Question 1:

Which Azure storage service includes support for Hot, Cool, and Archive access tiers?

- Azure Blob
- Azure Table
- Azure File

Correct Answer: Azure Blob

Explanation

Azure Blob is the only Azure storage option that supports access tiers. The default is the Hot tier, which is designed for frequently accessed data. The Cool tier is optimized for data that will be stored for at least 30 days. The Cool tier has lower storage cost than the Hot tier but higher costs for early access. The Archive tier is designed for data that is rarely accessed and will remain in storage for at least 180 days. Access to Archive tier data requires the data to be rehydrated to a Hot or Cool tier. This can mean a latency of several hours. Access tier support requires Data Lake Storage Gen2.

Azure Blob also supports two performance tiers. The Standard performance tier provides for high performance using hard disk-based storage media. The Premium performance provides greater throughput than the Standard tier and uses solid state drive (SSD) media. The Standard and Premium tiers are also supported for other storage options, including Azure File storage and Azure SQL Database.

Azure Table and Azure File do not support access tiers. Access tiers is a feature supported through Cosmos DB. Azure Table and Azure File are distinct storage types and are not implemented through Cosmos DB APIs. Table storage is used to store structured, non-relational data. File storage provides file storage with shared access, like a file server.

References

Explore Azure Blob storage
Introduction to Azure Blob storage
Azure Blob storage: hot, cool, and archive access tiers

Question 2:

Which of the following statements are true?

A. You can create a premium Azure File storage account in a General-Purpose version 2 (GPv2) or FileStorage storage account.

B. You can configure a premium Azure File storage account for locally-redundant storage (LRS), zone redundant storage (ZRS), or geo-redundant storage (GRS).

C. You can use a premium Azure File storage account to replace or supplement traditional on-premises file shares.

- A
- B and C
- C
- A and C

Correct Answer: C

Explanation

You can create a premium Azure File storage account in a FileStorage storage account only. You can create a standard File storage account only in a GPv2 account.

You can configure a premium Azure File storage account for LRS and, in select regions, for ZRS. A standard file storage account supports GRS, but not a premium storage account. You can use a premium Azure File storage account to replace or supplement traditional onpremises file shares. This is true for both standard and premium storage accounts. This includes scenarios where application data is moved to the cloud but applications continue to run on-premises.

References

Explore Azure File storage What is Azure Files?
Create an Azure file share

Question 3:

Which two statements identify features that are supported by Azure Cosmos DB Table API, but not Azure Table storage? Each correct answer presents part of the solution.

- Data is organized and distributed by partition keys and row keys.
- Manual and automatic failovers are supported.
- Multi-master replication is supported across multiple regions.
- Each row in a table can have a different number of columns.

Correct Answer: Manual and automatic failovers are supported, and multi-master replication is supported across multiple regions.

Explanation

Cosmos DB Table API supports multi-master replication across multiple regions. This means that you can set it up to let any region accept writes. Global distribution is a turnkey feature of Cosmos DB Table API. Table storage is limited to one primary image that can accept writes and can have one read-only replica in a different region.

Cosmos DB Table API supports manual and automatic failovers. Failure can be initiated from any redundant region and at any time. Azure Table API does not let you initiate failover. Each row in a table can have a different number of columns in both Azure Cosmos DB and Azure Table storage. This is a defining feature of Table storage.

Data is organized and distributed by partition keys and row keys. This is the only indexing on Azure Table storage. Cosmos DB Table API automatically creates secondary indexes without any index management requirements.

References

Explore Azure Table
Introduction to Azure Cosmos DB: Table API
What is Azure Table storage?
Frequently asked questions about the Table API in Azure Cosmos DB

Question 4:

You plan to reduce storage costs to store older, non-structured data in Azure Blob storage. The data needs to be accessible occasionally to generate reports that must be available as soon as possible.

You need to choose the most appropriate data tier for this data.

Which tier should you use?

- Cool
- Archive
- Hot

Correct Answer: Cool

Explanation

You should use the cool tier. This tier is optimized for storing data that is infrequently accessed, with a lower storage cost than the hot tier.

You should not use the hot tier. This tier is optimized for frequently accessed data and has the highest storage cost among the storage tiers.

You should not use the archive tier. This tier is optimized for storing data that is rarely accessed, with the lowest storage cost among the storage tiers. The archive tier data is saved in offline storage, requiring you to wait for the rehydration of the data to an online tier before you can access the data.

References

Azure Blob storage: hot, cool, and archive access tiers

Question 5:

You are migrating an application to Azure. This application uses a shared network folder as a data store.

You need to move the shared network folder to Azure storage.

Which type of Azure storage should you use?

- Azure File storage
- Azure Table storage
- Azure Blob storage
- Azure Queue storage

Correct Answer: Azure Blob Storage

Explanation

You should use Azure File storage. Azure File storage provides file shares compatible with the Server Message Block (SMB) protocol, replacing traditional on-premises file servers with a cloud solution.

You should not use Azure Queue storage. Azure Queue storage is a service used for storing messages that are used by distributed applications. A queue message can be up to 64 KB in size.

You should not use Azure Table storage. Azure Table storage is used to store data as rows and columns, forming a table in which the number of columns may vary according to each row.

You should not use Azure Blob storage. Azure Blob storage can store unstructured data, such as binary objects, images, media files, and large text files, in a cost-efficient and scalable manner.

References

What is Azure Files?
Introduction to Azure Blob storage
What are Azure queues?
What is Azure Table storage?