.windows.net/Backups/db1.bak'

WITH

COPY\_ONLY

CHECKSUM

COMPRESSION

COPY\_ONLY

DIFFERENTIAL

## NEW QUESTION 54

- (Exam Topic 5)

You have an Azure subscription that contains two instances of SQL Server on Azure Virtual Machines named VM1 and VM2. Both instances run Microsoft SQL Server 2019 CU8. You need to deploy a failover cluster instance (FCI) to VM1 and VM2. The solution must eliminate the need for the following:

- A distributed network name (DNN)
- A load balancer

- A. Deploy VM1 and VM2 to a single proximity placement group.  
 B. Deploy VM1 and VM2 to different proximity placement groups in the same Azure region.  
 C. Connect VM1 and VM2 to a single subnet.  
 D. Connect VM1 and VM2 to different subnets on a single virtual network.

**Answer:** D

#### NEW QUESTION 55

- (Exam Topic 5)

You have an Azure subscription that contains an Azure Data Factory version 2 (V2) data factory named df1. DF1 contains a linked service.

You have an Azure Key vault named vault1 that contains an encryption key named key1. You need to encrypt df1 by using key1.

What should you do first?

- A. Disable purge protection on vault1.
- B. Remove the linked service from df1.
- C. Create a self-hosted integration runtime.
- D. Disable soft delete on vault1.

**Answer:** B

#### Explanation:

A customer-managed key can only be configured on an empty data Factory. The data factory can't contain any resources such as linked services, pipelines and data flows. It is recommended to enable customer-managed key right after factory creation.

Note: Azure Data Factory encrypts data at rest, including entity definitions and any data cached while runs are in progress. By default, data is encrypted with a randomly generated Microsoft-managed key that is uniquely assigned to your data factory.

Reference:

<https://docs.microsoft.com/en-us/azure/data-factory/enable-customer-managed-key>

#### NEW QUESTION 56

- (Exam Topic 5)

You have an Azure virtual machine named VM1 on a virtual network named VNet1. Outbound traffic from VM1 to the internet is blocked.

You have an Azure SQL database named SqlDb1 on a logical server named SqlSrv1.

You need to implement connectivity between VM1 and SqlDb1 to meet the following requirements:

- Ensure that VM1 cannot connect to any Azure SQL Server other than SqlSrv1.
- Restrict network connectivity to SqlSrv1. What should you create on VNet1?

- A. a VPN gateway
- B. a service endpoint
- C. a private endpoint
- D. an ExpressRoute gateway

**Answer:** C

#### Explanation:

A private endpoint is a network interface that uses a private IP address from your virtual network. This network interface connects you privately and securely to a service powered by Azure Private Link. By enabling a private endpoint, you're bringing the service into your virtual network.

The service could be an Azure service such as:

- Azure Storage
- Azure Cosmos DB
- Azure SQL Database
- Your own service using a Private Link Service. Reference:

<https://docs.microsoft.com/en-us/azure/private-link/private-endpoint-overview>

#### NEW QUESTION 59

- (Exam Topic 5)

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure Data Lake Storage account that contains a staging zone.

You need to design a daily process to ingest incremental data from the staging zone, transform the data by executing an R script, and then insert the transformed data into a data warehouse in Azure Synapse Analytics.

Solution: You use an Azure Data Factory schedule trigger to execute a pipeline that copies the data to a staging table in the data warehouse, and then uses a stored procedure to execute the R script.

Does this meet the goal?

- A. Yes
- B. No

**Answer:** A

#### Explanation:

If you need to transform data in a way that is not supported by Data Factory, you can create a custom activity with your own data processing logic and use the activity in the pipeline. You can create a custom activity to run R scripts on your HDInsight cluster with R installed.

Reference:

<https://docs.microsoft.com/en-US/azure/data-factory/transform-data>

#### NEW QUESTION 64

- (Exam Topic 5)

You have SQL Server 2019 on an Azure virtual machine that contains an SSISDB database. A recent failure causes the master database to be lost.

You discover that all Microsoft SQL Server integration Services (SSIS) packages fail to run on the virtual machine.

Which four actions should you perform in sequence to resolve the issue? To answer, move the appropriate actions from the list of actions to the answer area and

arrange them in the correct.

Actions	Answer Area
Add a certificate to an Azure key vault	
Enable Transparent Data Encryption (TDE)	
Encrypt a copy of the master key by using the service master key	
Turn on the TRUSTWORTHY property and the CLR property	
Attach the SSISDB database	
Open the master key for the SSISDB database	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Step 1: Attach the SSISDB database

Step 2: Turn on the TRUSTWORTHY property and the CLR property

If you are restoring the SSISDB database to an SQL Server instance where the SSISDB catalog was never created, enable common language runtime (clr)

Step 3: Open the master key for the SSISDB database

Restore the master key by this method if you have the original password that was used to create SSISDB.

open master key decryption by password = 'LS1Setup!' --'Password used when creating SSISDB' Alter Master Key Add encryption by Service Master Key

Step 4: Encrypt a copy of the mater key by using the service master key Reference:

<https://docs.microsoft.com/en-us/sql/integration-services/backup-restore-and-move-the-ssis-catalog>

**NEW QUESTION 68**

- (Exam Topic 5)

You have an Azure SQL Database instance named DatabaseA on a server named Server1.

You plan to add a new user named App1 to DatabaseA and grant App1 db\_datacenter permissions. App1 will use SQL Server Authentication.

You need to create App1. The solution must ensure that App1 can be given access to other databases by using the same credentials.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
On the master database, run <code>CREATE LOGIN [APP1] FROM EXTERNAL PROVIDER;</code>	
On DatabaseA, run <code>CREATE USER [APP1] WITH PASSWORD = 'P@ssW0rd!';</code>	
On DatabaseA, run <code>ALTER ROLE db_datareader ADD MEMBER [App1];</code>	
On the master database, run <code>CREATE LOGIN [App1] WITH PASSWORD = 'P@aaW0rd!';</code>	
On DatabaseA, run <code>CREATE USER [App1] FROM LOGIN [App1];</code>	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Step 1: On the master database, run `CREATE LOGIN [App1] WITH PASSWORD = 'p@aaW0rd!'`

Logins are server wide login and password pairs, where the login has the same password across all databases. Here is some sample Transact-SQL that creates a login:



CREATE LOGIN readonlylogin WITH password='1231!#ASDF!a';

You must be connected to the master database on SQL Azure with the administrative login (which you get from the SQL Azure portal) to execute the CREATE LOGIN command.

Step 2: On DatabaseA, run CREATE USER [App1] FROM LOGIN [App1]

Users are created per database and are associated with logins. You must be connected to the database in where you want to create the user. In most cases, this is not the master database. Here is some sample Transact-SQL that creates a user:

CREATE USER readonlyuser FROM LOGIN readonlylogin;

Step 3: On DatabaseA run ALTER ROLE db\_datareader ADD Member [App1]

Just creating the user does not give them permissions to the database. You have to grant them access. In the Transact-SQL example below the readonlyuser is given read only permissions to the database via the db\_datareader role.

EXEC sp\_addrolemember 'db\_datareader', 'readonlyuser'; Reference:

<https://azure.microsoft.com/en-us/blog/adding-users-to-your-sql-azure-database/>

### NEW QUESTION 73

- (Exam Topic 5)

You have an Azure SQL database named DB1.

You need to ensure that DB1 will support automatic failover without data loss if a datacenter fails. The solution must minimize costs.

Which deployment option and pricing tier should you configure?

- A. Azure SQL Database Hyperscale
- B. Azure SQL Database managed instance General Purpose
- C. Azure SQL Database Premium
- D. Azure SQL Database Basic

**Answer: C**

#### Explanation:

By default, the cluster of nodes for the premium availability model is created in the same datacenter. With the introduction of Azure Availability Zones, SQL Database can place different replicas of the Business Critical database to different availability zones in the same region. To eliminate a single point of failure, the control ring is also duplicated across multiple zones as three gateway rings (GW). The routing to a specific gateway ring is controlled by Azure Traffic Manager (ATM). Because the zone redundant configuration in the Premium or Business Critical service tiers does not create additional database redundancy, you can enable it at no extra cost. By selecting a zone redundant configuration, you can make your Premium or Business Critical databases resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes to the application logic. You can also convert any existing Premium or Business Critical databases or pools to the zone redundant configuration.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla>

### NEW QUESTION 75

- (Exam Topic 5)

You have an Azure Synapse Analytics dedicated SQL pool.

You run PDW\_SHOWSPACEUSED('dbo.FactInternetSales'); and get the results shown in the following table.

ROWS	RESERVED_SPACE	DATA_SPACE	INDEX_SPACE	UNUSED_SPACE	PDW_NODE_ID	DISTRIBUTION_ID
694	2776	616	48	2112	1	1
407	2704	576	48	2080	1	2
53	2376	512	16	1848	1	3
58	2376	512	16	1848	1	4
168	2632	528	32	2072	1	5
195	2696	536	32	2128	1	6
5995	3464	1424	32	2008	1	7
0	2232	496	0	1736	1	8
264	2576	544	40	1992	1	9
3008	3016	960	32	2024	1	10
...	...	...	...	...	...	...
1550	2832	752	48	2032	1	50
1238	2832	696	40	2096	1	51
192	2632	528	32	2072	1	52
1127	2768	680	48	2040	1	53
1244	3032	704	64	2264	1	54
409	2632	568	32	2032	1	55
0	2232	496	0	1736	1	56
1437	2832	728	40	2064	1	57
0	2232	496	0	1736	1	58
384	2632	560	32	2040	1	59
225	2768	544	40	2184	1	60

Which statement accurately describes the dbo.FactInternetSales table?

- A. The table contains less than 10,000 rows.
- B. All distributions contain data.
- C. The table uses round-robin distribution
- D. The table is skewed.

**Answer: D**

#### Explanation:

The rows per distribution can vary up to 10% without a noticeable impact on performance. Here the distribution varies more than 10%. It is skewed.  
 Note: SHOWSPACEUSED displays the number of rows, disk space reserved, and disk space used for a specific table, or for all tables in a Azure Synapse Analytics or Parallel Data Warehouse database.  
 This is a very quick and simple way to see the number of table rows that are stored in each of the 60 distributions of your database. Remember that for the most balanced performance, the rows in your distributed table should be spread evenly across all the distributions.  
 ROUND\_ROBIN distributed tables should not be skewed. Data is distributed evenly across the nodes by design.  
 Reference:  
<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tables-distribu> [https://github.com/rgl/azure-](https://github.com/rgl/azure-content/blob/master/articles/sql-data-warehouse/sql-data-warehouse-manage-distrib)  
[content/blob/master/articles/sql-data-warehouse/sql-data-warehouse-manage-distrib](https://github.com/rgl/azure-content/blob/master/articles/sql-data-warehouse/sql-data-warehouse-manage-distrib)

#### NEW QUESTION 77

- (Exam Topic 5)

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

#### Explanation:

Geo-redundant storage (with GRS or GZRS) replicates your data to another physical location in the secondary region to protect against regional outages. However, that data is available to be read only if the customer or Microsoft initiates a failover from the primary to secondary region. When you enable read access to the secondary region, your data is available to be read if the primary region becomes unavailable. For read access to the secondary region, enable read-access geo-redundant storage (RA-GRS) or read-access geo-zone-redundant storage (RA-GZRS).

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy>

#### NEW QUESTION 80

- (Exam Topic 5)

You have a new Azure subscription.

You create an Azure SQL Database instance named DB1 on an Azure SQL Database server named Server1. You need to ensure that users can connect to DB1 in the event of an Azure regional outage. In the event of an outage, applications that connect to DB1 must be able to connect without having to update the connection strings.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE:Each correct selection is worth one point.

- A. From the properties of DB1. configure geo-replication.
- B. From the properties of Server1 add a failover group.
- C. Create a new Azure SQL Database server named Server2.
- D. From the properties of Server1 configure retention for DB1
- E. Create a new Azure SQL Database instance named DB2.

**Answer:** BC

#### Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/auto-failover-group-overview?tabs=azure-powershell> <https://docs.microsoft.com/en-us/azure/azure-sql/database/failover-group-add-single-database-tutorial?tabs=azur>

#### NEW QUESTION 82

- (Exam Topic 5)

You have an Azure SQL Database managed instance named sqldbmi1 that contains a database name Sales. You need to initiate a backup of Sales.

How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

#### BACKUP DATABASE Sales

	▼
TO DISK = \\BackupSystem\BackupDisk1\Sales.bak'	
TO DISK = 'X:\BAK\Sales.bak'	
TO 'Sales_Backup'	
TO URL = 'https://storage1.blob.core.windows.net/blob1/Sales.bak'	

WITH STATS = 5,

	▼
WITH COPY_ONLY;	
WITH ENCRYPTION;	
WITH FILE_SNAPSHOT;	
WITH NO_TRUNCATE	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Box 1: TO URL = 'https://storage1.blob.core.windows.net/blob1/Sales.bak' Native database backup in Azure SQL Managed Instance.  
 You can backup any database using standard BACKUP T-SQL command: BACKUP DATABASE tpcc2501  
 TO URL = 'https://myacc.blob.core.windows.net/testcontainer/tpcc2501.bak'  
 WITH COPY\_ONLY  
 Box 2: WITH COPY\_ONLY  
 Reference:  
<https://techcommunity.microsoft.com/t5/azure-sql-database/native-database-backup-in-azure-sql-managed-insta>

**NEW QUESTION 87**

- (Exam Topic 5)

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.

NOTE:Each correct selection is worth one point.

- 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:** ACE

**Explanation:**

CE: Estimate the vCores needed for the pool as follows:  
 For vCore-based purchasing model: MAX(<Total number of DBs X average vCore utilization per DB>,  
 <Number of concurrently peaking DBs X Peak vCore utilization per DB>  
 A: Estimate the storage space needed for the pool by adding the number of bytes needed for all the databases in the pool.  
 Reference:  
<https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview>

**NEW QUESTION 91**

- (Exam Topic 5)

You have an Azure subscription that contain an Azure SQL managed instance named SQLMI1 and a Log Analytics workspace named Workspace1.  
 You need to collect performance metrics for SQLMI1 and stream the metrics to Workspace1.

- A. Create the private endpoint connection on SQLMI1.
- B. Configure Azure SQL Analytics to use Workspace1.
- C. Modify the Computer + storage settings for SQLMI1.
- D. Modify the diagnostic settings for SQLMI1.

**Answer:** B

**NEW QUESTION 93**

- (Exam Topic 5)

You have an Azure subscription.  
 You need to deploy a logical SQL server by using PowerShell. The solution must ensure that the logical SQL server can create Azure AD users and provide Transparent Data Encryption (TDE} with a customer-managed key.  
 How should you complete the command? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

**Answer Area**

```
New-AzSqlServer -ResourceGroupName "RG1" -ServerName "SQL1" -Location "EastUS" -ErrorAction Stop
  -Tags @{Environment="Databases";Department="Data Tech"}
  -assignidentity
  -federatedclientID
  -keyid
  "https://db1.vault.azure.net/keys/dbkey/01234234512345678901234561823942"
```

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

"Assigned Identity" and "Key  
 id"<https://learn.microsoft.com/en-us/powershell/module/az.sql/new-azsqlserver?view=azps-10.2.0#code-try-3>

**NEW QUESTION 97**

- (Exam Topic 5)

You have an Azure subscription.



You need to deploy two instances of SQL Server on Azure virtual machines in a highly available configuration that will use an Always On availability group. The solution must meet the following requirements:

- Minimize how long it takes to fail over.
- Maintain existing connections to the primary replica during a failover. What should you do?

- A. Connect each virtual machine to a single subnet on a single virtual network.
- B. Connect each virtual machine to a single subnet on a virtual network
- C. Deploy a standard Azure load balancer.
- D. Connect each virtual machine to a different subnet on a single virtual network.
- E. Connect each virtual machine to a different subnet on a virtual network
- F. Deploy a basic Azure load balancer.

**Answer: C**

#### NEW QUESTION 98

- (Exam Topic 5)

You have an Azure virtual machine named VM1 on a virtual network named VNet1. Outbound traffic from VM1 to the internet is blocked.

You have an Azure SQL database named SqlDb1 on a logical server named SqlSrv1.

You need to implement connectivity between VM1 and SqlDb1 to meet the following requirements:

- Ensure that all traffic to the public endpoint of SqlSrv1 is blocked.
- Minimize the possibility of VM1 exfiltrating data stored in SqlDb1. What should you create on VNet1?

- A. a VPN gateway
- B. a service endpoint
- C. a private link
- D. an ExpressRoute gateway

**Answer: C**

#### Explanation:

Azure Private Link enables you to access Azure PaaS Services (for example, Azure Storage and SQL Database) and Azure hosted customer-owned/partner services over a private endpoint in your virtual network.

Traffic between your virtual network and the service travels the Microsoft backbone network. Exposing your service to the public internet is no longer necessary.

Reference:

<https://docs.microsoft.com/en-us/azure/private-link/private-link-overview>

#### NEW QUESTION 101

- (Exam Topic 5)

You have an Azure subscription that contains the resources shown in the following table.

Name	Type	Azure region
VM1	Azure virtual machine	West US 2
MI1	Azure SQL Managed Instance	East US

You need to configure a connection between VM1 and MI1. The solution must meet the following requirements:

- The connection must be encrypted.
- Network latency must be minimized. What should you implement?

- A. virtual network peering
- B. private endpoints
- C. service endpoints
- D. a site-to-site VPN

**Answer: B**

#### NEW QUESTION 105

- (Exam Topic 5)

You have a SQL Server on Azure Virtual Machines instance named SQLVM1 that was deployed by using an Azure Marketplace SQL Server 2019 Enterprise image.

You need to change the Microsoft SQL Server instance on SQLVM1 to the Standard edition. The solution must ensure licensing compliance.

What should you do first?

- A. From the SQL Server Installation Center on SQLVM1, run the Edition Upgrade wizard.
- B. From SQLVM1, uninstall the SQL Server instance.
- C. From the SQL Server Installation Center on SQLVM1, run the Repair wizard.
- D. From the Azure portal, reconfigure SQLVM1.

**Answer: B**

#### NEW QUESTION 106

- (Exam Topic 5)

You have an Azure SQL managed instance named SQLMI1 that hosts 10 databases.

You need to implement alerts by using Azure Monitor. The solution must meet the following requirements: ➤ Minimize costs.

- Aggregate Intelligent Insights telemetry from each database. What should you do?

- A. From the Diagnostic settings of each database, select Send to Log Analytics.

- B. From the Diagnostic settings of each database, select Stream to an event hub.
- C. From the Diagnostic settings of SQLMI1. select Send to Log Analytics.
- D. From the Diagnostic settings of SQLMI1. select Stream to an event hub.

**Answer:** A

**Explanation:**

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/metrics-diagnostic-telemetry-logging-streaming-expo>

**NEW QUESTION 107**

- (Exam Topic 5)

You have an Azure SQL Database elastic pool that contains 10 databases. You receive the following alert.

Msg 1132, Level 16, State 1, Line 1

The elastic pool has reached its storage limit. The storage used for the elastic pool cannot exceed (76800) MBs.

You need to resolve the alert. The solution must minimize administrative effort.

Which three actions can you perform? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

- A. Delete data from a database.
- B. Remove a database from the pool.
- C. Increase the maximum storage of the elastic pool.
- D. Shrink individual databases.
- E. Enable data compression.

**Answer:** BCD

**NEW QUESTION 109**

- (Exam Topic 5)

You are designing an enterprise data warehouse in Azure Synapse Analytics that will contain a table named Customers. Customers will contain credit card information.

You need to recommend a solution to provide salespeople with the ability to view all the entries in Customers. The solution must prevent all the salespeople from viewing or inferring the credit card information.

What should you include in the recommendation?

- A. row-level security
- B. data masking
- C. Always Encrypted
- D. column-level security

**Answer:** B

**Explanation:**

Azure SQL Database, Azure SQL Managed Instance, and Azure Synapse Analytics support dynamic data masking. Dynamic data masking limits sensitive data exposure by masking it to non-privileged users.

The Credit card masking method exposes the last four digits of the designated fields and adds a constant string as a prefix in the form of a credit card.

Example:

XXXX-XXXX-XXXX-1234

**NEW QUESTION 113**

- (Exam Topic 5)

You have an Azure subscription that contains two Azure SQL managed instances named SQLMI1 and SQLMI2 . SQLMI2 contains a database named DB1 and a user named User1.

User1 drops DB1.

You need to perform a point-in-time restore of DB1 to SQLMI2.

- A. Azure CLI
- B. Transact-SQL
- C. The Azure portal
- D. Azure PowerShell

**Answer:** C

**NEW QUESTION 114**

- (Exam Topic 5)

You have a database named db1.

The log for db1 contains the following entry.

```
Date 10/5/2021 10:57:08 AM
Log SQL Server (Current - 10/5/2021 11:26:00 AM)

Source spid1595

Message
The transaction log for database 'db1' is full due to 'AVAILABILITY_REPLICA'
```

You need to ensure That db1 can process transactions.

Actions

Add db1 back to the availability group.

Shrink db1.

Shrink the transaction log file.

Remove db1 from the availability group.

Back up the transaction log file.

Answer Area

>

<

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Actions

Add db1 back to the availability group.

Shrink db1.

Shrink the transaction log file.

Remove db1 from the availability group.

Back up the transaction log file.

Answer Area

Remove db1 from the availability group.

Shrink the transaction log file.

Add db1 back to the availability group.

NEW QUESTION 115

- (Exam Topic 5)

You have an Azure SQL database. The database contains a table that uses a columnstore index and is accessed infrequently. You enable columnstore archival compression. What are two possible results of the configuration? Each correct answer presents a complete solution. NOTE:Each correct selection is worth one point.

- A. Queries that use the index will consume more disk I/O.
- B. Queries that use the index will retrieve fewer data pages.
- C. The index will consume more disk space.
- D. The index will consume more memory.
- E. Queries that use the index will consume more CPU resources.

Answer: BE

Explanation:

For rowstore tables and indexes, use the data compression feature to help reduce the size of the database. In addition to saving space, data compression can help improve performance of I/O intensive workloads because the data is stored in fewer pages and queries need to read fewer pages from disk. Use columnstore archival compression to further reduce the data size for situations when you can afford extra time and CPU resources to store and retrieve the data.

NEW QUESTION 116

- (Exam Topic 5)

Your on-premises network contains a server that hosts a 60-TB database named DB 1. The network has a 10-Mbps internet connection. You need to migrate DB 1 to Azure. The solution must minimize how long it takes to migrate the database. What should you use?

- A. Azure Migrate
- B. Data Migration Assistant (DMA)
- C. Azure Data BOX
- D. Azure Database Migration Service

Answer: C

Explanation:

<https://www.techtarget.com/searchitoperations/tip/Easily-transfer-VMs-to-the-cloud-with-Microsoft-Azure-Mig>

NEW QUESTION 120



- (Exam Topic 5)

A data engineer creates a table to store employee information for a new application. All employee names are in the US English alphabet. All addresses are locations in the United States. The data engineer uses the following statement to create the table.

```
CREATE TABLE dbo.Employee
(
    EmployeeID INT IDENTITY(1,1) PRIMARY KEY CLUSTERED NOT NULL,
    FirstName VARCHAR(100) NOT NULL,
    LastName VARCHAR(100) NOT NULL,
    Title VARCHAR(100) NULL,
    LastHireDate DATETIME NULL,
    StreetAddress1 VARCHAR(500) NOT NULL,
    StreetAddress2 VARCHAR(500) NOT NULL,
    StreetAddress3 VARCHAR(500) NOT NULL,
    City VARCHAR(200) NOT NULL,
    StateName VARCHAR(20) NOT NULL,
    Salary VARCHAR(20) NULL,
    PhoneNumber VARCHAR(20) NOT NULL
)
```

You need to recommend changes to the data types to reduce storage and improve performance.

Which two actions should you recommend? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. ChangeSalaryto themoneydata type.
- B. ChangePhoneNumbertothefloatdata type.
- C. ChangeLastHireDatetothedatetime2(7)data type.
- D. ChangePhoneNumbertothebigintdata type.
- E. ChangeLastHireDatetothedatedata type.

**Answer:** AE

#### NEW QUESTION 124

- (Exam Topic 5)

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. NOTE: Each correct selection is worth one point.

- 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:** BD

#### Explanation:

B: Dynamic Thresholds continuously learns the data of the metric series and tries to model it using a set of algorithms and methods. It detects patterns in the data such as seasonality (Hourly / Daily / Weekly), and is able to handle noisy metrics (such as machine CPU or memory) as well as metrics with low dispersion (such as availability and error rate).

D: Alert threshold sensitivity is a high-level concept that controls the amount of deviation from metric behavior required to trigger an alert.

Low – The thresholds will be loose with more distance from metric series pattern. An alert rule will only trigger on large deviations, resulting in fewer alerts.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/platform/alerts-dynamic-thresholds>

#### NEW QUESTION 129

- (Exam Topic 5)

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have SQL Server 2019 on an Azure virtual machine.

You are troubleshooting performance issues for a query in a SQL Server instance.

To gather more information, you querysys.dm\_exec\_requestsand discover that the wait type isPAGELATCH\_UPand thewait\_resourceis2:3:905856.

You need to improve system performance.

Solution: You change the data file for the master database to autogrow by 10 percent. Does this meet the goal?

- A. Yes
- B. No

**Answer:** B

#### Explanation:

Reference:

<https://docs.microsoft.com/en-US/troubleshoot/sql/performance/recommendations-reduce-allocation-contention>

#### NEW QUESTION 131

- (Exam Topic 5)

You have an Azure virtual machine named VM1 that runs Windows Server 2022 and hosts a Microsoft SQL Server 2019 instance named SQL1. You need to

configure SQL! to use mixed mode authentication. Which procedure should you run?

- A. sp\_addremotelogin
- B. xp\_instance\_regwrite
- C. sp\_cnarge\_users\_login
- D. xp\_grant\_login

**Answer: B**

#### NEW QUESTION 136

- (Exam Topic 5)

You have an on-premises Microsoft SQL Server 2016 instance that hosts a database named db1. You have an Azure subscription that contains an Azure SQL managed instance named Mil.

You plan to perform an online migration of db1 to MM by using Azure Database Migration Service.

You need to create the backups for the migration. The solution must minimize the number of backup files created.

Which type of backups should you create, and how should you store the backups? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

**Answer Area**

Backup type:

To store the backups:

- A. Mastered
- B. Not Mastered

**Answer: A**

**Explanation:**

**Answer Area**

Backup type:

To store the backups:

#### NEW QUESTION 139

- (Exam Topic 5)

You create five Azure SQL Database instances on the same logical server.

In each database, you create a user for an Azure Active Directory (Azure AD) user named User1. User1 attempts to connect to the logical server by using Azure Data Studio and receives a login error.

You need to ensure that when User1 connects to the logical server by using Azure Data Studio, User1 can see all the databases.

What should you do?

- A. Create User1 in the master database.
- B. Assign User1 the db\_datareader role for the master database.
- C. Assign User1 the db\_datareader role for the databases that User1 creates.
- D. Grantselecton sys.databases to public in the master database.

**Answer: A**

**Explanation:**

Reference:

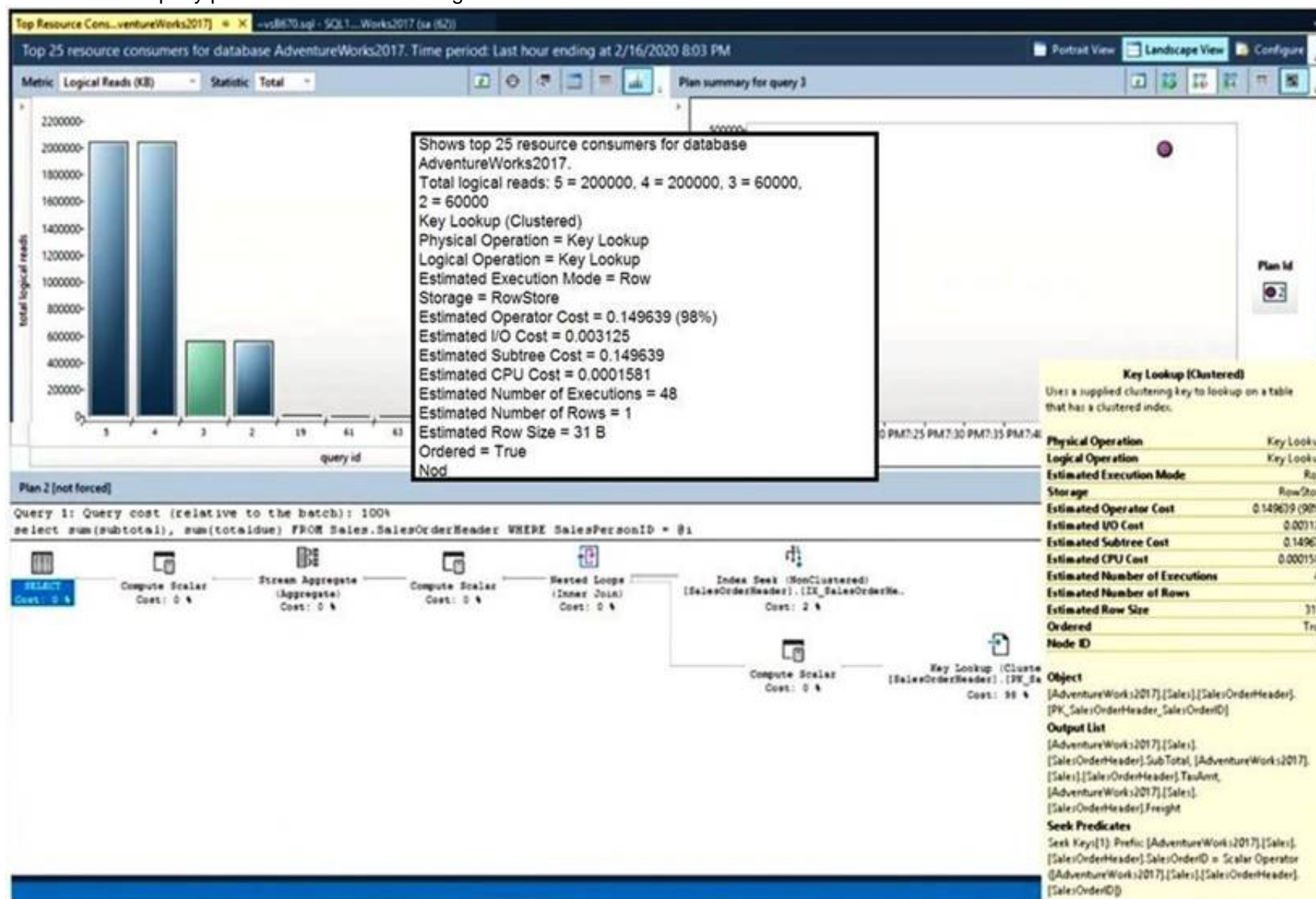
<https://docs.microsoft.com/en-us/azure/azure-sql/database/logins-create-manage>

### NEW QUESTION 141

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine.

You review the query plan shown in the following exhibit.



For each of the following statements, select yes if the statement is true. Otherwise, select no.

NOTE:Each correct selection is worth one point.

#### Statements

Yes

No

You will reduce the I/O usage and the query execution time if you force the query plan.

☐
☐

You will increase the I/O usage and the query execution time if you create a new index on the SalesOrderHeader table.

☐
☐

You will reduce the I/O usage and the query execution time if you include the SubTotal, TaxAmt, and Freight columns in the PK\_SalesOrderHeader\_SalesOrderID index.

☐
☐

A. Mastered

B. Not Mastered

Answer: A

Explanation:

Reference:

https://docs.microsoft.com/en-us/sql/relational-databases/performance/monitoring-performance-by-using-the-qu

### NEW QUESTION 142

- (Exam Topic 5)

A company plans to use Apache Spark analytics to analyze intrusion detection data.

You need to recommend a solution to analyze network and system activity data for malicious activities and policy violations. The solution must minimize administrative efforts.

What should you recommend?

A. Azure Data Lake Storage

B. Azure Databricks

C. Azure HDInsight

D. Azure Data Factory

Answer: C

Explanation:

Azure HDInsight offers pre-made, monitoring dashboards in the form of solutions that can be used to monitor the workloads running on your clusters. There are solutions for Apache Spark, Hadoop, Apache Kafka, live long and process (LLAP), Apache HBase, and Apache Storm available in the Azure Marketplace.



Note: With Azure HDInsight you can set up Azure Monitor alerts that will trigger when the value of a metric or the results of a query meet certain conditions. You can condition on a query returning a record with a value that is greater than or less than a certain threshold, or even on the number of results returned by a query. For example, you could create an alert to send an email if a Spark job fails or if a Kafka disk usage becomes over 90 percent full.

Reference:

<https://azure.microsoft.com/en-us/blog/monitoring-on-azure-hdinsight-part-4-workload-metrics-and-logs/>

#### NEW QUESTION 143

- (Exam Topic 5)

You have an on-premises Microsoft SQL Server 2019 server that hosts a database named DB1.

You have an Azure subscription that contains an Azure SQL managed instance named SQLMI1 and a virtual network named VNET1. SQLMI1 resides on VNET1.

The on-premises network connects to VNET1 by using an ExpressRoute connection.

You plan to migrate DB1 to SQLMI1 by using Azure Database Migration Service. You need to configure VNET1 to support the migration.

What should you do?

- A. Configure service endpoints.
- B. Configure virtual network peering.
- C. Deploy an Azure firewall.
- D. Configure network security groups (NSGs).

**Answer:** A

**Explanation:**

Reference:

<https://docs.microsoft.com/en-us/azure/dms/tutorial-sql-server-to-managed-instance>

#### NEW QUESTION 144

- (Exam Topic 5)

You have an Azure subscription.

You plan to deploy an Azure SQL database by using an Azure Resource Manager template.

How should you complete the template? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

#### Answer Area

```
{
  "resources": [
    {
      "type": 
      "apiVersion": "2020-02-02-preview",
      "name": "[parameters('name1')]",
      "location": "[parameters('location')]",
      ...
      "resources": [
        {
          "type": "databases",
          "apiVersion": "2020-02-02-preview",
          ...
          "dependsOn": [
            "properties": [
              "tags": [
                "[resourceId('Microsoft.Sql/servers', concat(parameters('name1')))]"
              ]
            ]
          ]
        }
      ]
    }
  ]
}
```

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Text Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/single-database-create-arm-template-quickstart>

#### NEW QUESTION 145

- (Exam Topic 5)

You plan to create a table in an Azure Synapse Analytics dedicated SQL pool.

Data in the table will be retained for five years. Once a year, data that is older than five years will be deleted. You need to ensure that the data is distributed evenly

across partitions. The solutions must minimize the amount of time required to delete old data.

How should you complete the Transact-SQL statement? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all.

You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

### Values

### Answer Area

Values	Answer Area
CustomerKey	CREATE TABLE [dbo].[FactSales]
HASH	(
ROUND_ROBIN	[ProductKey] int NOT NULL
REPLICATE	, [OrderDateKey] int NOT NULL
OrderDateKey	, [CustomerKey] int NOT NULL
SalesOrderNumber	, [SalesOrderNumber] nvarchar ( 20 ) NOT NULL
	, [OrderQuantity] smallint NOT NULL
	, [UnitPrice] money NOT NULL
	)
	WITH
	(
	CLUSTERED COLUMNSTORE INDEX
	DISTRIBUTION = [ ] ([ProductKey])
	PARTITION ( [ ] RANGE RIGHT FOR VALUES
	(20170101, 20180101, 20190101, 20200101, 20210101)
	)
	)

- A. Mastered
- B. Not Mastered

Answer: A

### Explanation:

Graphical user interface, text, application Description automatically generated

Box 1: HASH

Box 2: OrderDateKey

In most cases, table partitions are created on a date column.

A way to eliminate rollbacks is to use Metadata Only operations like partition switching for data management. For example, rather than execute a DELETE statement to delete all rows in a table where the order\_date was in October of 2001, you could partition your data early. Then you can switch out the partition with data for an empty partition from another table.

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/create-table-azure-sql-data-warehouse> <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/best-practices-dedicated-sql-pool>

### NEW QUESTION 147

- (Exam Topic 5)

You have an Azure subscription that contains the resources shown in the following table.

Name	Type	Description
SQL1	SQL Server on Azure Virtual Machines	Not applicable
db1	Microsoft SQL Server database	Hosted on SQL1
mysqlbackups	General purpose v2 storage account	Not applicable

You need to back up db1 to mysqlbackups, and then restore the backup to a new database named db2 that is hosted on SQL1. The solution must ensure that db1 is backed up to a stripe set.

Which three Transact-SQL statements should you execute in sequence? To answer, move the appropriate statements from the list of statements to the answer area and arrange them in the correct order.

## Statements

## Answer Area

```
RESTORE DATABASE db2 FROM URL = URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_4.bak'
WITH CREDENTIAL = 'sqlbackup', RECOVERY,
MOVE 'db1_mdf' TO
'D:\Data\db2_mdf.mdf',
MOVE 'db1_log' TO
'D:\Logs\db2_log.ldf'
```

```
BACKUP DATABASE db1
TO URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_4.bak'
WITH CREDENTIAL = 'sqlbackup';
GO
```

```
RESTORE DATABASE db2 FROM URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_4.bak'
WITH RECOVERY,
MOVE 'db1_mdf' TO
'D:\Data\db2_mdf.mdf',
MOVE 'db1_log' TO
'D:\Logs\db2_log.ldf'
```

```
CREATE CREDENTIAL
[https://mysqlbackups.blob.core.windows.net/
backups]
WITH IDENTITY = 'SHARED ACCESS SIGNATURE',
SECRET = '<SAS_TOKEN>'
GO
```

```
BACKUP DATABASE db1
TO URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_1.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_2.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_3.bak'
, URL =
'https://mysqlbackups.blob.core.windows.net/
backups/db1_4.bak'
GO
```

```
CREATE CREDENTIAL [sqlbackup] WITH IDENTITY
=
'sqlsamplebackup'
, SECRET = '<mystorageaccountaccesskey>';
GO
```



- A. Mastered
- B. Not Mastered

**Answer:** A

### Explanation:

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/sql-server-backup-to-url?view=sql-serv>

### NEW QUESTION 149

- (Exam Topic 5)

You have an Azure Synapse Analytics Apache Spark pool named Pool1.

You plan to load JSON files from an Azure Data Lake Storage Gen2 container into the tables in Pool1. The structure and data types vary by file.

You need to load the files into the tables. The solution must maintain the source data types. What should you do?

- A. Load the data by using PySpark.
- B. Load the data by using the OPENROWSET Transact-SQL command in an Azure Synapse Analytics serverless SQL pool.
- C. Use a Get Metadata activity in Azure Data Factory.
- D. Use a Conditional Split transformation in an Azure Synapse data flow.



**Answer:** B

**Explanation:**

Serverless SQL pool can automatically synchronize metadata from Apache Spark. A serverless SQL pool database will be created for each database existing in serverless Apache Spark pools.

Serverless SQL pool enables you to query data in your data lake. It offers a T-SQL query surface area that accommodates semi-structured and unstructured data queries.

To support a smooth experience for in place querying of data that's located in Azure Storage files, serverless SQL pool uses the OPENROWSET function with additional capabilities.

The easiest way to see to the content of your JSON file is to provide the file URL to the OPENROWSET function, specify csv FORMAT.

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/query-json-files> <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/query-data-storage>

**NEW QUESTION 150**

- (Exam Topic 5)

You have an Azure SQL database named DB1.

You need to display the estimated execution plan of a query by using the query editor in the Azure portal.

What should you do first?

- A. Run the set showplan\_all Transact-SQL statement.
- B. For DB1, set QUERY\_CAPTURE\_MODE of Query Store to All.
- C. Run the set forceplan Transact-SQL statement.
- D. Enable Query Store for DB1.

**Answer:** A

**Explanation:**

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/set-showplan-all-transact-sql?view=sql-server-ver15>

**NEW QUESTION 154**

- (Exam Topic 5)

You have an Azure Synapse Analytics dedicated SQL pool named Pool1 and an Azure Data Lake Storage Gen2 account named Account1.


You plan to access the files in Account1 by using an external table.

You need to create a data source in Pool1 that you can reference when you create the external table. How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.


NOTE: Each correct selection is worth one point.

CREATE EXTERNAL DATA SOURCE source1

WITH

( LOCATION = 'https://account1.  .core.windows.net',

blob
dfs
table


PUSHDOWN = ON
TYPE = BLOB_STORAGE
TYPE = HADOOP

)

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Graphical user interface, table Description automatically generated

Box 1: blob

The following example creates an external data source for Azure Data Lake Gen2 CREATE EXTERNAL DATA SOURCE YellowTaxi

WITH ( LOCATION = 'https://azureopendatastorage.blob.core.windows.net/nyctlc/yellow/', TYPE = HADOOP)

Box 2: HADOOP

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-tables-external-tables>

**NEW QUESTION 155**

- (Exam Topic 5)

You are developing an application that uses Azure Data Lake Storage Gen 2.

You need to recommend a solution to grant permissions to a specific application for a limited time period. What should you include in the recommendation?

- A. role assignments
- B. account keys
- C. shared access signatures (SAS)
- D. Azure Active Directory (Azure AD) identities

Answer: C

Explanation:

A shared access signature (SAS) provides secure delegated access to resources in your storage account. With a SAS, you have granular control over how a client can access your data. For example:

What resources the client may access.

What permissions they have to those resources. How long the SAS is valid.

Note: Data Lake Storage Gen2 supports the following authorization mechanisms:

- > Shared Key authorization
- > Shared access signature (SAS) authorization
- > Role-based access control (Azure RBAC)
- > Shared Key authorization
- > Shared access signature (SAS) authorization
- > Role-based access control (Azure RBAC)
- > Access control lists (ACL)

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview>

NEW QUESTION 156

- (Exam Topic 5)

You need to apply 20 built-in Azure Policy definitions to all new and existing Azure SQL Database deployments in an Azure subscription. The solution must minimize administrative effort.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Duplicate Azure Policy definitions

Run Azure Policy remediation tasks

Create an Azure Blueprints assignment

Create an Azure Policy initiative

Create an Azure Policy initiative assignment

Answer Area

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: Create an Azure Policy Initiative

The first step in enforcing compliance with Azure Policy is to assign a policy definition. A policy definition defines under what condition a policy is enforced and what effect to take.

With an initiative definition, you can group several policy definitions to achieve one overarching goal. An initiative evaluates resources within scope of the assignment for compliance to the included policies.

Step 2: Create an Azure Policy Initiative assignment

Assign the initiative definition you created in the previous step. Step 3: Run Azure Policy remediation tasks

To apply the Policy Initiative to the existing SQL databases. Reference:

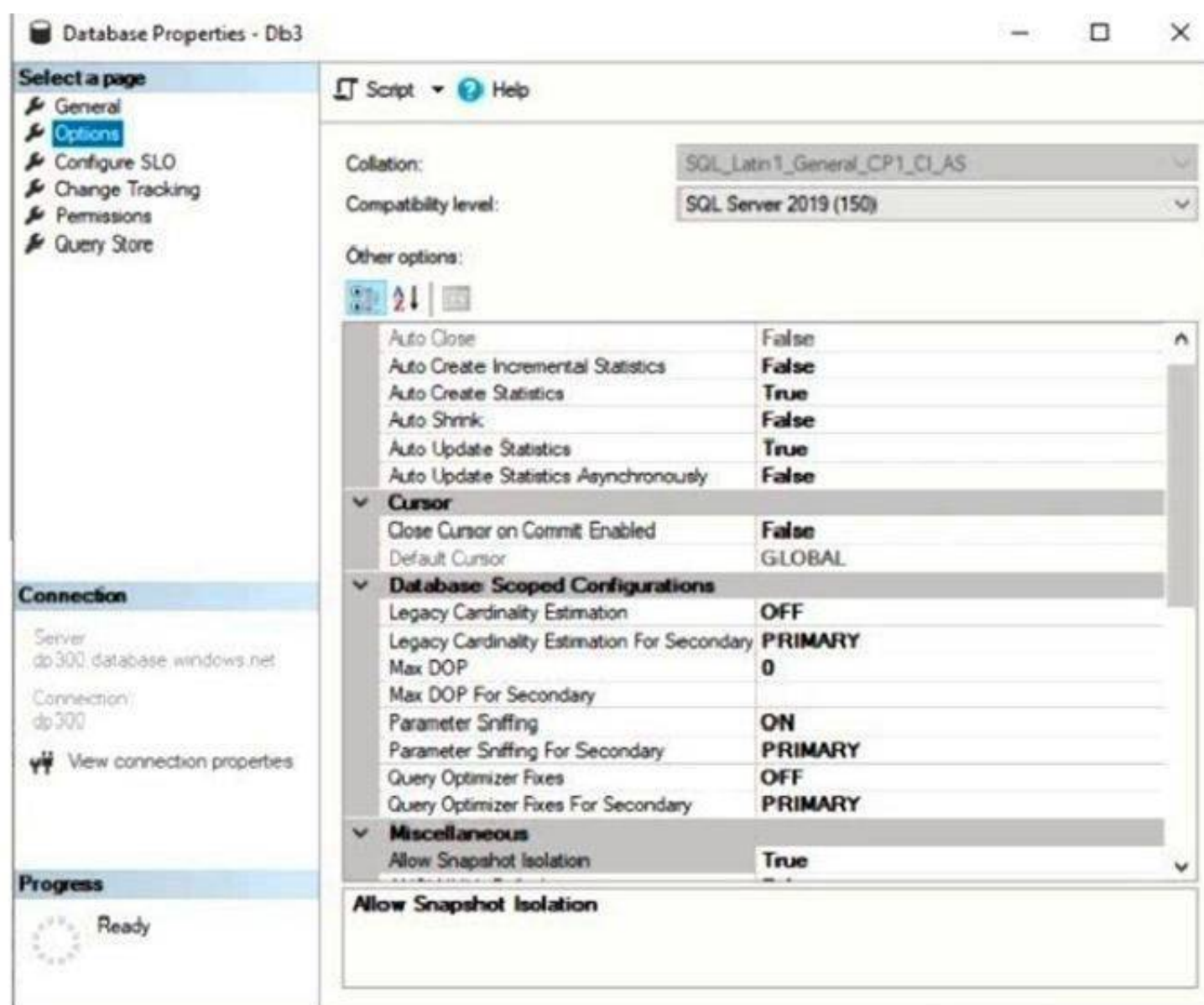
<https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage>

NEW QUESTION 159

- (Exam Topic 5)

You have an Azure SQL database named DB3.

You need to provide a user named DevUser with the ability to view the properties of DB3 from Microsoft SQL Server Management Studio (SSMS) as shown in the exhibit. (Click theExhibittab.)



Which Transact-SQL command should you run?

- A. GRANT SHOWPLAN TO DevUser
- B. GRANT VIEW DEFINITION TO DevUser
- C. GRANT VIEW DATABASE STATE TO DevUser
- D. GRANT SELECT TO DevUser

**Answer: C**

**Explanation:**

The exhibits displays Database [State] properties.

To query a dynamic management view or function requires SELECT permission on object and VIEW SERVER STATE or VIEW DATABASE STATE permission.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/databases/database-properties-options-page>

**NEW QUESTION 161**

- (Exam Topic 5)

You have an Azure SQL logical server. You run the following script.

```
CREATE DATABASE Sales
GO
CREATE TABLE [dbo].[Orders]
(
    [OrderID] INT NOT NULL,
    [OrderDescription] NVARCHAR (MAX) NOT NULL,
    [Timestamp] Datetime2 NOT NULL
)
WITH (
    SYSTEM_VERSIONING = ON,
    LEDGER = ON
);
GO
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

**NOTE:** Each correct selection is worth one point



Statements	Yes	No
The <code>orders</code> table will allow only rows to be inserted.	<input type="radio"/>	<input type="radio"/>
To create additional tables in the Sales database, the <code>LEDGER = ON</code> parameter must be used.	<input type="radio"/>	<input type="radio"/>
To ensure that a timestamp is added to each row in the <code>orders</code> table, the <code>GENERATED ALWAYS</code>	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

- Yes
- No No

#### NEW QUESTION 164

- (Exam Topic 5)

You have a Microsoft SQL Server 2019 database named DB1 that uses the following database-level and instance-level features.

- > Clustered columnstore indexes
- > Automatic tuning
- > Change tracking
- > PolyBase

You plan to migrate DB1 to an Azure SQL database.

What feature should be removed or replaced before DB1 can be migrated?

- A. Clustered columnstore indexes
- B. PolyBase
- C. Change tracking
- D. Automatic tuning

**Answer:** B

**Explanation:**

This table lists the key features for PolyBase and the products in which they're available.

Feature	SQL Server (Beginning with 2016)	Azure SQL Database	Azure Synapse Analytics	Parallel Data Warehouse
Query Hadoop data with Transact-SQL	Yes	No	No	Yes
Import data from Hadoop	Yes	No	No	Yes
Export data to Hadoop	Yes	No	No	Yes
Query, import from, export to Azure HDInsight	No	No	No	No
Push down query computations to Hadoop	Yes	No	No	Yes
Import data from Azure Blob storage	Yes	Yes*	Yes	Yes
Export data to Azure Blob storage	Yes	No	Yes	Yes
Import data from Azure Data Lake Store	No	No	Yes	No
Export data to Azure Data Lake Store	No	No	Yes	No
Run PolyBase queries from Microsoft BI tools	Yes	No	Yes	Yes

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/polybase/polybase-versioned-feature-summary>

#### NEW QUESTION 166

- (Exam Topic 5)

You have an Azure subscription.

You need to deploy an Azure SQL resource that will support cross database queries by using an Azure Resource Manager (ARM) template.

How should you complete the ARM template? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

## Answer Area

```

"resources": [
  ...
  "type": [
    Microsoft.Sql/servers
    Microsoft.Sql/servers/databases
    Microsoft.Sql/managedInstances
  ],
  "name": "[parameters('targetName')]",
  "location": "[parameters('location')]",
  "sku": {
    "name": "[parameters('skuName')]"
  },
  ...
  "dependsOn": [
    "[parameters('targetName')]",
    "[parameters('virtualNetworkName')]",
    "[variables('networkSecurityGroupName')]",
  ],
  "properties": {
    "administratorLogin": "[parameters('administratorLogin')]",
    "administratorLoginPassword": "[parameters('administratorLoginPassword')]",
    "subnetId": "[resourceId('Microsoft.Network/virtualNetworks/subnets', parameters('virtualNetworkName'), parameters('virtualNetworkName'), parameters('subnetName'))]",
    "storageSizeInGB": "[parameters('storageSizeInGB')]",
    "vCores": "[parameters('vCores')]",
    "licenseType": "[parameters('licenseType')]"
  },
  ...
]

```

- A. Mastered  
B. Not Mastered

Answer: A

### Explanation:

Graphical user interface, text, application, Word, email Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/create-template-quickstart?tabs=azure-powe>

### NEW QUESTION 167

- (Exam Topic 5)

You have an Azure SQL database named DB1.

You need to encrypt DB1. The solution must meet the following requirements;

- Encrypt data in motion.
- Support comparison operators.
- Provide randomized encryption.

What should you include in the solution?

- A. Always Encrypted  
B. column-level encryption  
C. Transparent Data Encryption (TDE)  
D. Always Encrypted with secure enclaves

Answer: A

### NEW QUESTION 170

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine named SQL1. SQL1 has an agent job to back up all databases.

You add a user named dbadmin1 as a SQL Server Agent operator. You need to ensure that dbadmin1 receives an email alert if a job fails.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Create a job alert	
Create a job notification	
Enable Database Mail	⤵
Enable the email settings for the SQL Server Agent	⤴
Create a job target	⤴

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Step 1: Enable the email settings for the SQL Server Agent.

To send a notification in response to an alert, you must first configure SQL Server Agent to send mail. Step 2: Create a job alert

Step 3: Create a job notification Example:

-- adds an e-mail notification for the specified alert (Test Alert)  
 -- This example assumes that Test Alert already exists  
 -- and that François Ajenstat is a valid operator name. USE msdb ;  
 GO

```
EXEC dbo.sp_add_notification
@alert_name = N'Test Alert',
@operator_name = N'François Ajenstat',
@notification_method = 1 ; GO
```

Reference:

<https://docs.microsoft.com/en-us/sql/ssms/agent/notify-an-operator-of-job-status> <https://docs.microsoft.com/en-us/sql/ssms/agent/assign-alerts-to-an-operator>

**NEW QUESTION 175**

- (Exam Topic 5)

You have an Azure data solution that contains an enterprise data warehouse in Azure Synapse Analytics named DW1.

Several users execute adhoc queries to DW1 concurrently. You regularly perform automated data loads to DW1.

You need to ensure that the automated data loads have enough memory available to complete quickly and successfully when the adhoc queries run.

What should you do?

- A. Assign a smaller resource class to the automated data load queries.
- B. Create sampled statistics to every column in each table of DW1.
- C. Assign a larger resource class to the automated data load queries.
- D. Hash distribute the large fact tables in DW1 before performing the automated data loads.

**Answer:** C

**Explanation:**

The performance capacity of a query is determined by the user's resource class.

Smaller resource classes reduce the maximum memory per query, but increase concurrency. Larger resource classes increase the maximum memory per query, but reduce concurrency.

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/resource-classes-for-workloadman>

**NEW QUESTION 179**

- (Exam Topic 5)

You are building an Azure virtual machine.

You allocate two 1-TiB, P30 premium storage disks to the virtual machine. Each disk provides 5,000 IOPS. You plan to migrate an on-premises instance of Microsoft SQL Server to the virtual machine. The instance has a database that contains a 1.2-TiB data file. The database requires 10,000 IOPS.

You need to configure storage for the virtual machine to support the database.

Which three objects should you create in sequence? To answer, move the appropriate objects from the list of objects to the answer area and arrange them in the correct order.



## Actions

## Answer Area

a virtual disk that uses the stripe layout

a virtual disk that uses the mirror layout

a volume

a virtual disk that uses the simple layout

a storage pool



- A. Mastered
- B. Not Mastered

**Answer:** A

### Explanation:

Follow these same steps to create striped virtual disk:

- > Create Log Storage Pool.
- > Create Virtual Disk
- > Create Volume

Box 1: a storage pool

Box 2: a virtual disk that uses stripe layout

Disk Striping: Use multiple disks and stripe them together to get a combined higher IOPS and Throughput limit. The combined limit per VM should be higher than the combined limits of attached premium disks.

Box 3: a volume Reference:

<https://hanu.com/hanu-how-to-striping-of-disks-for-azure-sql-server/>

### NEW QUESTION 184

- (Exam Topic 5)

You have an Azure virtual machine named VM1 on a virtual network named VNet1. Outbound traffic from VM1 to the internet is blocked.

You have an Azure SQL database named SqlDb1 on a logical server named SqlSrv1.

You need to implement connectivity between VM1 and SqlDb1 to meet the following requirements:

- > Ensure that VM1 cannot connect to any Azure SQL Server other than SqlSrv1.
- > Restrict network connectivity to SqlSrv1. What should you create on VNet1?

- A. a VPN gateway
- B. a service endpoint
- C. a private link
- D. an ExpressRoute gateway

**Answer:** B

### Explanation:

Azure Private Link enables you to access Azure PaaS Services (for example, Azure Storage and SQL Database) and Azure hosted customer-owned/partner services over a private endpoint in your virtual network.

Traffic between your virtual network and the service travels the Microsoft backbone network. Exposing your service to the public internet is no longer necessary.

Reference:

<https://docs.microsoft.com/en-us/azure/private-link/private-link-overview>

### NEW QUESTION 185

- (Exam Topic 5)

You have an Azure AD tenant and a logical Microsoft SQL server named SQL1 that hosts several Azure SQL databases.

You plan to assign Azure AD users permissions to the databases automatically by using Azure Automation. You need to create the required Automation accounts.

Which two accounts should you create? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- A. From the Azure Active Directory admin center, create a service principal.
- B. From the Azure Active Directory admin center, create a user-assigned managed identity for SQL1.
- C. On SQL1, create a SQL user in the databases.
- D. On SQL1, create a SQL login.
- E. From the Azure Active Directory admin center, create an external identity.

**Answer:** AC

### NEW QUESTION 187

- (Exam Topic 5)

You have an on-premises datacenter that contains a 2-TB Microsoft SQL Server 2019 database named DB1. You need to recommend a solution to migrate DB1 to

an Azure SQL managed instance. The solution must minimize downtime and administrative effort. What should you include in the recommendation?

- A. Log Replay Service (LRS)
- B. log shipping
- C. transactional replication
- D. SQL Data Sync

**Answer:** B

#### NEW QUESTION 189

- (Exam Topic 5)

You have several Azure SQL databases on the same Azure SQL Database server in a resource group named ResourceGroup1.

You must be alerted when CPU usage exceeds 80 percent for any database. The solution must apply to any additional databases that are created on the Azure SQL server.

Which resource type should you use to create the alert?

- A. Resource Groups
- B. SQL Servers
- C. SQL Databases
- D. SQL Virtual Machines

**Answer:** C

#### Explanation:

There are resource types related to application code, compute infrastructure, networking, storage + databases. You can deploy up to 800 instances of a resource type in each resource group.

Some resources can exist outside of a resource group. These resources are deployed to the subscription, management group, or tenant. Only specific resource types are supported at these scopes.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/resource-providers-and-types>

#### NEW QUESTION 192

- (Exam Topic 5)

You have 50 Azure SQL databases.

You need to notify the database owner when the database settings, such as the database size and pricing tier, are modified in Azure.

What should you do?

- A. Create a diagnostic setting for the activity log that has the Security log enabled.
- B. For the database, create a diagnostic setting that has the InstanceAndAppAdvanced metric enabled.
- C. Create an alert rule that uses a Metric signal type.
- D. Create an alert rule that uses an Activity Log signal type.

**Answer:** D

#### Explanation:

Activity log events - An alert can trigger on every event, or, only when a certain number of events occur. Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/alerts-insights-configure-portal>

#### NEW QUESTION 195

- (Exam Topic 5)

You have an Azure subscription that contains an Azure SQL database. The database fails to respond to queries in a timely manner.

You need to identify whether the issue relates to resource\_semaphore waits.

How should you complete the Transact-SQL query? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

```

SELECT
    is_user_process
    wait_time
    wait_type
    SUM(wait_time) AS total_wait_time_ms
FROM sys.
    dm_exec_query_stats
    dm_exec_requests
    query_store_query
JOIN sys.dm_exec_sessions AS dmvs2
    ON dmvs1.session_id = dmvs2.session_id
WHERE is_user_process = 1
GROUP BY wait_type
ORDER BY SUM(wait_time) DESC;

```

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Graphical user interface, text, application Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/monitoring-with-dmvs>

**NEW QUESTION 197**

- (Exam Topic 5)

You have an on-premises app named App1 that stores data in an on-premises Microsoft SQL Server 2016 database named DB1.

You plan to deploy additional instances of App1 to separate Azure regions. Each region will have a separate instance of App1 and DB1. The separate instances of DB1 will sync by using Azure SQL Data Sync.

You need to recommend a database service for the deployment. The solution must minimize administrative effort.

What should you include in the recommendation?

- A. Azure SQL Managed instance
- B. Azure SQL Database single database
- C. Azure Database for PostgreSQL
- D. SQL Server on Azure virtual machines

**Answer:** B

**Explanation:**

Azure SQL Database single database supports Data Sync. Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/features-comparison>

**NEW QUESTION 202**

- (Exam Topic 5)

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:** A

**Explanation:**

Active geo-replication is an Azure SQL Database feature that allows you to create readable secondary databases of individual databases on a server in the same or different data center (region).

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview>



#### NEW QUESTION 206

- (Exam Topic 4)

You need to implement the surrogate key for the retail store table. The solution must meet the sales transaction dataset requirements. What should you create?

- A. a table that has a FOREIGN KEY constraint
- B. a table the has an IDENTITY property
- C. a user-defined SEQUENCE object
- D. a system-versioned temporal table

**Answer: B**

#### Explanation:

Scenario: Contoso requirements for the sales transaction dataset include: Implement a surrogate key to account for changes to the retail store addresses.

A surrogate key on a table is a column with a unique identifier for each row. The key is not generated from the table data. Data modelers like to create surrogate keys on their tables when they design data warehouse models. You can use the IDENTITY property to achieve this goal simply and effectively without affecting load performance.

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tablesidentity>

#### NEW QUESTION 207

- (Exam Topic 2)

You need to implement a solution to notify the administrators. The solution must meet the monitoring requirements. What should you do?

- A. Create an Azure Monitor alert rule that has a static threshold and assign the alert rule to an action group.
- B. Add a diagnostic setting that logs QueryStoreRuntimeStatistics and streams to an Azure event hub.
- C. Add a diagnostic setting that logs Timeouts and streams to an Azure event hub.
- D. Create an Azure Monitor alert rule that has a dynamic threshold and assign the alert rule to an action group.

**Answer: D**

#### Explanation:

Reference:

<https://azure.microsoft.com/en-gb/blog/announcing-azure-monitor-aiops-alerts-with-dynamic-thresholds/>

#### NEW QUESTION 208

- (Exam Topic 1)

You are planning the migration of the SERVER1 databases. The solution must meet the business requirements.

What should you include in the migration plan? To answer, select the appropriate options in the answer area. NOTE:Each correct selection is worth one point.

Azure Database Migration Service pricing tier:

	▼
Standard 2-vCore	
Standard 4-vCore	
Premium 4-vCore	

Required Azure resource:

	▼
A virtual network that has service endpoints	
A VPN gateway	
An Azure Logic app	

- A. Mastered
- B. Not Mastered

**Answer: A**

#### Explanation:

Azure Database Migration service Box 1: Premium 4-VCore

Scenario: Migrate the SERVER1 databases to the Azure SQL Database platform.

➤ Minimize downtime during the migration of the SERVER1 databases.

Premium 4-vCore is for large or business critical workloads. It supports online migrations, offline migrations, and faster migration speeds.

Reference: <https://azure.microsoft.com/pricing/details/database-migration/>

<https://docs.microsoft.com/en-us/azure/dms/tutorial-sql-server-azure-sql-online>

#### NEW QUESTION 211

- (Exam Topic 1)

You create all of the tables and views for ResearchDB1.

You need to implement security for ResearchDB1. The solution must meet the security and compliance requirements.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Run the Always Encrypted wizard.	
Create an Azure Key Vault instance and generate a secret.	
Create an Azure Key Vault instance and configure an access policy.	
Create an Azure AD managed identity.	
Register ResearchApp1 to Azure AD.	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Graphical user interface, text, application Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/always-encrypted-azure-key-vault-configure?tabs=az>

**NEW QUESTION 215**

- (Exam Topic 1)

You need to recommend a solution to ensure that the customers can create the database objects. The solution must meet the business goals. What should you include in the recommendation?

- A. For each customer, grant the customer ddl\_admin to the existing schema.
- B. For each customer, create an additional schema and grant the customer ddl\_admin to the new schema.
- C. For each customer, create an additional schema and grant the customer db\_writerto the new schema.
- D. For each customer, grant the customer db\_writerto the existing schema.

**Answer:** B

**NEW QUESTION 219**

- (Exam Topic 1)

You need to implement statistics maintenance for SalesSQLDb1. The solution must meet the technical requirements.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

## Actions

## Answer Area

- Create and configure a schedule.
- Create a SQL Server Agent job.
- Publish the runbook.
- Create an Azure Automation account.
- Import the SqlServer module.
- Create a runbook that runs a PowerShell script.
- Run `sp_add_jobserver`.



- A. Mastered
- B. Not Mastered

**Answer:** A

### Explanation:

Automating Azure SQL DB index and statistics maintenance using Azure Automation:

- \* 1. Create Azure automation account (Step 1)
- \* 2. Import SQLServer module (Step 2)
- \* 3. Add Credentials to access SQL DB

This will use secure way to hold login name and password that will be used to access Azure SQL DB

- \* 4. Add a runbook to run the maintenance (Step 3)

Steps:1. Click on "runbooks" at the left panel and then click "add a runbook"

- \* 2. Choose "create a new runbook" and then give it a name and choose "PowerShell" as the type of the runbook and then click on "create"

Add Runbook	Runbook
Quick Create Create a new runbook	<p>* Name ⓘ  <input type="text" value="SqlMaintenance"/> ✓</p> <p>* Runbook type ⓘ  <input type="text" value="PowerShell"/> ▼</p> <p>Description  <input type="text" value=""/> ✓</p>
Import Import an existing runbook	

- \* 5. Schedule task (Step 4)

Steps:1. Click on Schedules2. Click on "Add a schedule" and follow the instructions to choose existing schedule or create a new schedule.

Reference:

<https://techcommunity.microsoft.com/t5/azure-database-support-blog/automating-azure-sql-db-index-and-statist>

### NEW QUESTION 222

- (Exam Topic 1)

You need to recommend a configuration for ManufacturingSQLDb1 after the migration to Azure. The solution must meet the business requirements.

What should you include in the recommendation? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.



Quorum model:

	▼
Cloud witness	
Disk witness	
File share witness	

Azure resource for the availability group listener:

	▼
Azure Application Gateway	
Azure Basic Load Balancer	

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Scenario: Business Requirements

Litware identifies business requirements include: meet an SLA of 99.99% availability for all Azure deployments.

Box 1: Cloud witness

If you have a Failover Cluster deployment, where all nodes can reach the internet (by extension of Azure), it is recommended that you configure a Cloud Witness as your quorum witness resource.

Box 2: Azure Basic Load Balancer

Microsoft guarantees that a Load Balanced Endpoint using Azure Standard Load Balancer, serving two or more Healthy Virtual Machine Instances, will be available 99.99% of the time.

Note: There are two main options for setting up your listener: external (public) or internal. The external (public) listener uses an internet facing load balancer and is associated with a publicVirtual IP (VIP) that is accessible over the internet. An internal listener uses an internal load balancer and only supports clients within the same Virtual Network.

Reference:

<https://technet.microsoft.com/windows-server-docs/failover-clustering/deploy-cloud-witness> [https://azure.microsoft.com/en-us/support/legal/sla/load-balancer/v1\\_0/](https://azure.microsoft.com/en-us/support/legal/sla/load-balancer/v1_0/)

**NEW QUESTION 224**

- (Exam Topic 1)

You need to provide an implementation plan to configure data retention for ResearchDB1. The solution must meet the security and compliance requirements. What should you include in the plan?

- A. Configure the Deleted databases settings for ResearchSrvOL
- B. Deploy and configure an Azure Backup server.
- C. Configure the Advanced Data Security settings for ResearchDBL
- D. Configure the Manage Backups settings for ResearchSrvOL

**Answer:** D

**Explanation:**

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/long-term-backup-retention-configure>

**NEW QUESTION 226**

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