

Microsoft

Exam Questions DP-300

Administering Relational Databases on Microsoft Azure (beta)



NEW QUESTION 1

- (Exam Topic 5)

You have an Azure Data Lake Storage Gen2 account named account1 that stores logs as shown in the following table.

Type	Designated retention period
Application	360 days
Infrastructure	60 days

You do not expect that the logs will be accessed during the retention periods.
 You need to recommend a solution for account1 that meets the following requirements:

- > Automatically deletes the logs at the end of each retention period
- > Minimizes storage costs

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.

To minimize storage costs:

Store the infrastructure logs and the application logs in the Archive access tier.

Store the infrastructure logs and the application logs in the Cool access tier.

Store the infrastructure logs in the Cool access tier and the application logs in the Archive access tier.

To delete the logs automatically:

Azure Data Factory pipelines

Azure Blob storage lifecycle management rules

Immutable Azure Blob storage time-based retention policies

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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 Box 1: Store the infrastructure logs in the Cool access tier the application logs in the Archive access tier Hot - Optimized for storing data that is accessed frequently.
 Cool - Optimized for storing data that is infrequently accessed and stored for at least 30 days.
 Archive - Optimized for storing data that is rarely accessed and stored for at least 180 days with flexible latency requirements, on the order of hours.
 Box 2: Azure Blob storage lifecycle management rules
 Blob storage lifecycle management offers a rich, rule-based policy that you can use to transition your data to the best access tier and to expire data at the end of its lifecycle.
 Reference:
<https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers>

NEW QUESTION 2

- (Exam Topic 5)

You have an Azure SQL database.

You discover that the plan cache is full of compiled plans that were used only once.

You run theselect * from sys.database_scoped_configurationsTransact-SQL command and receive the results shown in the following table.

configuration_id	name	value	is_value_default
1	LEGACY_CARDINALITY_ESTIMATION	0	1
2	QUERY_OPTIMIZER_HOTFIXES	0	1
3	OPTIMIZE_FOR_AD_HOC_WORKLOADS	0	1
4	ACCELERATED_PLAN_FORCING	1	1

You need relieve the memory pressure. What should you configure?

- A. LEGACY_CARDINALITY_ESTIMATION
- B. QUERY_OPTIMIZER_HOTFIXES
- C. OPTIMIZE_FOR_AD_HOC_WORKLOADS
- D. ACCELERATED_PLAN_FORCING

Answer: C

Explanation:

OPTIMIZE_FOR_AD_HOC_WORKLOADS = { ON | OFF }
 Enables or disables a compiled plan stub to be stored in cache when a batch is compiled for the first time. The default is OFF. Once the database scoped configuration OPTIMIZE_FOR_AD_HOC_WORKLOADS is enabled for a database, a compiled plan stub will be stored in cache when a batch is compiled for the first time. Plan stubs have a smaller memory footprint compared to the size of the full compiled plan.
 Reference:
<https://docs.microsoft.com/en-us/sql/t-sql/statements/alter-database-scoped-configuration-transact-sql>

NEW QUESTION 3

- (Exam Topic 5)
You have an Azure subscription.
You plan to deploy a new Azure virtual machine that will host a Microsoft SQL Server instance.
You need to configure the disks on the virtual machine. The solution must meet the following requirements:

- Minimize latency for transaction logs.
- Minimize the impact on IO Of the virtual machine.

Which type of disk should you use for each workload? To answer, drag the appropriate disk types to the correct workloads. Each disk type may be used once, 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.

Disk Types

Local

Premium SSD

Standard HDD

Standard SSD

Ultra Disk

Answer Area

TempDB:

Disk Type

Transaction logs:

Disk Type

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
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NEW QUESTION 4

- (Exam Topic 5)
You have an on-premises Microsoft SQL Server 2019 instance that hosts a database named DB1.
You plan to perform an online migration of DB1 to an Azure SQL managed instance by using the Azure Database Migration Service.
You need to create a backup of DB1 that is accessible to the Azure Database Migration Service.
What should you run for the backup and where should you store the backup? To answer, select the appropriate options in the answer area.
NOTE:Each correct selection is worth one point.

Run:

A full backup and a log backup appended to the same file by using the WITH CHECKSUM option

A full backup and a log backup to separate files by using the WITH CHECKSUM option

A full backup and a log backup to separate files by using the WITH FILE_SNAPSHOT option

Store the backup in:

A Recovery Services vault

An Azure Blob storage account

An SMB file share

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
Graphical user interface, application, Word Description automatically generated
Reference:
<https://docs.microsoft.com/en-us/azure/dms/tutorial-sql-server-managed-instance-online>

NEW QUESTION 5

- (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 Synapse Analytics dedicated SQL pool that contains a table named Table1. You have files that are ingested and loaded into an Azure Data Lake Storage Gen2 container named container1.
You plan to insert data from the files into Table1 and transform the data. Each row of data in the files will produce one row in the serving layer of Table1.
You need to ensure that when the source data files are loaded to container1, the DateTime is stored as an additional column in Table1.
Solution: You use a dedicated SQL pool to create an external table that has an additional DateTime column. Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead use a serverless SQL pool to create an external table with the extra column.
Note: In dedicated SQL pools you can only use Parquet native external tables. Native external tables are generally available in serverless SQL pools.
Reference:
<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/create-use-external-tables>

NEW QUESTION 6

- (Exam Topic 5)
You have an Azure subscription.
You need to deploy an Azure SQL managed instance by using an Azure Resource Manager (ARM) template. The solution must meet the following requirements:
The SQL managed instance must be assigned a unique identity.
The SQL managed instance must be available in the event of an Azure datacenter outage.
How should you complete the template? 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
<div>dnsZonePartner</div>	<pre>{ "type": "Microsoft.Sql/managedInstances", " }, "identity": { "type": <div></div> }, "dependsOn": ["[parameters('virtualNetworkName')]"], "properties": { "administratorLogin": "[parameters('administratorLogin')]", "administratorLoginPassword": "[parameters('administratorLoginPassword')]", "subnetId": "[resourceId('Microsoft.Network/virtualNetworks/subnets', "subnetId": "[resourceId('Microsoft.Network/virtualNetworks/subnets', parameters('virtualNetworkName'), parameters('subnetName'))]", "storageSizeInGB": 8192, "vCores": 80,"licenseType": "BasePrice", <div></div> : "True" } }</pre>
<div>storageAccountType</div>	
<div>SystemAssigned</div>	
<div>UserAssigned</div>	
<div>zoneRedundant</div>	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

```
{
  "type": "Microsoft.Sql/managedInstances",
  -
},
"identity": {
  "type": "SystemAssigned"
},
"dependsOn": [
  "[parameters('virtualNetworkName')]"
],
"properties": {
  "administratorLogin": "[parameters('administratorLogin')]",
  "administratorLoginPassword": "[parameters('administratorLoginPassword')]",
  "subnetId": "[resourceId('Microsoft.Network/virtualNetworks/subnets',
  "subnetId": "[resourceId('Microsoft.Network/virtualNetworks/subnets',
  parameters('virtualNetworkName'), parameters('subnetName'))]", "storageSizeInGB": 8192,
  "vCores": 80, "licenseType": "BasePrice",
  "zoneRedundant": "True"
}
}
```

NEW QUESTION 7

- (Exam Topic 5)

You have two on-premises servers that run Windows Server 2019 and host a Microsoft SQL Server 2017 Always On availability group named AG1. AG1 contains a single database named DB1.

You have an Azure subscription. The subscription contains a virtual machine named VM1 that runs Linux.

You need to migrate DB1 to a SQL Server 2019 instance on VM1. The solution must minimize the downtime of DB1 during the migration.

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

Answer Area

To prepare for the migration:

To perform the migration, use:

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

To prepare for the migration:

To perform the migration, use:

NEW QUESTION 8

- (Exam Topic 5)

You create a new Azure SQL managed instance named SQL1 and enable Database Mail extended stored procedures.

You need to ensure that SOL Server Agent jobs running on SQL 1 can notify administrators when a failure occurs.

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

Enable pager notifications upon failure.

Create a profile named application_dbmail_profile.

Create a Database Mail account.

Create a profile named AzureManagedInstance_dbmail_profile.

Enable email notifications upon failure.

Answer Area

1

2

3

>

<

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Actions

Enable pager notifications upon failure.

Create a profile named application_dbmail_profile.

Create a Database Mail account.

Create a profile named AzureManagedInstance_dbmail_profile.

Enable email notifications upon failure.

Answer Area

1

2

3

>

<

NEW QUESTION 9

- (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

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.

Answer Area

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- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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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 10

- (Exam Topic 5)

You have an Azure subscription. You need to deploy an Azure SQL database. The solution must meet the following requirements:

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- Dynamically scale CPU resources.
- Ensure that the database can be paused to reduce costs. What should you use?

- A. the Business Critical service tier
- B. the serverless compute tier
- C. an elastic pool
- D. the General Purpose service tier

Answer: B

NEW QUESTION 10

- (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 13

- (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 schedule an Azure Databricks job that executes an R notebook, and then inserts the data into the data warehouse.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Must use an Azure Data Factory, not an Azure Databricks job. Reference:

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

NEW QUESTION 17

- (Exam Topic 5)

You are designing an anomaly detection solution for streaming data from an Azure IoT hub. The solution must meet the following requirements:

- > Send the output to an Azure Synapse.
- > Identify spikes and dips in time series data.
- > Minimize development and configuration effort.

Which should you include in the solution?

- A. Azure SQL Database
- B. Azure Databricks
- C. Azure Stream Analytics

Answer: C

Explanation:

Anomalies can be identified by routing data via IoT Hub to a built-in ML model in Azure Stream Analytics Reference:

<https://docs.microsoft.com/en-us/learn/modules/data-anomaly-detection-using-azure-iot-hub/> <https://docs.microsoft.com/en-us/azure/stream-analytics/azure-synapse-analytics-output>

NEW QUESTION 21

- (Exam Topic 5)

You are designing a dimension table in an Azure Synapse Analytics dedicated SQL pool.

You need to create a surrogate key for the table. The solution must provide the fastest query performance. What should you use for the surrogate key?

- A. an IDENTITY column
- B. a GUID column
- C. a sequence object

Answer: A

Explanation:

Dedicated SQL pool supports many, but not all, of the table features offered by other databases. Surrogate keys are not supported. Implement it with an Identity column.

Reference:

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

NEW QUESTION 26

- (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 SQL database named Sales.

You need to implement disaster recovery for Sales to meet the following requirements:

- During normal operations, provide at least two readable copies of Sales.
- Ensure that Sales remains available if a datacenter fails.

Solution: You deploy an Azure SQL database that uses the General Purpose service tier and geo-replication. Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead deploy an Azure SQL database that uses the Business Critical service tier and Availability Zones. Note: Premium and Business Critical service tiers leverage the Premium availability model, which integrates compute resources (sqlservr.exe process) and storage (locally attached SSD) on a single node. High availability is achieved by replicating both compute and storage to additional nodes creating a three to four-node cluster.

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).

Reference:

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

NEW QUESTION 27

- (Exam Topic 5)

You plan to develop a dataset named Purchases by using Azure Databricks. Purchases will contain the following columns:

- ProductID
- ItemPrice
- LineTotal
- Quantity
- StoreID
- Minute
- Month
- Hour
- Year
- Day

You need to store the data to support hourly incremental load pipelines that will vary for each StoreID. The solution must minimize storage costs.

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

NOTE: Each correct selection is worth one point.

```
df.write
```

<div><div></div><div>.bucketBy</div><div>.partitionBy</div><div>.range</div><div>.sortBy</div></div>	<div><div></div><div>("*")</div><div>("StoreID", "Hour")</div><div>("StoreID", "Year", "Month", "Day", "Hour")</div><div>("Year", "Month", "Day", "Hour", "StoreID")</div></div>
--	--

```
.mode("append")
```

<div><div></div><div>.csv("/Purchases")</div><div>.json("/Purchases")</div><div>.parquet("/Purchases")</div><div>.saveAsTable("/Purchases")</div></div>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application Description automatically generated

Box 1: .partitionBy Example:

df.write.partitionBy("y","m","d") mode(SaveMode.Append) parquet("/data/hive/warehouse/db_name.db/" + tableName) Box 2:

("Year","Month","Day","Hour","StoreID")

Box 3: .parquet("/Purchases") Reference:

<https://intellipaat.com/community/11744/how-to-partition-and-write-dataframe-in-spark-without-deleting-partiti>

NEW QUESTION 30

- (Exam Topic 5)

You have an Azure SQL Database server named sqlsrv1 that hosts 10 Azure SQL databases. The databases perform slower than expected.

You need to identify whether the performance issue relates to the use of tempdb on sqlsrv1. What should you do?

- A. Run Query Store-based queries
- B. Review information provided by SQL Server Profiler-based traces
- C. Review information provided by Query Performance Insight
- D. Run dynamic management view-based queries

Answer: D

Explanation:

The diagnostics log outputs tempDB contention details. You can use the information as the starting point for troubleshooting.

You can use the Intelligent Insights performance diagnostics log of Azure SQL Database to troubleshoot performance issues.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/intelligent-insights-troubleshoot-performance#tempdb> <https://docs.microsoft.com/en-us/azure/azure-sql/database/intelligent-insights-use-diagnostics-log>

NEW QUESTION 33

- (Exam Topic 5)

You have an instance of SQL Server on Azure Virtual Machines that has a database named DB1. You plan to implement Azure SQL Data Sync for DB1.

Which isolation level should you configure?

- A. SERIALIZABLE
- B. SNAPSHOT
- C. READ UNCOMMITTED
- D. READ COMMITTED

Answer: B

Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/sql-data-sync-data-sql-server-sql-database>

NEW QUESTION 37

- (Exam Topic 5)

You are monitoring an Azure Stream Analytics job.

You discover that the Backlogged input Events metric is increasing slowly and is consistently non-zero. You need to ensure that the job can handle all the events.

What should you do?

- A. Remove any named consumer groups from the connection and use \$default.
- B. Change the compatibility level of the Stream Analytics job.
- C. Create an additional output stream for the existing input stream.
- D. Increase the number of streaming units (SUs).

Answer: D

Explanation:

Backlogged Input Events: Number of input events that are backlogged. A non-zero value for this metric implies that your job isn't able to keep up with the number of incoming events. If this value is slowly increasing or consistently non-zero, you should scale out your job, by increasing the SUs.

Reference:

<https://docs.microsoft.com/en-us/azure/stream-analytics/stream-analytics-monitoring>

NEW QUESTION 39

- (Exam Topic 5)

You have an Azure SQL Database managed instance. The instance starts experiencing performance issues.

You need to identify which query is causing the issue and retrieve the execution plan for the query. The solution must minimize administrative effort.

What should you use?

- A. the Azure portal
- B. Extended Events
- C. Query Store
- D. dynamic management views

Answer: D

Explanation:

Reference:

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

NEW QUESTION 43

- (Exam Topic 5)

You need to trigger an Azure Data Factory pipeline when a file arrives in an Azure Data Lake Storage Gen2 container. Which resource provider should you enable?

- A. Microsoft.EventHub
- B. Microsoft.EventGrid
- C. Microsoft.Sql
- D. Microsoft.Automation

Answer: B

Explanation:

Event-driven architecture (EDA) is a common data integration pattern that involves production, detection, consumption, and reaction to events. Data integration scenarios often require Data Factory customers to trigger pipelines based on events happening in storage account, such as the arrival or deletion of a file in Azure Blob Storage account. Data Factory natively integrates with Azure Event Grid, which lets you trigger pipelines on such events.

Reference:

<https://docs.microsoft.com/en-us/azure/data-factory/how-to-create-event-trigger>

NEW QUESTION 44

- (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 49

- (Exam Topic 5)

You have four Azure subscriptions. Each subscription contains multiple Azure SQL databases. You need to update the column and index statistics for the databases.

What should you use?

- A. an Azure Automation runbook
- B. a SQL Agent job
- C. Azure SQL Analytics
- D. automatic tuning in Azure SQL Database

Answer: A

Explanation:

Reference:

<https://www.sqlshack.com/automate-azure-sql-database-indexes-and-statistics-maintenance/>

NEW QUESTION 53

- (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 57

- (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 61

- (Exam Topic 5)

You are planning disaster recovery for the failover group of an Azure SQL Database managed instance.

Your company's SLA requires that the database in the failover group become available as quickly as possible if a major outage occurs.

You set the Read/Write failover policy to Automatic.

What are two results of the configuration? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. In the event of a datacenter or Azure regional outage, the databases will fail over automatically.
- B. In the event of an outage, the databases in the primary instance will fail over immediately.
- C. In the event of an outage, you can selectively fail over individual databases.
- D. In the event of an outage, you can set a different grace period to fail over each database.
- E. In the event of an outage, the minimum delay for the databases to fail over in the primary instance will be one hour.

Answer: AE

Explanation:

A: Auto-failover groups allow you to manage replication and failover of a group of databases on a server or all databases in a managed instance to another region.

E: Because verification of the scale of the outage and how quickly it can be mitigated involves human actions by the operations team, the grace period cannot be set below one hour. This limitation applies to all databases in the failover group regardless of their data synchronization state.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/auto-failover-group-overview>

NEW QUESTION 66

- (Exam Topic 5)

You have An Azure SQL managed instance.

You need to configure the SQL Server Agent service to email job notifications. Which statement should you execute?

A)

```
EXECUTE msdb.dbo.sysmail_add_profile_sp @profile_name = 'sysadmin_dbmail_profile';
```

B)

```
EXECUTE msdb.dbo.sysmail_add_profile_sp @profile_name = 'application_dbmail_profile';
```

C)

```
EXECUTE msdb.dbo.sysmail_add_profile_sp @profile_name = 'AzureManagedInstance_dbmail_profile';
```

D)

```
EXECUTE msdb.dbo.sysmail_add_profile_sp @profile_name = 'sys_dbmail_profile';
```

A. Option A

- B. Option B
- C. Option C
- D. Option D

Answer: B

NEW QUESTION 71

- (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 72

- (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 two Azure SQL Database servers named Server1 and Server2. Each server contains an Azure SQL database named Database1.

You need to restore Database1 from Server1 to Server2. The solution must replace the existing Database1 on Server2.

Solution: From the Azure portal, you delete Database1 from Server2, and then you create a new database on Server2 by using the backup of Database1 from Server1.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead restore Database1 from Server1 to the Server2 by using the RESTORE Transact-SQL command and the REPLACE option.

Note: REPLACE should be used rarely and only after careful consideration. Restore normally prevents accidentally overwriting a database with a different database. If the database specified in a RESTORE statement already exists on the current server and the specified database family GUID differs from the database family GUID recorded in the backup set, the database is not restored. This is an important safeguard.

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/restore-statements-transact-sql>

NEW QUESTION 74

- (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 two Azure SQL Database servers named Server1 and Server2. Each server contains an Azure SQL database named Database1.

You need to restore Database1 from Server1 to Server2. The solution must replace the existing Database1 on Server2.

Solution: You restore Database1 from Server1 to the Server2 by using the RESTORE Transact-SQL command and the REPLACE option.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

The REPLACE option overrides several important safety checks that restore normally performs. The overridden checks are as follows:

➤ Restoring over an existing database with a backup taken of another database.

With the REPLACE option, restore allows you to overwrite an existing database with whatever database is in the backup set, even if the specified database name differs from the database name recorded in the backup set. This can result in accidentally overwriting a database by a different database.

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/restore-statements-transact-sql>

NEW QUESTION 75

- (Exam Topic 5)

You have an Azure subscription that contains 50 instances of SQL Server on Azure Virtual Machines. The instances host 500 Azure SQL databases. You need to ensure that all the databases have the same configuration. The solution must meet the following requirements:

- Auditing must be enabled.
- Azure Defender must be enabled.
- Public network access must be disabled.
- Administrative effort must be minimized.

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

- A. an Azure Policy assignment
- B. an Azure Automation account
- C. an Azure Policy initiative
- D. an Azure Automation runbook
- E. an Azure Policy definition

Answer: CE

NEW QUESTION 79

- (Exam Topic 5)

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

Name	Type
App1	Azure web app
db1	Azure SQL database in the serverless tier

App1 experiences transient connection errors and timeouts when it attempts to access db1 after extended periods of inactivity. You need to modify db1 to resolve the issues experienced by App1 as soon as possible, without considering immediate costs. What should you do?

- A. Increase the number Of vCores allocated to db1.
- B. Disable auto-pause delay for db1.
- C. Decrease the auto-pause delay for db1.
- D. Enable automatic tuning for db1.

Answer: D





NEW QUESTION 84

- (Exam Topic 5)

You have a resource group named App1Dev that contains an Azure SQL Database server named DevServer1. DevServer1 contains an Azure SQL database named DB1. The schema and permissions for DB1 are saved in a Microsoft SQL Server Data Tools (SSDT) database project.

You need to populate a new resource group named App1Test with the DB1 database and an Azure SQL Server named TestServer1. The resources in App1Test must have the same configurations as the resources in App1Dev.





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
Change the Active Directory Admin on TestServer1	
Change the server name and related variables in the templates	
From the database project, deploy the database schema and permissions	
Add IP addresses to the firewall	
From the Azure portal, export the Azure Resource Manager templates	
From the Azure portal, deploy the templates.	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Actions	Answer Area
Change the Active Directory Admin on TestServer1	
Change the server name and related variables in the templates	
From the database project, deploy the database schema and permissions	
Add IP addresses to the firewall	
From the Azure portal, export the Azure Resource Manager templates	
From the Azure portal, deploy the templates.	

NEW QUESTION 89

- (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 93

- (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

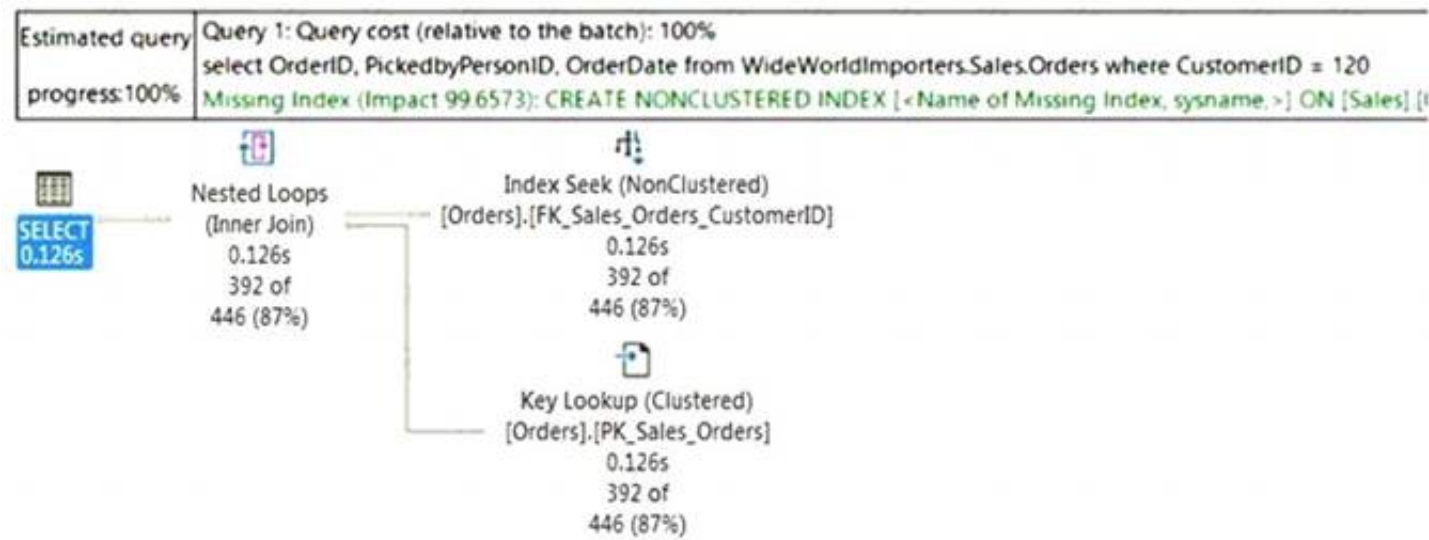
Explanation:

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 96

- (Exam Topic 5)
You have an Azure SQL database.
You are reviewing a slow performing query as shown in the following exhibit.



Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.
NOTE:Each correct selection is worth one point.

The exhibit shows [answer choice].

an actual execution plan
an estimated execution plan
Live Query Statistics

The [answer choice] operator in the execution plan indicates that the query would benefit from performance tuning.

Index Seek
Key Lookup
Nested Loops

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, email Description automatically generated
Reference:
https://docs.microsoft.com/en-us/sql/relational-databases/performance/live-query-statistics?view=sql-server-ver

NEW QUESTION 97

- (Exam Topic 5)
You have an Azure Synapse Analytics dedicated SQL pool.
You runPDW_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-distrib> <https://github.com/rigl/azure-content/blob/master/articles/sql-data-warehouse/sql-data-warehouse-manage-distrib>

NEW QUESTION 98

- (Exam Topic 5)

You have two Azure virtual machines named VM1 and VM2 that run Windows Server 2019. VM1 and VM2 each host a default Microsoft SQL Server 2019 instance. VM1 contains a database named DB1 that is backed up to a file named D:\DB1.bak.

You plan to deploy an Always On availability group that will have the following configurations:

- > VM1 will host the primary replica of DB1.
- > VM2 will host a secondary replica of DB1.

You need to prepare the secondary database on VM2 for the availability group.

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

▼

BACKUP

CREATE

RESTORE

FROM DISK = 'D:\DB1.bak'

WITH

GO

▼

NORECOVERY

RECOVERY

STANDBY

DATABASE MyDB1

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, chat or text message Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/manually-prepare-a-secondar>

NEW QUESTION 101

- (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 106

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine that contains a database named DB1. DB1 contains a table named CustomerPII.

You need to record whenever users query the CustomerPII table.

Which two options should you enable? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. server audit specification
- B. SQL Server audit
- C. database audit specification
- D. a server principal

Answer: AC

Explanation:

An auditing policy can be defined for a specific database or as a default server policy in Azure (which hosts SQL Database or Azure Synapse):

- A server policy applies to all existing and newly created databases on the server.
- If server auditing is enabled, it always applies to the database. The database will be audited, regardless of the database auditing settings.
- Enabling auditing on the database, in addition to enabling it on the server, does not override or change any of the settings of the server auditing. Both audits will exist side by side.

Note:

The Server Audit Specification object belongs to an audit.

A Database Audit Specification defines which Audit Action Groups will be audited for the specific database in which the specification is created.

Reference:

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

NEW QUESTION 110

- (Exam Topic 5)

You have an Azure subscription that contains a logical SQL server. The server hosts two databases named db1 and db2 and an Azure AD service principal named appl.

You need to ensure that appl can access db1. The solution must use the principle of least privilege. 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.

Answer Area

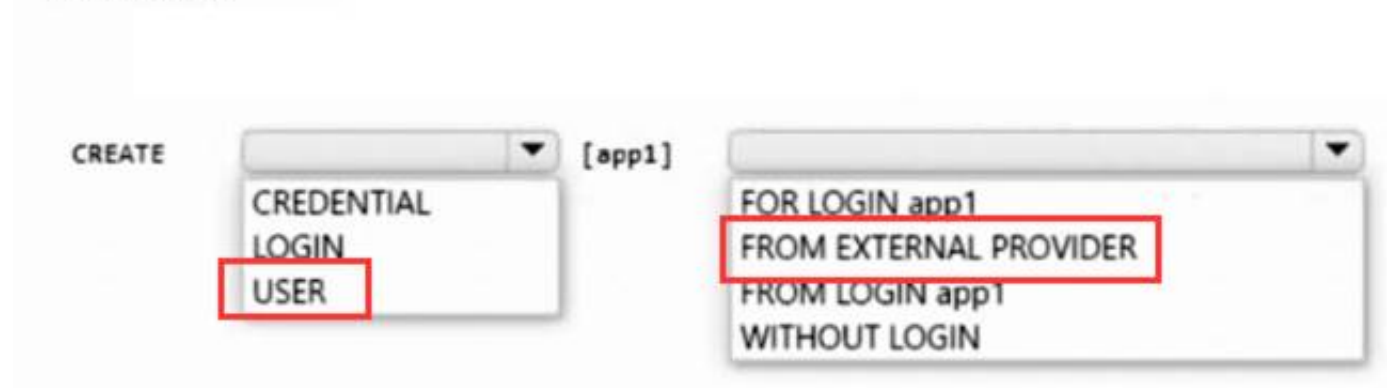


- A. Mastered
B. Not Mastered

Answer: A

Explanation:

Answer Area




NEW QUESTION 111

- (Exam Topic 5)

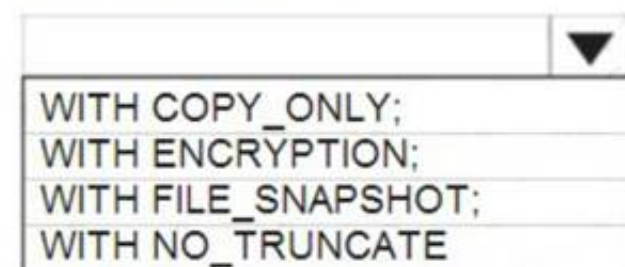
You have an Azure SQL Database managed instance named sqldbmi1 that contains a database name Sales. You need to initiate a backup of Sales. How should you complete the Transact-SQL statement? To answer, select the appropriate options in the answer area.

NOTE:Each correct selection is worth one point.

BACKUP DATABASE Sales



WITH STATS = 5,



- 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 116

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine.

You need to use Policy-Based Management in Microsoft SQL Server to identify stored procedures that do not comply with your naming conventions.

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

Export a built-in policy.

Create a custom policy based on a condition.

Create a custom condition based on a built-in facet.

View the policy history.

Import a policy file.

Run a policy evaluation.

Answer Area

⬅

➡

⬆

⬇

- A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

Reference:

<https://www.mssqltips.com/sqlservertip/2298/enforce-sql-server-database-naming-conventions-using-policy-bas>

NEW QUESTION 117

- (Exam Topic 5)

You have an Azure Stream Analytics job.

You need to ensure that the job has enough streaming units provisioned. You configure monitoring of the SU % Utilization metric.

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

- A. Late Input Events
 B. Out of order Events
 C. Backlogged Input Events
 D. Watermark Delay
 E. Function Events

Answer: CD

Explanation:

To react to increased workloads and increase streaming units, consider setting an alert of 80% on the SU Utilization metric. Also, you can use watermark delay and backlogged events metrics to see if there is an impact.

Note: Backlogged Input Events: Number of input events that are backlogged. A non-zero value for this metric implies that your job isn't able to keep up with the number of incoming events. If this value is slowly increasing or consistently non-zero, you should scale out your job, by increasing the SUs.

Reference:

<https://docs.microsoft.com/en-us/azure/stream-analytics/stream-analytics-monitoring>

NEW QUESTION 122

- (Exam Topic 5)

You have an Azure SQL database that contains a table named factSales. FactSales contains the columns shown in the following table.

Name	Data type
SalesID	Int
Product	Int
Total Number	Numeric(8,4)
Tax Number	Numeric(8,4)
SalesRep	Varchar(30)

FactSales has 6 billion rows and is loaded nightly by using a batch process.

Which type of compression provides the greatest space reduction for the database?

- A. page compression
 B. row compression
 C. columnstore compression
 D. columnstore archival compression

Answer: D

Explanation:

Columnstore tables and indexes are always stored with columnstore compression. You can further reduce the size of columnstore data by configuring an additional compression called archival compression.

Note: Columnstore — The columnstore index is also logically organized as a table with rows and columns, but the data is physically stored in a column-wise data format.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/data-compression/data-compression>

NEW QUESTION 127

- (Exam Topic 5)

You are designing a streaming data solution that will ingest variable volumes of data. You need to ensure that you can change the partition count after creation. Which service should you use to ingest the data?

- A. Azure Event Hubs Standard
- B. Azure Stream Analytics
- C. Azure Data Factory
- D. Azure Event Hubs Dedicated

Answer: D

Explanation:

The partition count for an event hub in a dedicated Event Hubs cluster can be increased after the event hub has been created.

Reference:

<https://docs.microsoft.com/en-us/azure/event-hubs/event-hubs-features#partitions>

NEW QUESTION 129

- (Exam Topic 5)

You have an Azure subscription that contains a logical SQL server named Server1. The master database of Server1 contains a user named User1. You need to ensure that User1 can create databases on Server1. Which database role should you assign to User1?

- A. db_owner
- B. dbmanager
- C. dbo
- D. db_ddladmin

Answer: B

NEW QUESTION 133

- (Exam Topic 5)

You have an Azure SQL managed instance named MI1.

You need to implement automatic tuning for the databases of MI1. What should you do?

- A. Use the REST API to call the patch operation and modify the AutomaticTuningServerMode property.
- B. Use Transact-SQL to enable the force_last_good_plan option.
- C. From the Azure portal, configure automatic tuning.

Answer: B

NEW QUESTION 136

- (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 140

- (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 144

- (Exam Topic 5)

You have SQL Server 2019 or 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 8 vCPUs and 64 GB of memory. You need to reduce tempdb contention without negatively affecting server performance. What is the number of secondary data files that you should configure for tempdb?

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

Answer: C

NEW QUESTION 145

- (Exam Topic 5)

You manage an enterprise data warehouse in Azure Synapse Analytics. Users report slow performance when they run commonly used queries. Users do not report performance changes for infrequently used queries. You need to monitor resource utilization to determine the source of the performance issues. Which metric should you monitor?

- A. Local tempdb percentage
- B. DWU percentage
- C. Data Warehouse Units (DWU) used
- D. Cache hit percentage

Answer: A

Explanation:

Tempdb is used to hold intermediate results during query execution. High utilization of the tempdb database can lead to slow query performance. Note: If you have a query that is consuming a large amount of memory or have received an error message related to allocation of tempdb, it could be due to a very large CREATE TABLE AS SELECT (CTAS) or INSERT SELECT statement running that is failing in the final data movement operation. Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-managemonit>

NEW QUESTION 147

- (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 150

- (Exam Topic 5)

You have an Azure SQL database named DB1. DB1 has a table named Table1 that contains the following columns.

Name	Type
Column1	Ntext
Column2	Geometry
Column3	Image
Column4	Varchar
Column5	Datetime2

You plan to enable Always Encrypted for Table1. Which two columns support encryption? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point

- A. Column1
- B. Column2
- C. Column3
- D. Column4
- E. Column5

Answer: AD

NEW QUESTION 155

- (Exam Topic 5)

You have an Azure Synapse Analytics dedicated SQL pool named Pool1 and a database named DB1. DB1 contains a fact table named Table. You need to identify the extent of the data skew in Table1. What should you do in Synapse Studio?

- A. Connect to Pool1 and query sys.dm_pdw_nodes_db_partition_stats.

- B. Connect to the built-in pool and run DBCC CHECKALLOC.
- C. Connect to Pool1 and run DBCC CHECKALLOC.
- D. Connect to the built-in pool and query sys.dm_pdw_nodes_db_partition_stats.

Answer: D

Explanation:

Use sys.dm_pdw_nodes_db_partition_stats to analyze any skewness in the data. Reference:
<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/cheat-sheet>

NEW QUESTION 159

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine that contains a database named DB1.

You view a plan summary that shows the duration in milliseconds of each execution of query 1178902 as shown in the following exhibit:



What should you do to ensure that the query uses the execution plan which executes in the least amount of time?

- A. Force the query execution plan for plan 1221065.
- B. Run the DBCC FREEPROCCACHE command.
- C. Force the query execution plan for plan 1220917.
- D. Disable parameter sniffing.

Answer: C

Explanation:

Reference:
<https://docs.microsoft.com/en-us/sql/relational-databases/performance/query-store-usage-scenarios>

NEW QUESTION 160

- (Exam Topic 5)

You have an Azure subscription that contains an Azure SQL managed instance, a database named db1, and an Azure web app named Appl. Appl uses db1. You need to enable Resource Governor for a App1. The solution must meet the following requirements: App1 must be able to consume all available CPU resources.

App1 must have at least half of the available CPU resources always available.

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

NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

Actions

- Create a plan.
- Create a classifier function in db1.
- Create a workload group.
- Create a classifier function in the master database.
- Create a resource pool that has the following configurations.

MAX_CPU_PERCENT = 100
MIN_CPU_PERCENT = 50

Answer Area

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Actions	Answer Area
Create a plan.	Create a resource pool that has the following configurations.
Create a classifier function in db1.	MAX_CPU_PERCENT = 100 MIN_CPU_PERCENT = 50
Create a workload group.	(<) ----- 1
Create a classifier function in the master database.	Create a workload group.
Create a resource pool that has the following configurations.	----- 1
MAX_CPU_PERCENT = 100 MIN_CPU_PERCENT = 50	----- 1
	Create a classifier function in the master database.
	----- 1

NEW QUESTION 164

- (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 167

- (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 two Azure SQL Database servers named Server1 and Server2. Each server contains an Azure SQL database named Database1.

You need to restore Database1 from Server1 to Server2. The solution must replace the existing Database1 on Server2.

Solution: From Microsoft SQL Server Management Studio (SSMS), you rename Database1 on Server2 as Database2. From the Azure portal, you create a new database on Server2 by restoring the backup of Database1 from Server1, and then you delete Database2.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead restore Database1 from Server1 to the Server2 by using the RESTORE Transact-SQL command and the REPLACE option.

Note: REPLACE should be used rarely and only after careful consideration. Restore normally prevents accidentally overwriting a database with a different database. If the database specified in a RESTORE statement already exists on the current server and the specified database family GUID differs from the database family GUID recorded in the backup set, the database is not restored. This is an important safeguard.

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/restore-statements-transact-sql>

NEW QUESTION 170

- (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 query sys.dm_exec_requests and discover that the wait type is PAGELATCH_UP and the wait_resource is 2:3:905856.

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 171

- (Exam Topic 5)

You have SQL Server on Azure virtual machines in an availability group. You have a database named DB1 that is NOT in the availability group.

You create a full database backup of DB1.

You need to add DB1 to the availability group.

Which restore option should you use on the secondary replica?

- A. Restore with Recovery
- B. Restore with Norecovery
- C. Restore with Standby

Answer: B

Explanation:

Prepare a secondary database for an Always On availability group requires two steps:

* 1. Restore a recent database backup of the primary database and subsequent log backups onto each server instance that hosts the secondary replica, using RESTORE WITH NORECOVERY

* 2. Join the restored database to the availability group. Reference:

<https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/manually-prepare-a-secondary-database-for-an-availability-group-sql-server>

NEW QUESTION 175

- (Exam Topic 5)

You are creating a new notebook in Azure Databricks that will support R as the primary language but will also support Scala and SQL.

Which switch should you use to switch between languages?

- A. \[<language>]
- B. %<language>
- C. \[<language>]
- D. @<language>

Answer: B

Explanation:

You can override the default language by specifying the language magic command %<language> at the beginning of a cell. The supported magic commands are: %python, %r, %scala, and %sql.

Reference:

<https://docs.microsoft.com/en-us/azure/databricks/notebooks/notebooks-use>

NEW QUESTION 177

- (Exam Topic 5)

You have a Microsoft SQL Server 2019 instance in an on-premises datacenter. The instance contains a 4-TB database named DB1.

You plan to migrate DB1 to an Azure SQL Database managed instance.

What should you use to minimize downtime and data loss during the migration?

- A. distributed availability groups
- B. database mirroring
- C. log shipping
- D. Database Migration Assistant

Answer: D

Explanation:

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

NEW QUESTION 182

- (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. Grant select on sys.databases to public in the master database.

Answer: A

Explanation:

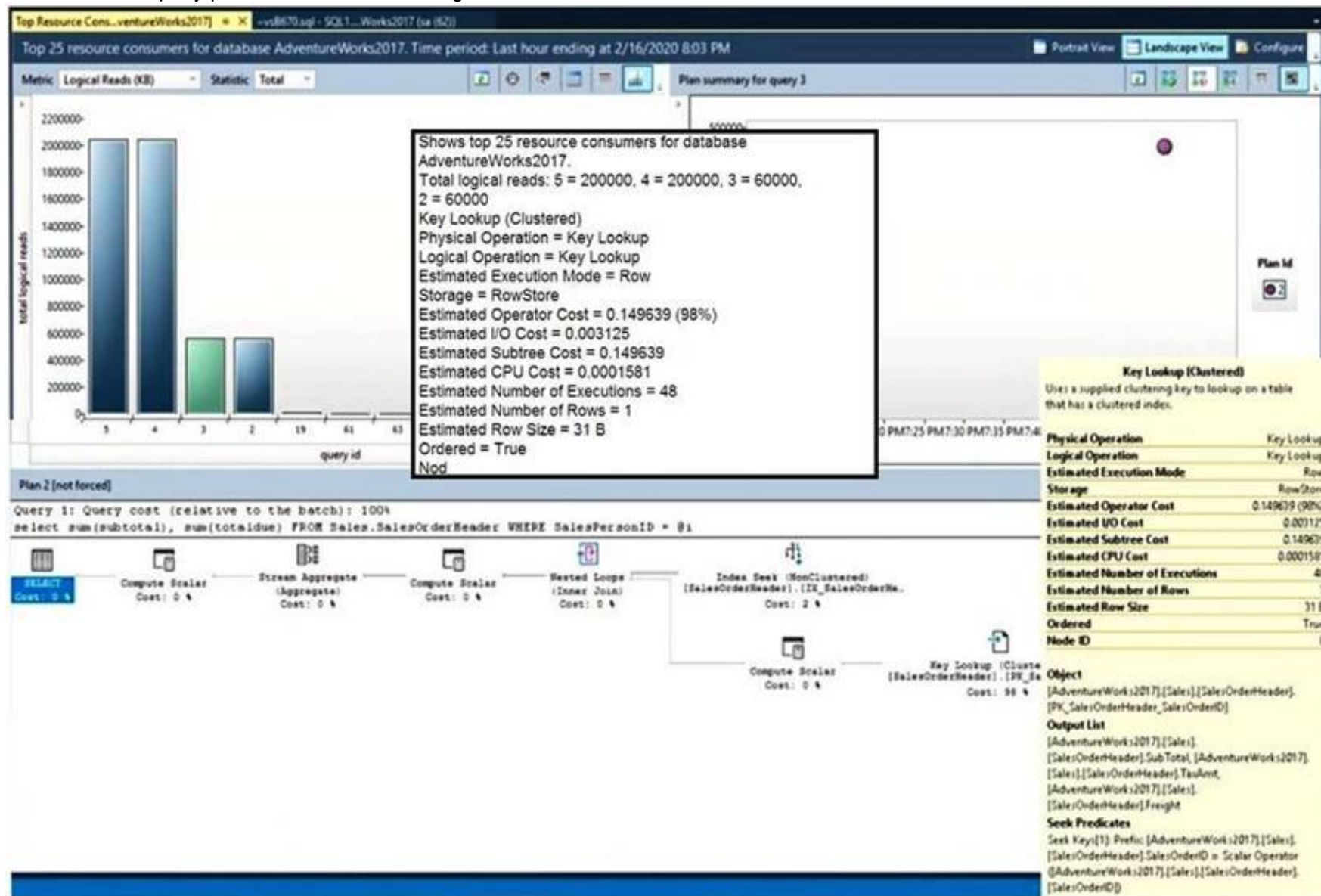
Reference:

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

NEW QUESTION 184

- (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 189

- (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>

- (Exam Topic 5)

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

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.

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
```

- 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 192

- (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 197

- (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 200

- (Exam Topic 5)

You have an instance of SQL Server on Azure Virtual Machines named SQL1.

SQL1 contains an Extended Events session named session1 that captures Microsoft SQL Server events. You need to correlate the session events with events captured by Event Tracing for Windows (ETW). What should you do for session1?

- A. Modify the Set Session Event Filters settings.
- B. Add a target.
- C. Add an action.
- D. Modify the Specify Session Data Storage settings.

Answer: B

NEW QUESTION 205

- (Exam Topic 5)

You have an Azure SQL managed instance named SQLMI1 that has Resource Governor enabled and is used by two apps named App1 and App2.

You need to configure SQLMI1 to limit the CPU and memory resources that can be allocated to App1. 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 a workload group.	
Create a user-defined classifier function.	
Modify Resource Governor.	
Create a contained database user.	
Create a resource pool.	

- A. Mastered
B. Not Mastered

Answer: A

Explanation:

Text, table Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/resource-governor/resource-governor?view=sql-server> <https://docs.microsoft.com/en-us/sql/relational-databases/resource-governor/create-and-test-a-classifier-user-def>

NEW QUESTION 207

- (Exam Topic 5)

You plan to deploy two instances of SQL Server on Azure virtual machines in a highly available configuration that will use an Always On availability group.

You need to recommend a deployment solution that meets the following requirements:

- Provides a Service Level Agreement (SLA) of at least 99.95%
 - Replicates databases in the same group synchronously
 - Minimizes the latency of database writes
- What should you recommend?

- A. Create a proximity group and an availability se
B. Deploy each virtual machine to the availability set Add both virtual machines to the proximity group.
C. Create two proximity groups and a single availability se
D. Deploy both virtual machines to the availability se
E. Add one virtual machine to each proximity group.
F. Create two proximity groups and two availability set
G. Deploy each virtual machine to a unique availability se
H. Add one virtual machine to each proximity group.
I. Create a proximity group and two availability set
J. Deploy each virtual machine to a unique availability se
K. Add both virtual machines to the proximity group.

Answer: A

NEW QUESTION 211

- (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 212

- (Exam Topic 5)

You have an Azure virtual machine based on a custom image named VM1. VM1 hosts an instance of Microsoft SQL Server 2019 Standard. You need to automate the maintenance of VM1 to meet the following requirements: Automate the patching of SQL Server and Windows Server. Automate full database backups and transaction log backups of the databases on VM1. Minimize administrative effort. What should you do first?

- A. Enable a system-assigned managed identity for VM1
- B. Register VM1 to the Microsoft.Sql resource provider
- C. Install an Azure virtual machine Desired State Configuration (DSC) extension on VM1
- D. Register VM1 to the Microsoft.SqlVirtualMachine resource provider

Answer: D

Explanation:

Automated Patching depends on the SQL Server infrastructure as a service (IaaS) Agent Extension. The SQL Server IaaS Agent Extension (SqlIaaSExtension) runs on Azure virtual machines to automate administration tasks. The SQL Server IaaS extension is installed when you register your SQL Server VM with the SQL Server VM resource provider. Reference:
<https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/sql-server-iaas-agent-extensionauto>

NEW QUESTION 214

- (Exam Topic 5)

You have an Azure SQL database.
You run the following PowerShell script.

```
$serverName = "SERVER1"
$resourceGroup = "RG1"
$dbName = "DB1"
```

```
Connect-AzAccount
```

```
$server = Get-AzSqlServer -ServerName $serverName -ResourceGroupName
$resourceGroup
```

```
Set-AzSqlDatabaseBackupShortTermRetentionPolicy -ResourceGroupName $resourceGroup
-ServerName $server `
    -DatabaseName $dbName -RetentionDays 21
```

```
Set-AzSqlDatabaseBackupLongTermRetentionPolicy -ServerName $serverName -
DatabaseName $dbName `
    -ResourceGroupName $resourceGroup -WeeklyRetention P52W -YearlyRetention PSY
-WeekOfYear 52
```

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
DB1 can be restored to a specific point in time 30 days ago.	<input type="radio"/>	<input type="radio"/>
DB1 can be restored from a weekly backup performed six months ago.	<input type="radio"/>	<input type="radio"/>
DB1 can be restored from a yearly backup performed six years ago.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/powershell/module/az.sql/set-azsqldatabasebackupshorttermretentionpolicy?vi> <https://docs.microsoft.com/en-us/powershell/module/az.sql/set-azsqldatabasebackuplongtermretentionpolicy?vie>

NEW QUESTION 215

- (Exam Topic 5)

You have an Azure subscription that contains the following resources:

- 10 Azure SQL databases
- Five Azure SQL managed instances
- Five instances of SQL Server on Azure Virtual Machines

You need to implement a centralized monitoring solution for all the Azure SQL resources. The solution must minimize administrative effort. What should you include in the solution?

- A. Log Analytics
- B. Azure SQL Analytics
- C. Query Performance Insight
- D. SQL Insights

Answer: B

NEW QUESTION 219

- (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 SQL database named Sales.

You need to implement disaster recovery for Sales to meet the following requirements:

- > During normal operations, provide at least two readable copies of Sales.
- > Ensure that Sales remains available if a datacenter fails.

Solution: You deploy an Azure SQL database that uses the Business Critical service tier and Availability Zones.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Premium and Business Critical service tiers leverage the Premium availability model, which integrates compute resources (sqlservr.exe process) and storage (locally attached SSD) on a single node. High availability is achieved by replicating both compute and storage to additional nodes creating a three to four-node cluster.

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).

Reference:

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

NEW QUESTION 220

- (Exam Topic 5)

You have an Azure SQL database named DB1. A user named User 1 has an Azure AD account.

You need to provide User1 with the ability to add and remove columns from the tables in DBV. The solution must use the principle of least privilege.

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

- A. Assign the database user the db.ddladmin role.
- B. Assign the database user the db.owner role.
- C. Create a contained database user.
- D. Create a login and an associated database user.

Answer: AD

NEW QUESTION 225

- (Exam Topic 5)

You are designing a date dimension table in an Azure Synapse Analytics dedicated SQL pool. The date dimension table will be used by all the fact tables.

Which distribution type should you recommend to minimize data movement?

- A. HASH
- B. REPLICATE
- C. ROUND_ROBIN

Answer: B

Explanation:

A replicated table has a full copy of the table available on every Compute node. Queries run fast on replicated tables since joins on replicated tables don't require data movement. Replication requires extra storage, though, and isn't practical for large tables.

Reference:

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

NEW QUESTION 229

- (Exam Topic 5)

You have an Azure Data Factory pipeline that is triggered hourly. The pipeline has had 100% success for the past seven days.

The pipeline execution fails, and two retries that occur 15 minutes apart also fail. The third failure returns the following error.

```
ErrorCode=UserErrorFileNotFound,
'Type=Microsoft.DataTransfer.Common.Shared.HybridDeliveryException,Message=ADLS
Gen2 operation failed for: Operation returned an invalid status code
'NotFound'. Account: 'contosoproduksouth' FileSystem: wwi.Path:
'BIKES/CARBON/year=2021/month=01/day=10/hour=06'. ErrorCode:
'PathNotFound'.Message: 'The specified path does not exist.'. RequestId:
'6d269b78-901f-001b-4924-e7a7bc000000'. Timestamp: 'Sun, 10 Jan 2021 07:45:05'
```

What is a possible cause of the error?

- A. From 06:00 to 07:00 on January 10, 2021, there was no data in wwi/BIKES/CARBON.
- B. The parameter used to generate year=2021/month=01/day=10/hour=06 was incorrect.
- C. From 06:00 to 07:00 on January 10, 2021, the file format of data in wwi/BIKES/CARBON was incorrect.
- D. The pipeline was triggered too early.

Answer: B

NEW QUESTION 231

- (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 234

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine that contains a database named DB1. The database reports a CHECKSUM error.

You need to recover the database.

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

NOTE: Each correct selection is worth one point.

USE master;

ALTER DATABASE [DB1] SET

GO

▼
OFFLINE
ONLINE
SINGLE_USER
TRUSTWORTHY

WITH ROLLBACK IMMEDIATE;

DBCC CHECKDB ('DB1',

GO

▼
MOINDEX
PHYSICAL_ONLY
REPAIR_ALLOW_DATA_LOSS
REPAIR_FAST

WITH NO_INFOMSGS;

ALTER DATABASE [DB1] SET

GO

▼
MULTI_USER;
ONLINE;
OPEN;
TRUSTWORTHY;

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: SINGLE_USER

The specified database must be in single-user mode to use one of the following repair options. Box 2: REPAIR_ALLOW_DATA_LOSS

REPAIR_ALLOW_DATA_LOSS tries to repair all reported errors. These repairs can cause some data loss.

Note: The REPAIR_ALLOW_DATA_LOSS option is a supported feature but it may not always be the best option for bringing a database to a physically consistent state. If successful, the REPAIR_ALLOW_DATA_LOSS option may result in some data loss. In fact, it may result in more data lost than if a user were to restore the database from the last known good backup.

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-checkdb-transact-sql>

NEW QUESTION 239

- (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 243

- (Exam Topic 5)

You have a Microsoft SQL Server 2019 instance in an on-premises datacenter. The instance contains a 4-TB database named DB1.

You plan to migrate DB1 to an Azure SQL Database managed instance.

What should you use to minimize downtime and data loss during the migration?

- A. database mirroring
- B. distributed availability groups
- C. Always On Availability Group
- D. Azure Database Migration Service

Answer: D

NEW QUESTION 244

- (Exam Topic 5)

You are creating a managed data warehouse solution on Microsoft Azure.

You must use PolyBase to retrieve data from Azure Blob storage that resides in parquet format and load the data into a large table called FactSalesOrderDetails.

You need to configure Azure Synapse Analytics to receive the data.

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 an external data source for Azure Blob storage.

Create a master key on database.

Enable Transparent Data Encryption.

Create the external table FactSalesOrderDetails.

Load the data to a staging table.

Create an external file format to map the parquet files.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, chat or text message Description automatically generated

To query the data in your Hadoop data source, you must define an external table to use in Transact-SQL queries. The following steps describe how to configure

the external table.

Step 1: Create a master key on database.

* 1. Create a master key on the database. The master key is required to encrypt the credential secret. (Create a database scoped credential for Azure blob storage.)

Step 2: Create an external data source for Azure Blob storage.

* 2. Create an external data source with CREATE EXTERNAL DATA SOURCE.. Step 3: Create an external file format to map the parquet files.

* 3. Create an external file format with CREATE EXTERNAL FILE FORMAT. Step 4. Create an external table FactSalesOrderDetails

* 4. Create an external table pointing to data stored in Azure storage with CREATE EXTERNAL TABLE. Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/polybase/polybase-configure-azure-blob-storage>

NEW QUESTION 246

- (Exam Topic 5)

Your company uses Azure Stream Analytics to monitor devices.

The company plans to double the number of devices that are monitored.

You need to monitor a Stream Analytics job to ensure that there are enough processing resources to handle the additional load.

Which metric should you monitor?

- A. Input Deserialization Errors
- B. Late Input Events
- C. Early Input Events
- D. Watermark delay

Answer: D

Explanation:

The Watermark delay metric is computed as the wall clock time of the processing node minus the largest watermark it has seen so far.

The watermark delay metric can rise due to:

* 1. Not enough processing resources in Stream Analytics to handle the volume of input events.

* 2. Not enough throughput within the input event brokers, so they are throttled.

* 3. Output sinks are not provisioned with enough capacity, so they are throttled. Reference:

<https://docs.microsoft.com/en-us/azure/stream-analytics/stream-analytics-time-handling>

NEW QUESTION 249

- (Exam Topic 5)

You have an Azure SQL managed instance that hosts multiple databases.

You need to configure alerts for each database based on the diagnostics telemetry of the database. What should you use?

- A. Azure SQL Analytics alerts based on metrics
- B. SQL Health Check alerts based on diagnostics logs
- C. SQL Health Check alerts based on metrics
- D. Azure SQL Analytics alerts based on diagnostics logs

Answer: D

Explanation:

Reference:

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

NEW QUESTION 254

- (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 257

- (Exam Topic 5)

You plan to move two 100-GB databases to Azure.

You need to dynamically scale resources consumption based on workloads. The solution must minimize downtime during scaling operations.

What should you use?

- A. An Azure SQL Database elastic pool
- B. SQL Server on Azure virtual machines
- C. an Azure SQL Database managed instance
- D. Azure SQL databases

Answer: A

Explanation:

Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single server and share a set number of resources at a set price.

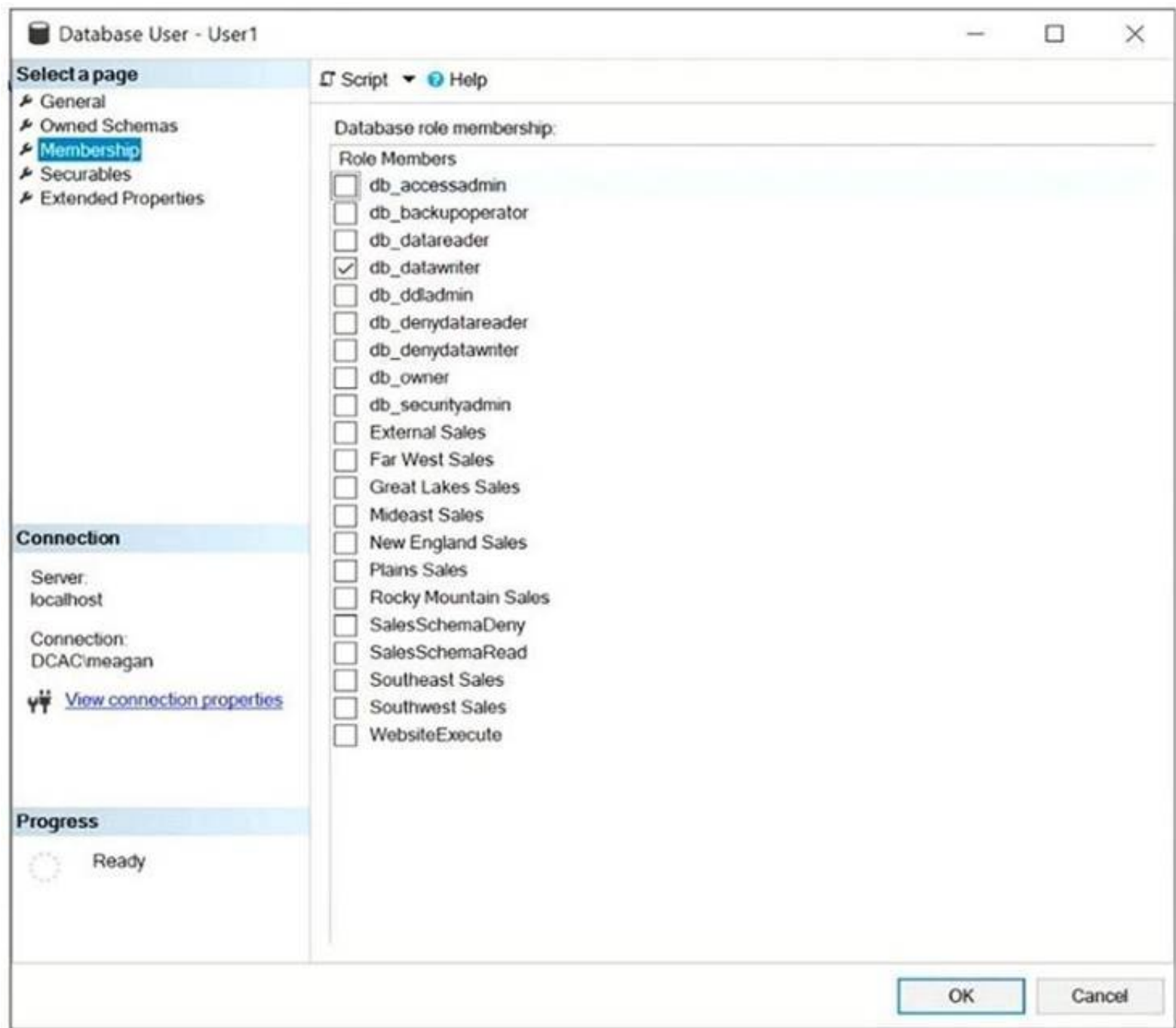
Reference:

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

NEW QUESTION 262

- (Exam Topic 5)

You have a Microsoft SQL Server database named DB1 that contains a table named Table1. The database role membership for a user named User1 is shown in the following exhibit.



Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.
NOTE:Each correct selection is worth one point.

User1 can [answer choice].

add a column to Table1
delete a row from Table1
delete Table1

To ensure that User1 can run queries to retrieve data from DB1, you must assign User1 the [answer choice] database role.

db_datareader
db_ddladmin
db_denydatareader
db_denydatawriter

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: delete a row from Table1
Members of the db_datawriter fixed database role can add, delete, or change data in all user tables. Box 2: db_datareader
Members of the db_datareader fixed database role can read all data from all user tables. Reference:
<https://docs.microsoft.com/en-us/sql/relational-databases/security/authentication-access/database-level-roles>

NEW QUESTION 264

- (Exam Topic 5)
You are planning a solution that will use Azure SQL Database. Usage of the solution will peak from October 1 to January 1 each year. During peak usage, the database will require the following:

- > 24 cores
- > 500 GB of storage
- > 124 GB of memory
- > More than 50,000 IOPS

During periods of off-peak usage, the service tier of Azure SQL Database will be set to Standard. Which service tier should you use during peak usage?

- A. Business Critical
- B. Premium
- C. Hyperscale

Answer: A

Explanation:

Reference:
<https://docs.microsoft.com/en-us/azure/azure-sql/database/resource-limits-vcare-single-databases#business-critic>

NEW QUESTION 269

- (Exam Topic 5)

From a website analytics system, you receive data extracts about user interactions such as downloads, link clicks, form submissions, and video plays. The data contains the following columns:

Name	Sample value
Date	15 Jan 2021
EventCategory	Videos
EventAction	Play
EventLabel	Contoso Promotional
ChannelGrouping	Social
TotalEvents	150
UniqueEvents	120
SessionsWithEvents	99

You need to design a star schema to support analytical queries of the data. The star schema will contain four tables including a date dimension. To which table should you add each column? To answer, select the appropriate options in the answer area.
 NOTE:Each correct selection is worth one point.

EventCategory:

▼

DimChannel
 DimDate
 DimEvent
 FactEvents

ChannelGrouping:

▼

DimChannel
 DimDate
 DimEvent
 FactEvents

TotalEvents:

▼

DimChannel
 DimDate
 DimEvent
 FactEvents

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, application, table Description automatically generated
 Box 1: FactEvents
 Fact tables store observations or events, and can be sales orders, stock balances, exchange rates, temperatures, etc.
 Box 2: DimChannel
 Dimension tables describe business entities – the things you model. Entities can include products, people, places, and concepts including time itself. The most consistent table you'll find in a star schema is a date dimension table. A dimension table contains a key column (or columns) that acts as a unique identifier, and descriptive columns.
 Box 3: DimEvent Reference:
<https://docs.microsoft.com/en-us/power-bi/guidance/star-schema>

NEW QUESTION 272

- (Exam Topic 5)

You have an Azure Data Factory pipeline that performs an incremental load of source data to an Azure Data Lake Storage Gen2 account. Data to be loaded is identified by a column named LastUpdatedDate in the source table. You plan to execute the pipeline every four hours. You need to ensure that the pipeline execution meets the following requirements:
Automatically retries the execution when the pipeline run fails due to concurrency or throttling limits. Supports backfilling existing data in the table. Which type of trigger should you use?

- A. tumbling window
- B. on-demand
- C. event
- D. schedule

Answer: A

Explanation:
The Tumbling window trigger supports backfill scenarios. Pipeline runs can be scheduled for windows in the past.
Reference:
<https://docs.microsoft.com/en-us/azure/data-factory/concepts-pipeline-execution-triggers>

NEW QUESTION 275

- (Exam Topic 4)
You need to design a data retention solution for the Twitter feed data records. The solution must meet the customer sentiment analytics requirements. Which Azure Storage functionality should you include in the solution?

- A. time-based retention
- B. change feed
- C. lifecycle management
- D. soft delete

Answer: C

Explanation:
The lifecycle management policy lets you:
Delete blobs, blob versions, and blob snapshots at the end of their lifecycles
Reference:
<https://docs.microsoft.com/en-us/azure/storage/blobs/storage-lifecycle-management-concepts>

NEW QUESTION 276

- (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 279

- (Exam Topic 2)
You are evaluating the role assignments.
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
DBAGroup1 will be able to sign in to each customer’s Azure SQL database by using Azure Data Studio.	<input type="radio"/>	<input type="radio"/>
DBAGroup1 will be able to assign the SQL DB Contributor role to other users.	<input type="radio"/>	<input type="radio"/>
DBAGroup2 will be able to create a new Azure SQL database on each customer’s Azure SQL Database server.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: Yes

DBAGroup1 is member of the Contributor role.

The Contributor role grants full access to manage all resources, but does not allow you to assign roles in Azure RBAC, manage assignments in Azure Blueprints, or share image galleries.

Box 2: No

Box 3: Yes

DBAGroup2 is member of the SQL DB Contributor role.

The SQL DB Contributor role lets you manage SQL databases, but not access to them. Also, you can't manage their security-related policies or their parent SQL servers. As a member of this role you can create and manage SQL databases.

Reference:

<https://docs.microsoft.com/en-us/azure/role-based-access-control/built-in-roles>

NEW QUESTION 283

- (Exam Topic 2)

What should you implement to meet the disaster recovery requirements for the PaaS solution?

- A. Availability Zones
- B. failover groups
- C. Always On availability groups
- D. geo-replication

Answer: B

Explanation:

Scenario: In the event of an Azure regional outage, ensure that the customers can access the PaaS solution with minimal downtime. The solution must provide automatic failover.

The auto-failover groups feature allows you to manage the replication and failover of a group of databases on a server or all databases in a managed instance to another region. It is a declarative abstraction on top of the existing active geo-replication feature, designed to simplify deployment and management of geo-replicated databases at scale. You can initiate failover manually or you can delegate it to the Azure service based on a user-defined policy.

The latter option allows you to automatically recover multiple related databases in a secondary region after a catastrophic failure or other unplanned event that results in full or partial loss of the SQL Database or SQL Managed Instance availability in the primary region.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/auto-failover-group-overview>

NEW QUESTION 284

- (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 289

- (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

- 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`.

Answer Area



- 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

Quick Create

Create a new runbook

Import

Import an existing runbook

Runbook

Name

SqlMaintenance

Runbook type

PowerShell

Description

- * 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 294

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