

Exam Questions DP-300

Administering Relational Databases on Microsoft Azure (beta)

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



NEW QUESTION 1

- (Exam Topic 5)

You have an Azure subscription that uses a domain named contoso.com.

You have two Azure VMs named DBServer1 and DBServer2. Each of them hosts a default SQL Server instance. DBServer1 is in the East US Azure region and contains a database named DatabaseA. DBServer2 is in the West US Azure region.

DBServer1 has a high volume of data changes and low latency requirements for data writes.

You need to configure a new availability group for DatabaseA. The secondary replica will reside on DBServer2.

What should you do?

- A. Configure the primary endpoint as TCP://DBServer1.contoso.com:445, configure the secondary endpoint as TCP://DBServer2.contoso.com:445, and set the availability mode to Asynchronous.
- B. Configure the primary endpoint as TCP://DBServer1.contoso.com:445, configure the secondary endpoint as TCP://DBServer2.contoso.com:445, and set the availability mode to Synchronous.
- C. Configure the primary endpoint as TCP://DBServer1.contoso.com:5022, configure the secondary endpoint as TCP://DBServer2.contoso.com:5022, and set the availability mode to Asynchronous.
- D. Configure the primary endpoint as TCP://DBServer1.contoso.com:5022, configure the secondary endpoint as TCP://DBServer2.contoso.com:5022, and set the availability mode to Synchronous.

Answer: C

Explanation:

Reference:

<https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/availability-modes-always-on>

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)

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 4

- (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
<input type="text" value="dnsZonePartner"/>	<pre>{ "type": "Microsoft.Sql/managedInstances", "identity": { "type": <input type="text"/> }, "dependsOn": ["[parameters('virtualNetworkName')]"], "properties": { "administratorLogin": "[parameters('administratorLogin')]", "administratorLoginPassword": "[parameters('administratorLoginPassword')]", "subnetId": "[resourceId('Microsoft.Network/virtualNetworks/subnets', parameters('virtualNetworkName'), parameters('subnetName'))]", "storageSizeInGB": 8192, "vCores": 80, "licenseType": "BasePrice", <input type="text"/> : "True" } }</pre>
<input type="text" value="storageAccountType"/>	
<input type="text" value="SystemAssigned"/>	
<input type="text" value="UserAssigned"/>	
<input type="text" value="zoneRedundant"/>	

A. Mastered

B. Not Mastered

Answer: A

Explanation:

Answer Area

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

NEW QUESTION 5

- (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: Create a SQL Server 2019 Always On availability group on VM1.

To perform the migration, use: Azure Migrate

NEW QUESTION 6

- (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 reduce the use of table variables and temporary tables. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

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

NEW QUESTION 7

- (Exam Topic 5)
Your company analyzes images from security cameras and sends alerts to security teams that respond to unusual activity. The solution uses Azure Databricks.
You need to send Apache Spark level events, Spark Structured Streaming metrics, and application metrics to Azure Monitor.
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions in the answer area and arrange them in the correct order.

Actions

Answer Area

Deploy Grafana to an Azure virtual machine.

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

Create Dropwizard counters in the application code.

Create a data source in Azure Monitor.

Configure the Databricks cluster to use the Databricks monitoring library.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

Send application metrics using Dropwizard.

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

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

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

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

NEW QUESTION 8

- (Exam Topic 5)

You have an Azure subscription.

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

- 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 9

- (Exam Topic 5)

You have an Azure subscription that is linked to an Azure AD tenant named contoso.com. The subscription contains an Azure SQL database named SQL 1 and an Azure web named app1. App1 has the managed identity feature enabled. You need to create a new database user for app1.

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.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

<https://learn.microsoft.com/en-us/azure/app-service/tutorial-connect-msi-sql-database?tabs=windowsclient%2Ce>

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 10

- (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.

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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 15

- (Exam Topic 5)

You have an Azure SQL database named DB 1 in the General Purpose service tier. You need to monitor DB 1 by using SQL Insights.

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

To collect monitoring data, use:

- ☐ A virtual machine
- ☒ An Azure function
- ☐ The Azure Monitor agent

To store monitoring data, create:

- ☐ A Log Analytics workspace
- ☐ An Azure SQL database
- ☒ An Azure Storage account

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1 = Azure Monitor Agent Box 2 = An Azure SQL database

<https://docs.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql>

NEW QUESTION 19

- (Exam Topic 5)

You have an Azure subscription that contains an instance of SQL Server on Azure Virtual Machines. The virtual machine hosts a database named DB1. You need to monitor DB1 by using Extended Events. The solution must meet the following requirements:

- Capture raw event data and store the data in Azure Storage.
- Minimize the performance impact of capturing extended events.

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

```
CREATE EVENT SESSION session1 ON DATABASE
ADD EVENT sqlserver.sql_statement_starting
(
    ACTION (sqlserver.sql_text)
    WHERE statement LIKE 'UPDATE gmTabEmployee%'
)
ADD TARGET
package0.
    event_file
    event_stream
    ring_buffer
)
SET filename = 'https://gmstorageaccountxevent.blob.core.windows.net/gmcontainerxevent/anyfilenamexel242b.xel'
)
WITH
    (MAX_MEMORY = 10 MB,
    EVENT_RETENTION_MODE=
    MAX_DISPATCH_LATENCY = 3 SECONDS
    ALLOW_MULTIPLE_EVENT_LOSS
    ALLOW_SINGLE_EVENT_LOSS
    NO_EVENT_LOSS
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

```
CREATE EVENT SESSION session1 ON DATABASE
ADD EVENT sqlserver.sql_statement_starting
(
    ACTION (sqlserver.sql_text)
    WHERE statement LIKE 'UPDATE gmTabEmployee%'
)
ADD TARGET
package0.
    event_file
    event_stream
    ring_buffer
)
SET filename = 'https://gmstorageaccountxevent.blob.core.windows.net/gmcontainerxevent/anyfilenamexel242b.xel'
)
WITH
    (MAX_MEMORY = 10 MB,
    EVENT_RETENTION_MODE=
    MAX_DISPATCH_LATENCY = 3 SECONDS
    ALLOW_MULTIPLE_EVENT_LOSS
    ALLOW_SINGLE_EVENT_LOSS
    NO_EVENT_LOSS
```

NEW QUESTION 21

- (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 24

- (Exam Topic 5)

You have an instance of SQL Server on Azure Virtual Machines named SQL1. SQL1 contains a database named DB1.

You need to enable Transparent Data Encryption (TDE) for DB1.

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

Objects

- a database encryption key in the master database
- a master key in DB1
- a certificate in DB1
- a master key in the master database
- a certificate in the master database
- a database encryption key in DB1

>

<

Answer Area

>

<

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Objects

- a database encryption key in the master database
- a master key in DB1
- a certificate in DB1
- a master key in the master database
- a certificate in the master database
- a database encryption key in DB1

>

<

Answer Area

- a master key in the master database
- a certificate in the master database
- a database encryption key in DB1

>

<

NEW QUESTION 25

- (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 30

- (Exam Topic 5)

You have a SQL Server on Azure Virtual Machines instance that hosts a 10-TB SQL database named DB1. You need to identify and repair any physical or logical corruption in DB1. The solution must meet the following requirements:

- Minimize how long it takes to complete the procedure.
- Minimize data loss.

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

Answer Area

DBCC CHECK [DB1],

▼

NOINDEX
REPAIR_ALLOW_DATA_LOSS
REPAIR_FAST
REPAIR_REBUILD

) WITH

▼

EXTENDED_LOGICAL_CHECKS;
PHYSICAL_ONLY;
TABLOCK;

- A. Mastered
B. Not Mastered

Answer: A

Explanation:

Answer Area

DBCC CHECK [DB1],

▼

NOINDEX
REPAIR_ALLOW_DATA_LOSS
REPAIR_FAST
REPAIR_REBUILD

) WITH

▼

EXTENDED_LOGICAL_CHECKS;
PHYSICAL_ONLY;
TABLOCK;

NEW QUESTION 34

- (Exam Topic 5)

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

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

Answer: C

Explanation:

Reference:

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

NEW QUESTION 38

- (Exam Topic 5)

You have an on-premises multi-tier application named App1 that includes a web tier, an application tier, and a Microsoft SQL Server tier. All the tiers run on Hyper-V virtual machines.

Your new disaster recovery plan requires that all business-critical applications can be recovered to Azure. You need to recommend a solution to fail over the database tier of App1 to Azure. The solution must provide the ability to test failover to Azure without affecting the current environment.

What should you include in the recommendation?

- A. Azure Backup
B. Azure Information Protection
C. Windows Server Failover Cluster
D. Azure Site Recovery

Answer: D

Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-test-failover-to-azure>

NEW QUESTION 39

- (Exam Topic 5)

You have an Azure SQL Database managed instance named SQLMI1. A Microsoft SQL Server Agent job runs on SQLMI1. You need to ensure that an automatic email notification is sent once the job completes. What should you include in the solution?

- A. From SQL Server Configuration Manager (SSMS), enable SQL Server Agent
- B. From SQL Server Management Studio (SSMS), runsp_set_sqlagent_properties
- C. From SQL Server Management Studio (SSMS), create a Database Mail profile
- D. From the Azure portal, create an Azure Monitor action group that has an Email/SMS/Push/Voice action

Answer: C

Explanation:

To send a notification in response to an alert, you must first configure SQL Server Agent to send mail. Using SQL Server Management Studio; to configure SQL Server Agent to use Database Mail:

- In Object Explorer, expand a SQL Server instance.
- Right-click SQL Server Agent, and then click Properties.
- Click Alert System.
- Select Enable Mail Profile.
- In the Mail system list, select Database Mail.
- In the Mail profile list, select a mail profile for Database Mail.
- Restart SQL Server Agent.

Note: Prerequisites include:

- Enable Database Mail.
- Create a Database Mail account for the SQL Server Agent service account to use.
- Create a Database Mail profile for the SQL Server Agent service account to use and add the user to the DatabaseMailUserRole in the msdb database.
- Set the profile as the default profile for the msdb database. Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/database-mail/configure-sql-server-agent-mail-to-use-d>

NEW QUESTION 44

- (Exam Topic 5)

You have an Azure subscription that contains an instance of SQL Server on an Azure virtual machine named SQLVM1 and a user named User1. SQLVM1 hosts a database named DB1.

You need to ensure that User1 can create a scheduled task to perform a full backup of DB1. The solution must use the principle of least privilege.

Which built-in database role should you assign to User1?

- A. SQLAgentReaderRole
- B. db.owner
- C. SQLAgentOperatorRole
- D. SQLAgentUserRole

Answer: C

NEW QUESTION 46

- (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 50

- (Exam Topic 5)

You plan to perform batch processing in Azure Databricks once daily. Which type of Databricks cluster should you use?

- A. automated
- B. interactive
- C. High Concurrency

Answer: A

Explanation:

Azure Databricks makes a distinction between all-purpose clusters and job clusters. You use all-purpose clusters to analyze data collaboratively using interactive notebooks. You use job clusters to run fast and robust automated jobs.

The Azure Databricks job scheduler creates a job cluster when you run a job on a new job cluster and terminates the cluster when the job is complete.

Reference:

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

NEW QUESTION 53

- (Exam Topic 5)

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

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

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

Answer: C

NEW QUESTION 54

- (Exam Topic 5)

You plan to build a structured streaming solution in Azure Databricks. The solution will count new events in five-minute intervals and report only events that arrive during the interval.

The output will be sent to a Delta Lake table. Which output mode should you use?

- A. complete
- B. append
- C. update

Answer: A

Explanation:

Complete mode: You can use Structured Streaming to replace the entire table with every batch.

Reference:

<https://docs.databricks.com/delta/delta-streaming.html>

NEW QUESTION 55

- (Exam Topic 5)

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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 create additional tempdb files. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Reference:

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

NEW QUESTION 60

- (Exam Topic 5)

You have an Azure SQL database named DB1.

You have a table named Table1 that has 20 columns of type `CHAR(400)`. Row compression for Table1 is enabled.

During a database audit, you discover that none of the fields contain more than 150 characters. You need to ensure that you can apply page compression to Table1.

What should you do?

- A. Configure the columns as sparse.
- B. Change the column type to `nvarchar(MAX)`.
- C. Change the column type to `varchar(MAX)`.
- D. Change the column type to `varchar(200)`.

Answer: D

Explanation:

Reference:

<https://www.sqlshack.com/sql-varchar-data-type-deep-dive/> <https://36chambers.wordpress.com/2020/06/18/nvarchar-everywhere-a-thought-experiment/>

NEW QUESTION 61

- (Exam Topic 5)

You have the following Transact-SQL query.

```
SELECT
    [file_id] AS [File ID],
    [type] AS [File Type],
    substring([physical_name], 1,1) AS [Drive],
    [name] AS [Logical Name],
    [physical_name] AS [Physical Name],
    CAST([size] as DECIMAL(38,0))/128.0 AS [ColumnA],
    CAST(FILEPROPERTY([name], 'SpaceUsed') AS DECIMAL(38,0))/128.0 AS
[ColumnB],
    (CAST([size] AS DECIMAL(38,0))/128.0) - (CAST(FILEPROPERTY([name],
'SpaceUsed') AS DECIMAL (38,0))/128.0) AS [ColumnC],
    [max_size] AS [ColumnD],
    [is_percent_growth] AS [Percent Growth Enabled],
    [growth] AS [Growth Rate],
    SYSDATETIME() AS [Current Date]
FROM sys.database_files;
```

Which column returned by the query represents the free space in each file?

- A. ColumnA
- B. ColumnB
- C. ColumnC
- D. ColumnD

Answer: C

Explanation:

Example:

Free space for the file in the below query result set will be returned by the FreeSpaceMB column. SELECT DB_NAME() AS DbName, name AS FileName, type_desc, size/128.0 AS CurrentSizeMB, size/128.0 - CAST(FILEPROPERTY(name, 'SpaceUsed') AS INT)/128.0 AS FreeSpaceMB FROM sys.database_files WHERE type IN (0,1);

Reference:

<https://www.sqlshack.com/how-to-determine-free-space-and-file-size-for-sql-server-databases/>

NEW QUESTION 65

- (Exam Topic 5)

You have a data warehouse in Azure Synapse Analytics.

You need to ensure that the data in the data warehouse is encrypted at rest. What should you enable?

- A. Transparent Data Encryption (TDE)
- B. Advanced Data Security for this database
- C. Always Encrypted for all columns
- D. Secure transfer required

Answer: A

Explanation:

Transparent data encryption (TDE) helps protect Azure SQL Database, Azure SQL Managed Instance, and Azure Synapse Analytics against the threat of malicious offline activity by encrypting data at rest. Reference: <https://docs.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-tde-overview>

NEW QUESTION 66

- (Exam Topic 5)

You have a new Azure SQL database named DB1 on an Azure SQL server named AzSQL1. The only user who was created is the server administrator.

You need to create a contained database user in DB1 who will use Azure Active Directory (Azure AD) for authentication.

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

Actions

Connect to DB1 by using the Active Directory admin account.

Create a user by using the FROM EXTERNAL PROVIDER clause.

Connect to DB1 by using the server administrator account.

Set the Active Directory Admin for AzSQL1.

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

Create a login in the master database.

Answer Area



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: Set up the Active Directory Admin for AzSQL1. Step 2: Connect to DB1 by using the server administrator.

Sign into your managed instance with an Azure AD login granted with the sysadmin role. Step 3: Create a user by using the FROM EXTERNAL PROVIDER clause.

FROM EXTERNAL PROVIDER is available for creating server-level Azure AD logins in SQL Database managed instance. Azure AD logins allow database-level Azure AD principals to be mapped to server-level Azure AD logins. To create an Azure AD user from an Azure AD login use the following syntax:

CREATE USER [AAD_principal] FROM LOGIN [Azure AD login] Reference:

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

NEW QUESTION 68

- (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 70

- (Exam Topic 5)

You have an Azure subscription that contains an Azure SQL managed instance named SQLMi1 and a SQL Agent job named Backupdb. Backupdb performs a daily backup of the databases hosted on SQLMi1.

You need to be notified by email if the job fails.

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

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 SQL Server Agent alert.

Create an operator.

Create an extended event.

Enable Database Mail.

Add a failure notification to the job.

Answer Area



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/job-automation-managed-instance>

NEW QUESTION 71

- (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 72

- (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 75

- (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 76

- (Exam Topic 5)

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

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

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

Answer: B

NEW QUESTION 78

- (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 82

- (Exam Topic 5)

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

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

Answer Area

```
CREATE CREDENTIAL
[https://databasebackups.blob.core.windows.net/Backups]
WITH IDENTITY = 'SHARED ACCESS SIGNATURE'
SECRET = 'sp=r&st=2023-02-02T19:23:08Z&se=2033-02-02T19:30:08Z&spr=https&sv=2021-06-08&sr=b&sig=B%2FxEYQiOC%4BqyYCeqlH5z2QpRI%2FKcg3ZABz78J2kix3JZjk%3D'
BACKUP DATABASE DB1
TO URL =
'https://databasebackups.blob.core.windows.net/Backups/db1.bak'
WITH COPY_ONLY
```

- A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Answer Area

```
CREATE CREDENTIAL
[https://databasebackups.blob.core.windows.net/Backups]
WITH IDENTITY = 'SHARED ACCESS SIGNATURE'
SECRET = 'sp=r&st=2023-02-02T19:23:08Z&se=2033-02-02T19:30:08Z&spr=https&sv=2021-06-08&sr=b&sig=B%2FxEYQiOC%4BqyYCeqlH5z2QpRI%2FKcg3ZABz78J2kix3JZjk%3D'
BACKUP DATABASE DB1
TO URL =
'https://databasebackups.blob.core.windows.net/Backups/db1.bak'
WITH COPY_ONLY
```

NEW QUESTION 84

- (Exam Topic 5)

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

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

A. Deploy VM1 and VM2 to a single proximity placement group.

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

Answer: D

NEW QUESTION 88

- (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 92

- (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 96

- (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 97

- (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 an Azure Synapse Analytics serverless SQL pool to create an external table that has an additional DateTime column.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

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 102

- (Exam Topic 5)

You have a Microsoft SQL Server 2017 server that hosts five databases. You Plan to migrate the databases to Azure.

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

- > Automatically scales compute based on the workload demand
- > Provides per-second billing

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

Azure service:

- A single Azure SQL database in the provisioned compute tier
- A single Azure SQL database in the serverless compute tier
- An Azure SQL Database elastic pool
- Azure SQL Managed Instance

Service tier:

- Basic
- General Purpose
- Standard

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Azure service:

- A single Azure SQL database in the provisioned compute tier
- A single Azure SQL database in the serverless compute tier
- An Azure SQL Database elastic pool
- Azure SQL Managed Instance

Service tier:

- Basic
- General Purpose
- Standard

NEW QUESTION 106

- (Exam Topic 5)

You have the following Azure Data Factory pipelines:

- > Ingest Data from System1
- > Ingest Data from System2
- > Populate Dimensions
- > Populate Facts

Ingest Data from System1 and Ingest Data from System2 have no dependencies. Populate Dimensions must execute after Ingest Data from System1 and Ingest Data from System2. Populate Facts must execute after the Populate Dimensions pipeline. All the pipelines must execute every eight hours.

What should you do to schedule the pipelines for execution?

- A. Add a schedule trigger to all four pipelines.
- B. Add an event trigger to all four pipelines.
- C. Create a parent pipeline that contains the four pipelines and use an event trigger.
- D. Create a parent pipeline that contains the four pipelines and use a schedule trigger.

Answer: D

Explanation:

Reference:
<https://www.mssqltips.com/sqlservertip/6137/azure-data-factory-control-flow-activities-overview/>

NEW QUESTION 109

- (Exam Topic 5)
You have SQL Server 2019 on an Azure virtual machine that contains an SSISDB database. A recent failure causes the master database to be lost. You discover that all Microsoft SQL Server integration Services (SSIS) packages fail to run on the virtual machine.
Which four actions should you perform in sequence to resolve the issue? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct.

Actions

Add a certificate to an Azure key vault

Enable Transparent Data Encryption (TDE)

Encrypt a copy of the master key by using the service master key

Turn on the TRUSTWORTHY property and the CLR property

Attach the SSISDB database

Open the master key for the SSISDB database

Answer Area

>

<

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: Attach the SSISDB database
Step 2: Turn on the TRUSTWORTHY property and the CLR property
If you are restoring the SSISDB database to an SQL Server instance where the SSISDB catalog was never created, enable common language runtime (clr)
Step 3: Open the master key for the SSISDB database
Restore the master key by this method if you have the original password that was used to create SSISDB.
open master key decryption by password = 'LS1Setup!' --'Password used when creating SS1SDB' Alter Master Key Add encryption by Service Master Key
Step 4: Encrypt a copy of the mater key by using the service master key Reference:
<https://docs.microsoft.com/en-us/sql/integration-services/backup-restore-and-move-the-ssis-catalog>

NEW QUESTION 113

- (Exam Topic 5)
You have an Azure SQL Database instance named DatabaseA on a server named Server1.
You plan to add a new user named App1 to DatabaseA and grant App1 db_datacenter permissions. App1 will use SQL Server Authentication.
You need to create App1. The solution must ensure that App1 can be given access to other databases by using the same credentials.
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Answer Area

On the master database, run CREATE LOGIN [APP1] FROM EXTERNAL PROVIDER;

On DatabaseA, run CREATE USER [APP1] WITH PASSWORD = 'P@ssW0rd!';

On DatabaseA, run ALTER ROLE db_datareader ADD MEMBER [App1];

On the master database, run CREATE LOGIN [App1] WITH PASSWORD = 'P@aaW0rd!';

On DatabaseA, run CREATE USER [App1] FROM LOGIN [App1];



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

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

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

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

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

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

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

CREATE USER readonlyuser FROM LOGIN readonlylogin;

Step 3: On DatabaseA run ALTER ROLE db_datareader ADD Member [App1]

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

EXEC sp_addrolemember 'db_datareader', 'readonlyuser'; Reference:

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

NEW QUESTION 115

- (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 117

- (Exam Topic 5)

You have an Azure Synapse Analytics dedicated SQL pool.

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

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

Which statement accurately describes the dbo.FactInternetSales table?

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

Answer: D

Explanation:

The rows per distribution can vary up to 10% without a noticeable impact on performance. Here the distribution varies more than 10%. It is skewed.

Note: SHOWSPACEUSED displays the number of rows, disk space reserved, and disk space used for a specific table, or for all tables in a Azure Synapse Analytics or Parallel Data Warehouse database.

This is a very quick and simple way to see the number of table rows that are stored in each of the 60 distributions of your database. Remember that for the most balanced performance, the rows in your distributed table should be spread evenly across all the distributions.

ROUND_ROBIN distributed tables should not be skewed. Data is distributed evenly across the nodes by design.

Reference:

https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tables-distribu https://github.com/rgl/azure-content/blob/master/articles/sql-data-warehouse/sql-data-warehouse-manage-distrib

NEW QUESTION 122

- (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 126

- (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 131

- (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 136

- (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

CREATE [app1]

CREDENTIAL LOGIN USER	FOR LOGIN app1 FROM EXTERNAL PROVIDER FROM LOGIN app1 WITHOUT LOGIN
-----------------------------	--

- A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Answer Area

CREATE [app1] CREDENTIAL LOGIN USER FOR LOGIN app1 FROM EXTERNAL PROVIDER FROM LOGIN app1 WITHOUT LOGIN

NEW QUESTION 137

- (Exam Topic 5)

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

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

NOTE:Each correct selection is worth one point.

BACKUP DATABASE Sales

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

WITH STATS = 5,

WITH COPY_ONLY;
 WITH ENCRYPTION;
 WITH FILE_SNAPSHOT;
 WITH NO_TRUNCATE

- A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Box 1: TO URL = 'https://storage1.blob.core.windows.net/blob1/Sales.bak' Native database backup in Azure SQL Managed Instance.

You can backup any database using standard BACKUP T-SQL command: BACKUP DATABASE tpcc2501

TO URL = 'https://myacc.blob.core.windows.net/testcontainer/tpcc2501.bak'

WITH COPY_ONLY

Box 2: WITH COPY_ONLY

Reference:

<https://techcommunity.microsoft.com/t5/azure-sql-database/native-database-backup-in-azure-sql-managed-insta>

NEW QUESTION 141

- (Exam Topic 5)

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

Which three metrics should you use to size the elastic pool to meet the demands of your workload? Each correct answer presents part of the solution.

NOTE:Each correct selection is worth one point.

- A. total size of all the databases
 B. geo-replication support
 C. number of concurrently peaking databases * peak CPU utilization per database
 D. maximum number of concurrent sessions for all the databases
 E. total number of databases * average CPU utilization per database

Answer: ACE

Explanation:

CE: Estimate the vCores needed for the pool as follows:

For vCore-based purchasing model: MAX(<Total number of DBs X average vCore utilization per DB>,

<Number of concurrently peaking DBs X Peak vCore utilization per DB)

A: Estimate the storage space needed for the pool by adding the number of bytes needed for all the databases in the pool.

Reference:

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

NEW QUESTION 145

- (Exam Topic 5)

You have SQL Server on an Azure virtual machine that contains a database named DB1. You have an application that queries DB1 to generate a sales report.

You need to see the parameter values from the last time the query was executed.

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

NOTE:Each correct selection is worth one point.

- A. EnableLast_Query_Plan_Statsin the master database
- B. EnableLightweight_Query_Profilingin DB1
- C. EnableLast_Query_Plan_Statsin DB1
- D. EnableLightweight_Query_Profilingin the master database
- E. EnablePARAMETER_SNIFFINGin DB1

Answer: AC

Explanation:

Last_Query_Plan_Stats allows you to enable or disable collection of the last query plan statistics (equivalent to an actual execution plan) in sys.dm_exec_query_plan_stats.

Lightweight profiling can be disabled at the database level using the LIGHTWEIGHT_QUERY_PROFILING database scoped configuration: ALTER DATABASE SCOPED CONFIGURATION SET LIGHTWEIGHT_QUERY_PROFILING = OFF;.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/performance/query-profiling-infrastructure>

NEW QUESTION 148

- (Exam Topic 5)

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

The Intelligent Insights diagnostics log identifies queries that cause performance issues due to tempDB contention.

You need to resolve the performance issues. What should you do?

- A. Implement memory-optimized tables.
- B. Run the dbcc flushprocindbcommand.
- C. Replace the sequential index keys with nonsequential keys.
- D. Run the dbcc dbreindexcommand.

Answer: A

Explanation:

Reference:

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

NEW QUESTION 150

- (Exam Topic 5)

You have an Azure subscription.

You need to deploy a logical SQL server by using PowerShell. The solution must ensure that the logical SQL server can create Azure AD users and provide Transparent Data Encryption (TDE) with a customer-managed key.

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

Answer Area

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

"Assigned Identity" and "Key

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

NEW QUESTION 153

- (Exam Topic 5)

You have an Azure SQL database named DB1 that contains a private certificate named Sales. The private key for Sales is encrypted with a password. You need to change the password for the private key. Which

Transact-SQL statement should you run?

A)


```
ALTER CERTIFICATE Sales
WITH PRIVATE KEY (DECRYPTION BY PASSWORD = 'Mb^6BK&*w%',
ENCRYPTION BY PASSWORD = ' 6YY9YcD!pV');
```

B)

```
ALTER CERTIFICATE Sales
WITH PRIVATE KEY (ENCRYPTION BY PASSWORD = ' 6YY9YcD!pV');
```

C)

```
ALTER CERTIFICATE Sales WITH PRIVATE KEY (FILE = 'D:\importkeys\SalesNew, DECRYPTION BY PASSWORD = ' Mb^6BK&*w%');
```

D)

```
ALTER CERTIFICATE Sales WITH PRIVATE KEY (DECRYPTION BY PASSWORD = ' EWYx9Xk+$#');
```

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

Answer: C

NEW QUESTION 157

- (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	Answer Area
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.	

- 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 162

- (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 163

- (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 run theRemove-AzSqlDatabasePowerShell cmdlet for Database1 on Server2. You run theRestore-AzSqlDatabasePowerShell cmdlet for Database1 on Server2.

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 166

- (Exam Topic 5)

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

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

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

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

Answer: A

Explanation:

Reference:

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

NEW QUESTION 167

- (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 172

- (Exam Topic 5)

You configure backups for an Azure SQL database as shown in the following exhibit.

Point-in-time-restore

Specify how long you want to keep your point-in-time backups. [Learn more](#)

How many days would you like PITR backups to be kept? ⓘ



Long-term retention

Specify how long you want to keep your long-term retention backups. You may choose to keep yearly backups for up to 10 years. [Learn more](#)

Weekly LTR Backups

Keep weekly backups for:

Monthly LTR Backups

Keep the first backup of each month for:

Yearly LTR Backups

Keep an annual backup for:

Which weekly backup of the year would you like to keep?

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.

Answer Area

To restore from a failure that occurred two days ago and caused minimal data loss, you must use a [answer choice]

After the 52nd weekly backup runs, there will be [answer choice] in long term retention.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

To restore from a failure that occurred two days ago and caused minimal data loss, you must use a [answer choice]

After the 52nd weekly backup runs, there will be [answer choice] in long term retention.

NEW QUESTION 174

- (Exam Topic 5)

You have an Azure subscription that contains a group named Group1 and an Azure SQL managed instance that hosts a database named 081. You need to ensure that Group 1 has read access to new tables created m 06l The solution must use the principle of least privilege Howshould 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

GRANT

SELECT	Schema	::[table] TO [Contoso\group1]
DELETE	Database	
INSERT	Schema	
SELECT	Table	
UPDATE		

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

GRANT

SELECT	Schema	::[table] TO [Contoso\group1]
DELETE	Database	
INSERT	Schema	
SELECT	Table	
UPDATE		

NEW QUESTION 179

- (Exam Topic 5)

You have a database named db1.

The log for db1 contains the following entry.

Date 10/5/2021 10:57:08 AM
Log SQL Server (Current - 10/5/2021 11:26:00 AM)
Source spid1595
Message
The transaction log for database 'db1' is full due to 'AVAILABILITY_REPLICA'

You need to ensure That db1 can process transactions.

Actions

Answer Area

Add db1 back to the availability group.	
Shrink db1.	
Shrink the transaction log file.	>
Remove db1 from the availability group.	<
Back up the transaction log file.	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Actions

Add db1 back to the availability group.	
Shrink db1.	
Shrink the transaction log file.	
Remove db1 from the availability group.	
Back up the transaction log file.	

Answer Area

Remove db1 from the availability group.
Shrink the transaction log file.
Add db1 back to the availability group.

NEW QUESTION 183

- (Exam Topic 5)

You have an Azure SQL database. The database contains a table that uses a columnstore index and is accessed infrequently.

You enable columnstore archival compression.

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

NOTE:Each correct selection is worth one point.

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

Answer: BE

Explanation:

For rowstore tables and indexes, use the data compression feature to help reduce the size of the database. In addition to saving space, data compression can help improve performance of I/O intensive workloads because the data is stored in fewer pages and queries need to read fewer pages from disk.

Use columnstore archival compression to further reduce the data size for situations when you can afford extra time and CPU resources to store and retrieve the data.

NEW QUESTION 186

- (Exam Topic 5)

You have an Azure SQL database.

You need to implement a disaster recovery solution that meets the following requirements:

- Minimizes how long it takes to recover the database if a datacenter fails
- Minimizes administrative effort

What should you include in the solution?

- A. Azure Backup
- B. active geo-replication
- C. Azure Site Recovery
- D. auto-failover groups

Answer: D

NEW QUESTION 188

- (Exam Topic 5)

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

Name	Type	Configuration
DB1	Azure SQL Database	Hyperscale service tier No secondary replicas
App1	Azure Web Apps	App1 has read-only access to DB1. There are multiple instances of App1.

You need to create a read-only replica of DB1 and configure the App1 instances to use the replica. 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 add read-only replicas of DB1:

- Create a replica on the same logical server.
- Create a new logical server and configure geo-replication.
- Create a new logical server and configure an auto-failover group.

To configure App1 instances to access the read-only replica:

- Add an ApplicationIntent entry to the connection string.
- Add a MultiSubnetFailover entry to the App1 connection string.
- Create a dedicated endpoint and configure the App1 connection string to point to the endpoint.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

Reference:

<https://sqlserverguides.com/read-only-replica-azure-sql/>

NEW QUESTION 189

- (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

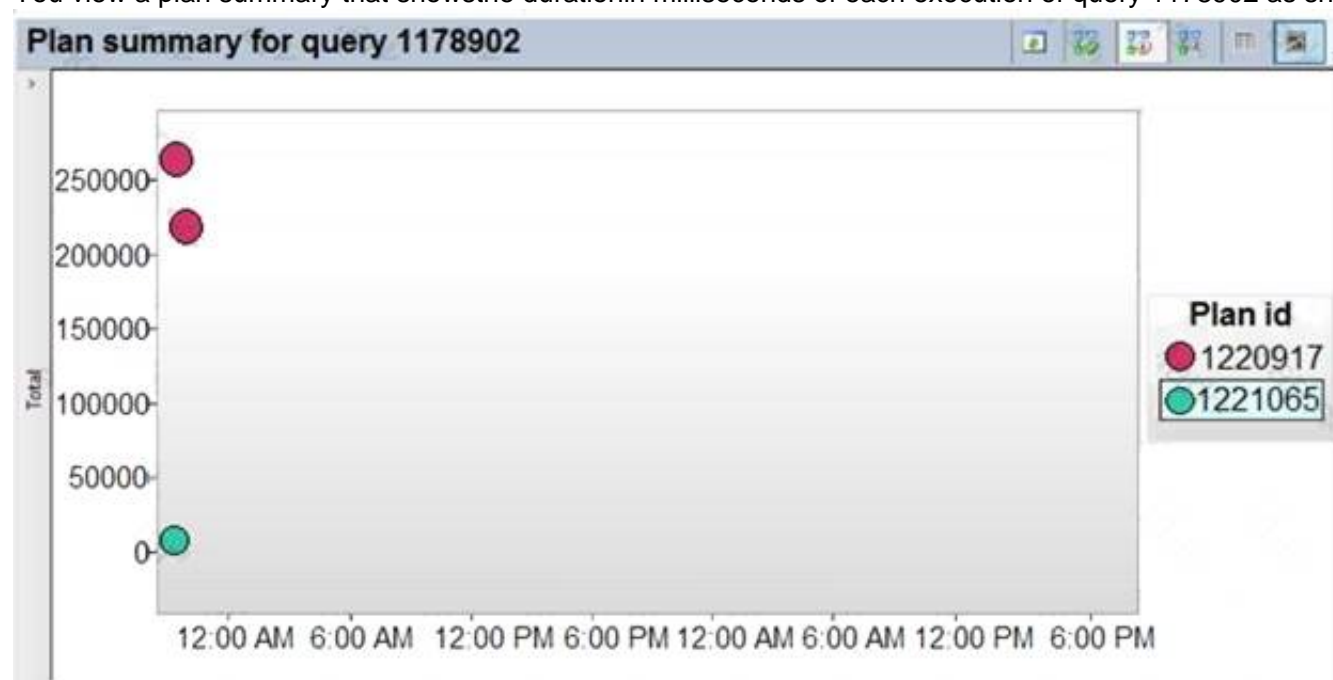
Answer: AD

NEW QUESTION 191

- (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 194

- (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 199

- (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 201

- (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 206

- (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 211

- (Exam Topic 5)

You have an Azure Synapse Analytics workspace named WS1 that contains an Apache Spark pool named Pool1.

You plan to create a database named DB1 in Pool1.

You need to ensure that when tables are created in DB1, the tables are available automatically as external tables to the built-in serverless SQL pool.

Which format should you use for the tables in DB1?

- A. JSON
- B. CSV
- C. Parquet
- D. ORC

Answer: C

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.

For each Spark external table based on Parquet and located in Azure Storage, an external table is created in a serverless SQL pool database. As such, you can shut down your Spark pools and still query Spark external tables from serverless SQL pool.

Reference:

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

NEW QUESTION 215

- (Exam Topic 5) You have an Azure SQL database. You identify a long running query.

You need to identify which operation in the query is causing the performance issue.

What should you use to display the query execution plan in Microsoft SQL Server Management Studio (SSMS)?

- A. Live Query Statistics
- B. an estimated execution plan
- C. an actual execution plan
- D. Client Statistics

Answer: A

Explanation:

<https://www.mssqltips.com/sqlservertip/3685/live-query-statistics-in-sql-server-2016/>

NEW QUESTION 219

- (Exam Topic 5)

You are designing a security model for an Azure Synapse Analytics dedicated SQL pool that will support multiple companies.

You need to ensure that users from each company can view only the data of their respective company. Which two objects should you include in the solution? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- A. a column encryption key
- B. asymmetric keys
- C. a function
- D. a custom role-based access control (RBAC) role
- E. a security policy

Answer: DE

Explanation:

Azure RBAC is used to manage who can create, update, or delete the Synapse workspace and its SQL pools, Apache Spark pools, and Integration runtimes.

Define and implement network security configurations for resources related to your dedicated SQL pool with Azure Policy.

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/security/synapse-workspace-synapse-rbac> <https://docs.microsoft.com/en-us/security/benchmark/azure/baselines/synapse-analytics-security-baseline>

NEW QUESTION 224

- (Exam Topic 5)

You have an Azure SQL database that contains a table named Employees. Employees contains a column named Salary.

You need to encrypt the Salary column. The solution must prevent database administrators from reading the data in the Salary column and must provide the most secure encryption.

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

Actions

Answer Area

Encrypt the Salary column by using the randomized encryption type.

Create a column encryption key.

Enable Transparent Data Encryption (TDE).

Encrypt the Salary column by using the deterministic encryption type.

Apply a dynamic data mask to the Salary column.

Create a column master key.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: Create a column master key

Create a column master key metadata entry before you create a column encryption key metadata entry in the database and before any column in the database can be encrypted using Always Encrypted.

Step 2: Create a column encryption key.

Step 3: Encrypt the Salary column by using the randomized encryption type.

Randomized encryption uses a method that encrypts data in a less predictable manner. Randomized encryption is more secure, but prevents searching, grouping, indexing, and joining on encrypted columns.

Note: A column encryption key metadata object contains one or two encrypted values of a column encryption key that is used to encrypt data in a column. Each value is encrypted using a column master key.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/security/encryption/always-encrypted-database-engine>

NEW QUESTION 227

- (Exam Topic 5)

You have a SQL pool in Azure Synapse that contains a table named dbo.Customers. The table contains a column name Email.

You need to prevent nonadministrative users from seeing the full email addresses in the Email column. The users must see values in a format of aXXX@XXXX.com instead.

What should you do?

- A. From the Azure portal, set a mask on the Email column.
- B. From the Azure portal, set a sensitivity classification of Confidential for the Email column.
- C. From Microsoft SQL Server Management Studio, set an email mask on the Email column.
- D. From Microsoft SQL Server Management Studio, grant the SELECT permission to the users for all the columns in the dbo.Customers table except Email.

Answer: B

Explanation:

The Email masking method, which exposes the first letter and replaces the domain with XXX.com using a constant string prefix in the form of an email address.

Example: aXX@XXXX.com

NEW QUESTION 231

- (Exam Topic 5)

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

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

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

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

What should you do?

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

Answer: A

Explanation:

Reference:

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

NEW QUESTION 234

- (Exam Topic 5)

You have an Azure subscription.

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

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

NOTE:Each correct selection is worth one point.

Answer Area

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Text Description automatically generated

Reference:

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

NEW QUESTION 236

- (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 239

- (Exam Topic 5)

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

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

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

answer area.

NOTE:Each correct selection is worth one point.

CREATE EXTERNAL DATA SOURCE source1

WITH

(LOCATION = 'https://account1.

	▼
blob	
dfs	
table	

.core.windows.net',

	▼
PUSHDOWN = ON	
TYPE = BLOB_STORAGE	
TYPE = HADOOP	

)

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, table Description automatically generated

Box 1: blob

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

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

Box 2: HADOOP

Reference:

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

NEW QUESTION 241

- (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 245

- (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 248

- (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 253

- (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 257

- (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 261

- (Exam Topic 5)

You have an Azure SQL database named sqldb1.

You need to minimize the amount of space by the data and log files of sqldb1. What should you run?

- A. DBCC SHRINKDATABASE
- B. sp_clean_db_free_space
- C. sp_clean_db_file_free_space
- D. DBCC SHRINKFILE

Answer: D

Explanation:

DBCC SHRINKDATABASE shrinks the size of the data and log files in the specified database. Reference:

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

NEW QUESTION 262

- (Exam Topic 5)

You have an Azure subscription that contains a server named Server1. Server1 hosts two Azure SQL databases named DB1 and DB2.

You plan to deploy a Windows app named App1 that will authenticate to DB2 by using SQL authentication. You need to ensure that App1 can access DB2. The solution must meet the following requirements:

- > App1 must be able to view only DB2.
- > Administrative effort must be minimized. What should you create?

- A. a contained database user for App1 on DB2
- B. a login for App1 on Server1
- C. a contained database user from an external provider for App1 on DB2
- D. a contained database user from a Windows login for App1 on DB2

Answer: D

Explanation:

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/security/contained-database-users-making-your-databa>

NEW QUESTION 266

- (Exam Topic 5)

You have an Azure subscription.

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

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

NOTE:Each correct selection is worth one point.

Answer Area

```

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

```

- A. Mastered
 B. Not Mastered

Answer: A

Explanation:

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

Reference:

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

NEW QUESTION 267

- (Exam Topic 5)

You have an Azure subscription.

You plan to deploy an instance of SQL Sevier on Azure Virtual Machines that supports Write Accelerator.

Which virtual machine series should you use?

- A. H-series
 B. G -series
 C. M-series
 D. E-series

Answer: C

NEW QUESTION 271

- (Exam Topic 5)

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

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

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

What should you do?

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

Answer: C

Explanation:

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

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

Reference:

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

NEW QUESTION 274

- (Exam Topic 5)

You are building an Azure virtual machine.

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

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

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

Actions	Answer Area
a virtual disk that uses the stripe layout	
a virtual disk that uses the mirror layout	
a volume	⬆
a virtual disk that uses the simple layout	⬇
a storage pool	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Follow these same steps to create striped virtual disk:

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

Box 1: a storage pool

Box 2: a virtual disk that uses stripe layout

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

Box 3: a volume Reference:

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

NEW QUESTION 279

- (Exam Topic 5)

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

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

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

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

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

Answer: B

Explanation:

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

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

Reference:

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

NEW QUESTION 281

- (Exam Topic 5)

You have a on-premises Microsoft SQL Server named SQL1 that hosts five databases.

You need to migrate the databases to an Azure SQL managed instance. The solution must minimize downtime and prevent data loss.

What should you use?

- A. log shipping
- B. Always On availability groups
- C. Database Migration Assistant
- D. Backup and Restore

Answer: C

NEW QUESTION 286

- (Exam Topic 5)

You need to recommend a disaster recovery solution for an on-premises Microsoft SQL Server database. The solution must meet the following requirements:

- Support real-time data replication to a different geographic region.
- Use Azure as a disaster recovery target.
- Minimize costs and administrative effort.

What should you include in the recommendation?

- A. database mirroring on an instance of SQL Server on Azure Virtual Machines
- B. availability groups for SQL Server on Azure Virtual Machines
- C. an Azure SQL Managed Instance link
- D. transactional replication to an Azure SQL Managed Instance

Answer: D

NEW QUESTION 291

- (Exam Topic 5)

You have a SQL Server on Azure Virtual Machines instance that hosts a database named Db1. You need to configure the autogrow and autoshrink settings for DB1.

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

Autogrow:

Autoshrink:

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

<https://learn.microsoft.com/en-us/troubleshoot/sql/admin/considerations-autogrow-autoshrink>

NEW QUESTION 292

- (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 297

- (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 300

- (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 305

- (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 309

- (Exam Topic 5)

You have 50 Azure SQL databases.

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

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

Answer: D

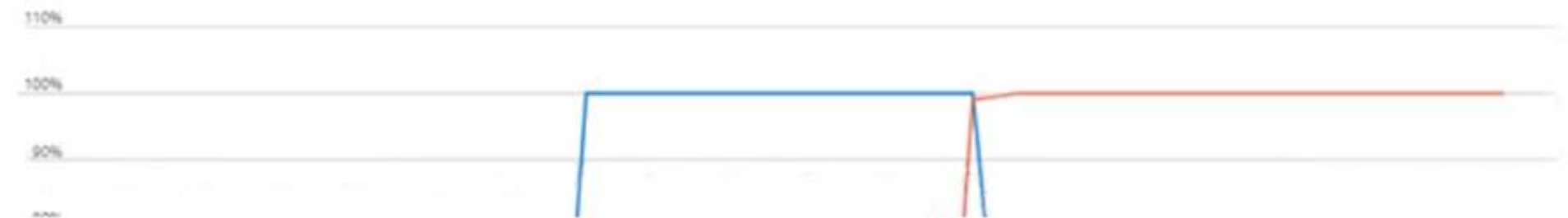
Explanation:

Activity log events - An alert can trigger on every event, or, only when a certain number of events occur. Reference: <https://docs.microsoft.com/en-us/azure/azure-sql/database/alerts-insights-configure-portal>

NEW QUESTION 311

- (Exam Topic 5)

You have an Azure SQL database named that contains a table named Table1. You run a query to bad data into Table1. The performance Of Table1 during the load operation are shown in exhibit.



To reduce how long it takes to complete the query you must [answer choice].

- scale the resource
- use an elastic pool
- perform query tuning

To reduce the log IO load of the operation, the query must be updated to use [answer choice] table.

- a temporary
- an In-Memory OTLP durable
- an In-Memory OTLP non durable

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

To reduce how long it takes to complete the query you must [answer choice].

- scale the resource
- use an elastic pool
- perform query tuning

To reduce the log IO load of the operation, the query must be updated to use [answer choice] table.

- a temporary
- an In-Memory OTLP durable
- an In-Memory OTLP non durable

NEW QUESTION 313

- (Exam Topic 5)

You have an Azure SQL database named DB1 that contains a nonclustered index named index1. End users report slow queries when they use index1. You need to identify the operations that are being performed on the index. Which dynamic management view should you use?

- A. sys.dm_exec_query_plan_stats
- B. Sys.dm_db_index_physical_stats
- C. Sys.dm_db_index_operational_stats
- D. Sys.dm_db_index_usage_stats

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

Answer: D

NEW QUESTION 318

- (Exam Topic 5)

You have an Azure SQL database named DB1. DB1 contains a table that has a column named Col1. You need to encrypt the data in Col1.

Which four actions should you perform for DB1 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 database master key.
- Create a column master key.
- Open the symmetric key.
- Create a certificate.
- Update Col1.
- Create a symmetric key.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Table Description automatically generated

Reference:

<https://www.sqlshack.com/an-overview-of-the-column-level-sql-server-encryption/>

NEW QUESTION 321

- (Exam Topic 5)

You deploy a database to an Azure SQL Database managed instance.

You need to prevent read queries from blocking queries that are trying to write to the database. Which database option should set?

- A. PARAMETERIZATIONtoFORCED
- B. PARAMETERIZATIONtoSIMPLE
- C. Delayed Durability toForced
- D. READ_COMMITTED_SNAPSHOTtoON

Answer: D

Explanation:

In SQL Server, you can also minimize locking contention while protecting transactions from dirty reads of uncommitted data modifications using either:

- The READ COMMITTED isolation level with the READ_COMMITTED_SNAPSHOT database option set to ON.

➤ The SNAPSHOT isolation level.

If READ_COMMITTED_SNAPSHOT is set to ON (the default on SQL Azure Database), the Database Engine uses row versioning to present each statement with a transactionally consistent snapshot of the data as it existed at the start of the statement. Locks are not used to protect the data from updates by other transactions.

Reference:

<https://docs.microsoft.com/en-us/sql/t-sql/statements/set-transaction-isolation-level-transact-sql>

NEW QUESTION 323

- (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 326

- (Exam Topic 5)

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

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

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

What should you include in the recommendation?

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

Answer: B

Explanation:

Azure SQL Database single database supports Data Sync. Reference:

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

NEW QUESTION 331

- (Exam Topic 5)

You have an Azure subscription.

You need to deploy an Azure SQL managed instance that meets the following requirements:

- Optimize latency.
- Maximize the memory-to-vCore ratio.

Which service tier and hardware generation should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Service tier:

Hardware generation:

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Service tier:
 Business Critical
 General Purpose
 Hyperscale

Hardware generation:
 Premium-series - memory optimized
 Premium-series
 Standard-series (Gen 5)
 Premium-series - memory optimized

NEW QUESTION 333

- (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 336

- (Exam Topic 4)

You need to design an analytical storage solution for the transactional data. The solution must meet the sales transaction dataset requirements.

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.

Table type to store retail store data:
 Hash
 Replicated
 Round-robin

Table type to store promotional data:
 Hash
 Replicated
 Round-robin

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application Description automatically generated

Box 1: Hash Scenario:

Ensure that queries joining and filtering sales transaction records based on product ID complete as quickly as possible.

A hash distributed table can deliver the highest query performance for joins and aggregations on large tables. Box 2: Round-robin

Scenario:

You plan to create a promotional table that will contain a promotion ID. The promotion ID will be associated to a specific product. The product will be identified by a product ID. The table will be approximately 5 GB.

A round-robin table is the most straightforward table to create and delivers fast performance when used as a staging table for loads. These are some scenarios where you should choose Round robin distribution:

- > When you cannot identify a single key to distribute your data.
- > If your data doesn't frequently join with data from other tables.
- > When there are no obvious keys to join.

Reference:

<https://rajanieshkaushikk.com/2020/09/09/how-to-choose-right-data-distribution-strategy-for-azure-synapse/>

NEW QUESTION 338

- (Exam Topic 3)

Which windowing function should you use to perform the streaming aggregation of the sales data?

- A. Sliding
- B. Hopping
- C. Session
- D. Tumbling

Answer: D

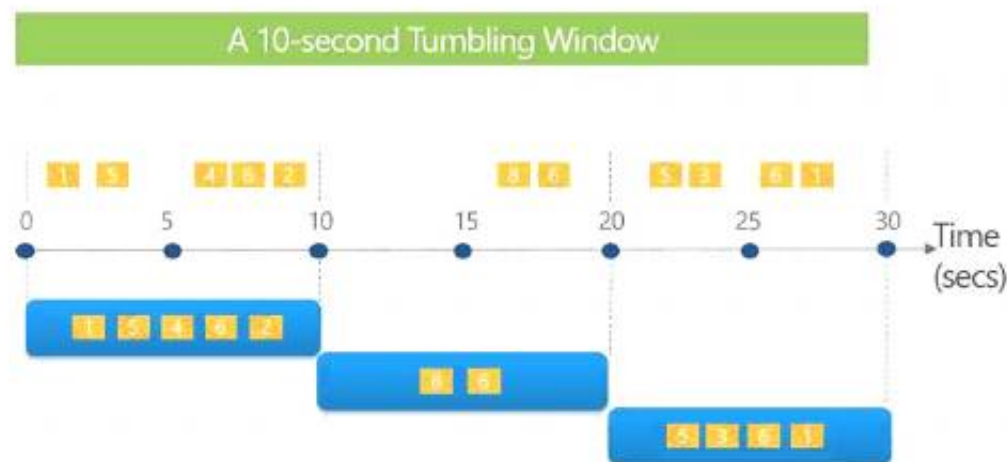
Explanation:

Scenario: The sales data, including the documents in JSON format, must be gathered as it arrives and analyzed online by using Azure Stream Analytics. The analytics process will perform aggregations that must be done continuously, without gaps, and without overlapping.

Tumbling window functions are used to segment a data stream into distinct time segments and perform a function against them, such as the example below. The key differentiators of a Tumbling window are that they repeat, do not overlap, and an event cannot belong to more than one tumbling window.

Timeline Description automatically generated

Tell me the count of Tweets per time zone every 10 seconds



```
SELECT TimeZone, COUNT(*) AS Count
FROM TwitterStream TIMESTAMP BY CreatedAt
GROUP BY TimeZone, TumblingWindow(second,10)
```

Reference:

<https://github.com/MicrosoftDocs/azure-docs/blob/master/articles/stream-analytics/stream-analytics-window-fun>

NEW QUESTION 343

- (Exam Topic 2)

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

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

Answer: D

Explanation:

Reference:

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

NEW QUESTION 346

- (Exam Topic 2)

Which audit log destination should you use to meet the monitoring requirements?

- A. Azure Storage
- B. Azure Event Hubs
- C. Azure Log Analytics

Answer: C

Explanation:

Scenario: Use a single dashboard to review security and audit data for all the PaaS databases.

With dashboards can bring together operational data that is most important to IT across all your Azure resources, including telemetry from Azure Log Analytics.

Note: Auditing for Azure SQL Database and Azure Synapse Analytics tracks database events and writes them to an audit log in your Azure storage account, Log Analytics workspace, or Event Hubs.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/visualize/tutorial-logs-dashboards>

NEW QUESTION 347

- (Exam Topic 1)

You create all of the tables and views for ResearchDB1.

You need to implement security for ResearchDB1. The solution must meet the security and compliance requirements. Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

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

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application Description automatically generated

Reference:

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

NEW QUESTION 350

- (Exam Topic 1)

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

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

NOTE:Each correct selection is worth one point.

Quorum model:	<div>▼</div> <div>Cloud witness</div> <div>Disk witness</div> <div>File share witness</div>
Azure resource for the availability group listener:	<div>▼</div> <div>Azure Application Gateway</div> <div>Azure Basic Load Balancer</div>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Scenario: Business Requirements

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

Box 1: Cloud witness

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

Box 2: Azure Basic Load Balancer

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

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

Reference:

<https://technet.microsoft.com/windows-server-docs/failover-clustering/deploy-cloud-witness> https://azure.microsoft.com/en-us/support/legal/sla/load-balancer/v1_0/

NEW QUESTION 352

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