

within a prescribed budget while delivering performance elasticity for each database.

Guaranteed 99.995 percent uptime for SQL Database

Reference:

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

<https://azure.microsoft.com/en-us/pricing/details/sql-database/elastic/>

<https://www.azure.cn/en-us/support/sla/virtual-machines/>

<https://techcommunity.microsoft.com/t5/azure-sql/optimize-price-performance-with-computeauto-scaling-in-azure/ba-p6149>

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## **QUESTION 55**

### **HOTSPOT**

You have an on-premises database that you plan to migrate to Azure.

You need to design the database architecture to meet the following requirements:

Support scaling up and down.

Support geo-redundant backups.

Support a database of up to 75 TB.

Be optimized for online transaction processing (OLTP).

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

NOTE: Each correct selection is worth one point.

Service:

	▼
Azure SQL Database	
Azure SQL Managed Instance	
Azure Synapse Analytics	
SQL Server on Azure Virtual Machines	

Service tier:

	▼
Basic	
Business Critical	
General Purpose	
Hyperscale	
Premium	
Standard	

Answer:

Explanation:

Box 1: Azure SQL Database

Azure SQL Database:

Database size always depends on the underlying service tiers (e.g. Basic, Business Critical, Hyperscale).

It supports databases of up to 100 TB with Hyperscale service tier model.

Active geo-replication is a feature that lets you to create a continuously synchronized readable secondary database for a primary database. The readable secondary database may be in the same Azure region as the primary, or, more commonly, in a different region. This kind of readable secondary databases are also known as geo-secondaries, or geo-replicas.

Azure SQL Database and SQL Managed Instance enable you to dynamically add more resources to your database with minimal downtime.

Box 2: Hyperscale

Reference:

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

<https://medium.com/awesome-azure/azure-difference-between-azure-sql-database-and-sql-server-on-vm-comparison-azure-sql-vs-sql-server-vm-cf02578a1188>

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**QUESTION 56**

You are planning an Azure IoT Hub solution that will include 50,000 IoT devices.

Each device will stream data, including temperature, device ID, and time data.

a. Approximately 50,000 records will be written every second. The data will be visualized in near real time.

You need to recommend a service to store and query the data.

Which two services can you recommend? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Azure Table Storage
- B. Azure Event Grid
- C. Azure Cosmos DB SQL API
- D. Azure Time Series Insights

Answer: CD

Explanation:

D: Time Series Insights is a fully managed service for time series data. In this architecture, Time Series Insights performs the roles of stream processing, data store, and analytics and reporting. It accepts streaming data from either IoT Hub or Event Hubs and stores, processes, analyzes, and displays the data in near real time.

C: The processed data is stored in an analytical data store, such as Azure Data Explorer, HBase, Azure Cosmos DB, Azure Data Lake, or Blob Storage.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/data-guide/scenarios/time-series>

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**QUESTION 57**

You are designing an application that will aggregate content for users.

You need to recommend a database solution for the application. The solution must meet the following requirements:

Support SQL commands.

Support multi-master writes.

Guarantee low latency read operations.

What should you include in the recommendation?

- A. Azure Cosmos DB SQL API
- B. Azure SQL Database that uses active geo-replication
- C. Azure SQL Database Hyperscale
- D. Azure Database for PostgreSQL

Answer: A

Explanation:

With Cosmos DB's novel multi-region (multi-master) writes replication protocol, every region supports both writes and reads. The multi-region writes capability also enables:

Unlimited elastic write and read scalability.

99.999% read and write availability all around the world.

Guaranteed reads and writes served in less than 10 milliseconds at the 99th percentile.

Reference:

<https://docs.microsoft.com/en-us/azure/cosmos-db/distribute-data-globally>

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## QUESTION 58

### HOTSPOT

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

Name	Resource group	Location
SQLsvr1	RG1	East US
SQLsvr2	RG2	West US

The subscription contains the storage accounts shown in the following table.

Name	Resource group	Location	Account kind
storage1	RG1	East US	StorageV2 (general purpose v2)
storage2	RG2	Central US	BlobStorage

You create the Azure SQL databases shown in the following table.

Name	Resource group	Server	Pricing tier
SQLdb1	RG1	SQLsvr1	Standard
SQLdb2	RG1	SQLsvr1	Standard
SQLdb3	RG2	SQLsvr2	Premium

Answer Area		
	Statements	Yes No
	When you enable auditing for SQLdb1, you can store the audit information to storage1.	<input type="radio"/> <input type="radio"/>
	When you enable auditing for SQLdb2, you can store the audit information to storage2.	<input type="radio"/> <input type="radio"/>
	When you enable auditing for SQLdb3, you can store the audit information to storage2.	<input type="radio"/> <input type="radio"/>

Answer:

Explanation:

Box 1: Yes

Be sure that the destination is in the same region as your database and server.

Box 2: No

Box 3: Yes

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

Reference:

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

[https://docs.microsoft.com/en-us/previousversions/azure/dn741340\(v=azure.100\)?redirectedfrom=MSDN](https://docs.microsoft.com/en-us/previousversions/azure/dn741340(v=azure.100)?redirectedfrom=MSDN)

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### QUESTION 59

You have SQL Server on an Azure virtual machine. The databases are written to nightly as part of a batch process.

You need to recommend a disaster recovery solution for the data.

a. The solution must meet the following requirements:

Provide the ability to recover in the event of a regional outage.

Support a recovery time objective (RTO) of 15 minutes.

Support a recovery point objective (RPO) of 24 hours.

Support automated recovery.

Minimize costs.

What should you include in the recommendation?

A. Azure virtual machine availability sets

B. Azure Disk Backup

C. an Always On availability group

D. Azure Site Recovery

Answer: D

Explanation:

Replication with Azure Site Recover:

RTO is typically less than 15 minutes.

RPO: One hour for application consistency and five minutes for crash consistency.

Reference:

<https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-sql>

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## **QUESTION 60**

HOTSPOT

You plan to deploy the backup policy shown in the following exhibit.

## Policy1

Associated Items Delete Save Discard

### Backup frequency

Daily 6:00 PM (UTC) Coordinated Universal Time

### Retention range

☒ Retention of daily backup point.

\* At For  
6:00 PM 90 Day(s)

☒ Retention of weekly backup point.

\* On \* At For  
Sunday 6:00 PM 26 Week(s)

☒ Retention of monthly backup point.

Week Based Day Based

\* On \* Day \* At For  
First Sunday 6:00 PM 36 Month(s)

☐ Retention of yearly backup point.

Not Configured

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.

Virtual machines that are backed up using the policy can be recovered for up to a maximum of **[answer choice]**.

	▼
90 days	
26 weeks	
36 months	
45 months	

The minimum recovery point objective (RPO) for virtual machines that are backed up by using the policy is **[answer choice]**.

	▼
1 hour	
1 day	
1 week	
1 month	
1 year	

Answer:



Virtual machines that are backed up using the policy can be recovered for up to a maximum of **[answer choice]**.

	▼
90 days	
26 weeks	
36 months	
45 months	

The minimum recovery point objective (RPO) for virtual machines that are backed up by using the policy is **[answer choice]**.

	▼
1 hour	
1 day	
1 week	
1 month	
1 year	

Explanation:

<https://docs.microsoft.com/en-us/azure/backup/backup-azure-vm-backup-faq#what-s-the-minimum-rpo-and-rto-for-vm-backups-in-azure-backup>

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### QUESTION 61

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 need to deploy resources to host a stateless web app in an Azure subscription. The solution must meet the following requirements:

- Provide access to the full .NET framework.

- Provide redundancy if an Azure region fails.

- Grant administrators access to the operating system to install custom application dependencies.

Solution: You deploy two Azure virtual machines to two Azure regions, and you create a Traffic Manager profile.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Azure Traffic Manager is a DNS-based traffic load balancer that enables you to distribute traffic optimally to services across global Azure regions, while providing high availability and responsiveness.

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview>

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### **QUESTION 62**

You need to deploy resources to host a stateless web app in an Azure subscription. The solution must meet the following requirements:

Provide access to the full .NET framework.

Provide redundancy if an Azure region fails.

Grant administrators access to the operating system to install custom application dependencies.

Solution: You deploy an Azure virtual machine to two Azure regions, and you deploy an Azure Application Gateway.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

You need to deploy two Azure virtual machines to two Azure regions, but also create a Traffic Manager profile.

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### **QUESTION 63**

#### **HOTSPOT**

You plan to create an Azure Storage account that will host file shares. The shares will be accessed from on-premises applications that are transaction-intensive.

You need to recommend a solution to minimize latency when accessing the file shares. The solution