

- 1) You are planning to move streaming media content to Windows Azure Storage. You need to recommend an approach for providing worldwide users the fastest possible access to the content. Which two actions should you recommend? (Each correct answer presents part of the solution. Choose two.)
- A) Use a Shared Access Signature.
 - B) Use Windows Azure page blob storage.
 - C) Use Windows Azure block blob storage.
 - D) Use the Windows Azure Content Delivery Network (CDN).

Answer: **CD**

- 2) You are designing a plan for migrating Virtual Hard Disks (VHDs) and video files to Windows Azure Storage. The VHDs must be optimized for random read/write operation. The video files must be optimized for sequential access. You need to recommend storage types for storing the VHDs and video files. Which two storage types should you recommend? (Each correct answer presents part of the solution. Choose two.)
- A) Store VHDs in Windows Azure page blob storage.
 - B) Store VHDs in Windows Azure block blob storage.
 - C) Store video files in Windows Azure page blob storage.
 - D) Store video files in Windows Azure block blob storage.

Answer: **AD**

- 3) You are designing a Windows Azure application that will use Windows Azure Table storage. The application will allow teams of users to collaborate on projects. Each user is a member of only one team. You have the following requirements:
- Ensure that each user can efficiently query records related to his or her team's projects.
 - Minimize data access latency.

You need to recommend an approach for partitioning table storage entities. What should you recommend?

- A) Partition by user.
- B) Partition by team.
- C) Partition by project.
- D) Partition by the current date.

Answer: **B**

- 4) You deploy a stateless ASP.NET application to an Azure website. You scale out the application by adding website instances. Only newly signed in users are routed to the recently added website instances. Users must be evenly distributed among all of the instances. You need to configure the environment to ensure that the load balancer evenly distributes requests. What should you do?

- a) `<system.webServer>`
 `<httpProtocol>`
 `<customHeaders>`
 `<add name="Arr-Disable-Session-Affinity" value="False"/>`
 `</customHeaders>`

- ```
 </httpProtocol>
 </system.webServer>
b) Configure autoscaling rules based on metrics
c) <system.webServer>
 <httpProtocol>
 <customHeaders>
 <add name="Arr-Disable-Session-Affinity" value="False"/>
 </customHeaders>
 </httpProtocol>
</system.webServer>
d) Enable Always On Support
A) Option a,b
B) Option b,c
C) Option c,d
D) Option d
```

Answer: C

- 5) You store data in an Azure blob. Data accumulates at a rate of 0.10 GB per day. You must use storage analytics data to verify that the service level agreement (SLA) has been met and to analyze the performance of VHDs, including the pattern of usage. Analytics data must be deleted when it is older than 100 days or when the total amount of data exceeds 10 GB. You need to configure storage analytics and access the storage analytics data. Which two approaches will achieve the goal? Each correct answer presents part of the solution.
- A) Disable the data retention policy.
  - B) Access analytics data by using the Service Management REST API
  - C) Access analytics data by using the APIs used to read blob and table data.
  - D) Configure a data retention policy of 100 days.

Answer: **CD**

- 6) You store JSON data in a blob by using the Azure Blob service. Web applications access the JSON data by using client-side JavaScript calls. JSON data is stored in a container that is configured to allow anonymous access. Web applications that are allowed to make updates to the data have access to any necessary shared access signatures (SASs) and storage keys. You configure one Cross-Origin Resource Sharing (CORS) rule for the <https://fabrikam.com> domain and then run the following method. Line numbers are provided for reference only.

```
01 void ConfigureBlobCorsRules(CloudBlobClient blobClient)
02 {
03 var blobServiceProperties=blobClient.GetServiceProperties();
04 var partnerCorRule=new CorsRule();
05 partnerCorRule.AllowedOrigins.Add("https://contoso.com");
06 partnerCorRule.AllowedMethods=CorsHttpMethods.Post | CorsHttpMethods.Put;
07 partnerCorRule.ExposedHeaders.Add("*");
08 partnerCorRule.AllowedHeaders.Add("*");
09 blobServiceProperties.Cors.CorsRules.Add(partnerCorRule);
```

```
10 var publicCorsRule=new CorsRule();
11 publicCorsRule.AllowedOrigins.Add("*");
12 publicCorsRule.AllowedMethods=CorsHttpMethods.Get;
13 publicCorsRule.ExposedHeaders.Add("*");
14 publicCorsRule.AllowedHeaders.Add("*");
15 blobServiceProperties.Cors.CorsRules.Add(publicCorsRule);
16 blobClient.SetServiceProperties(blobServiceProperties);
17 }
```

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

| Answer Area                                                                                                                    | Yes                   | No                    |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| The CORS rule that was previously configured for https://fabrikam.com is no longer in effect after this method runs.           | <input type="radio"/> | <input type="radio"/> |
| Partners from the https://contoso.com domain can access the configured storage by using the <b>HTTP HEAD</b> operation.        | <input type="radio"/> | <input type="radio"/> |
| Partners from the https://contoso.com domain can access the configured storage service by using the <b>HTTP GET</b> operation. | <input type="radio"/> | <input type="radio"/> |

Answer:

| Answer Area                                                                                                                    | Yes                              | No                               |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|
| The CORS rule that was previously configured for https://fabrikam.com is no longer in effect after this method runs.           | <input checked="" type="radio"/> | <input type="radio"/>            |
| Partners from the https://contoso.com domain can access the configured storage by using the <b>HTTP HEAD</b> operation.        | <input type="radio"/>            | <input checked="" type="radio"/> |
| Partners from the https://contoso.com domain can access the configured storage service by using the <b>HTTP GET</b> operation. | <input type="radio"/>            | <input checked="" type="radio"/> |

- 7) You develop a web application that will use the Azure Table service.  
The web application will store entities in the form of XML data within a single table.  
The web application must support high traffic throughput.  
You need to avoid exceeding the throttle limit for the table.  
Which two actions should you take?  
Each correct answer presents part of the solution.
- a) Add additional partition keys to the table.
  - b) Batch transactions for entities that are in the same partition group in the table.
  - c) Compress the entities before storing them in the table.
  - d) Store the entities in JSON format.

Answer: **BD**

- 8) You are managing an application. The application uses data that is stored in an Azure SQL database. You must be able to reset the application to the state that existed on any day in the previous 35 days. You need to choose a backup solution. What should you do?
- A. Run SQL replication on the SQL database once a day.
  - B. Use Microsoft Azure SQL Database Point in Time Restore
  - C. Use the SQL Server Data-Tier Application Framework to build a data-tier application (DAC) file once a day.
  - D. Use the bcp utility to export data to an Azure page blob once a day


Answer: **B**

- 9) Tailspin Toys uses a website to manage its inventory. The website is hosted on Azure. You are writing a Windows Store app that uses data from the blob storage. You need to retrieve an image from the following URI:

**<https://tailspintoys.blob.core.windows.net/Trains/Caboose2.jpg>**.

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

a)

```
CloudStorageAccount storageAccount = CloudStorageAccount.Parse(
 CloudConfigurationManager.GetSetting("StorageConnectionString"));
CloudBlobClient blobClient = storageAccount.  ();
```

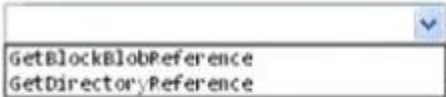
The dropdown menu for the first code segment contains the following options: BlobEndpoint, FileEndpoint, CreateCloudBlobClient, and CreateCloudFileClient.

b)

```
CloudBlobContainer blobContainer =
 blobClient.  ("trains");
```

The dropdown menu for the second code segment contains the following options: GetContainerReference and GetBlobReferenceFromServerAsync.

c)

```
CloudBlockBlob myBlob =
 blobContainer.  ("Caboose2.jpg");

using (var fileStream = System.IO.File.OpenWrite
 (@path\myfile"))
{
 myBlob.DownloadToStream(fileStream);
}
```

The dropdown menu for the third code segment contains the following options: GetBlockBlobReference and GetDirectoryReference.

Answers:

**a) CreateCloudBlobClient**

**b) GetContainerPreference**

**c) GetBlockBlobReference**

10) You develop a web application that uses table storage in Azure. You create a storage account named Contoso that stores a table named CityPopulationData. The web application stores entities in this table. You need to query the table data by using OData. Which URL should you use?

- a) <http://contoso.table.core.windows.net/citypopulationdata>
- b) <http://contoso.table.core.windows.net/odata/citypopulationdata>
- c) <http://azurestorage.table.core.windows.net/contoso>
- d) <http://microsoft.table.core.windows.net/contoso>
- e) <http://azure.table.core.windows.net/contoso/citypopulationdata>

Answer: A

11) You are maintaining an application that uses the Azure Content Delivery Network (CDN) to serve terabytes of content that is stored in page blobs. Your bill for CDN services is higher than you expect. You need to monitor the application to find issues that increase costs. Which two operations should you monitor? (Select two.)

- A. The Time-To-Live (TTL) of the blobs.
- B. The country of origin for the client computer and the CDN region.
- C. The number of requests that result in an HTTP status code over 400.
- D. The allocated size of page blobs.
- E. The expiration date of the blobs.

Answer: B, D

12) You are developing a REST API service that provides data about products. The service will be hosted in an Azure virtual machine (VM). The product data must be stored in Azure tables and replicated to multiple geographic locations. API calls that use the HTTP GET operation must continue to function when the data tables at the primary Azure datacenter are not accessible. You need to configure storage for the service. Which type of replication should you choose?

- A. Locally Redundant Storage replication
- B. Geo-Redundant Storage replication
- C. Zone-Redundant Storage replication
- D. Read-Access Geo-Redundant Storage replication

Answer: D

13) A company maintains an Azure storage account. The storage account uses blobs and tables. Customers access the storage account by using shared access signatures (SASs). You need to monitor the usage of the storage services. You need to do the following:

- Understand which storage areas perform operations that incur a fee.
- Understand which requests are denied because of insufficient permissions.

Validate that the performance of the storage account meets the service level agreement (SLA) for the Azure Storage service.

Which three data analysis tasks should you perform? Each correct answer presents part of the solution.

- A. Use data from the logs of the storage services to find individual storage access attempts that do not comply with the SLA.
- B. Use data from the logs of the storage services to calculate aggregate server latency across individual requests. Determine whether the results of this calculation indicate that the Azure Storage service is in compliance with the SLA.
- C. Analyze the logs of the storage services to determine which storage services were inaccessible because of permissions issues.
- D. Review the Azure documentation to determine which storage operations are billable. Then find records of those operations in the logs of the storage services.
- E. Analyze the logs of the storage services to find records of operations that are marked as billable.
- F. Correlate the data logged from the storage service with the permissions to store data in the individual blobs and containers.

Determine which storage services were inaccessible because of permissions issues.

Answer: BCD

- 14) Your company works with trusted partners. These partners upload files into a storage account that you control. Partners must be able to create, read, and write files. Partners must NOT be allowed to see files from other partners. You generate a shared access signature (SAS) for each partner. You create the following Windows PowerShell script to create a new container for each partner. Line numbers are included for reference only.

```
01 $containerName = "partner123files"
02 $key = (Get-AzureStorageKey -StorageAccountName $storageAccountName).Primary
03 $context = New-AzureStorageContext -StorageAccountName $storageAccountName `
 -StorageAccountKey $key
05 New-AzureStorageContainer -Name $containerName -Context $context
06 $filepath = "welcome.txt"
07 $blobname = "welcome.txt"
08 Set-AzureStorageBlobContent -Container $containerName -File "$filepath" `
 -Blob $blobname -Context $context -Properties @{"ContentType"="text/plain"}
09 $oneYearFromNow = (Get-Date).AddYears(1)
10 $sasToken = New-AzureStorageContainerSASToken -Name $containerName `
 -Permission 'rwdl' -ExpiryTime $oneYearFromNow -Context $context
11 $sasBlobUri = New-AzureStorageBlobSASToken -Container $containerName `
 -Permission 'r' -ExpiryTime $oneYearFromNow -Context $context `
 -FullUri -Blob $blobname
```

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

| Answer Area                                                                                                   | Yes                   | No                    |
|---------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| Running the command at line 10 a second time invalidates the previously generated SAS token.                  | <input type="radio"/> | <input type="radio"/> |
| Web browsers can open the welcome.txt file directly by using the full URI and the SAS token for the file.     | <input type="radio"/> | <input type="radio"/> |
| If the primary storage key is regenerated, the SAS token is still valid until its expiration date is reached. | <input type="radio"/> | <input type="radio"/> |

Answer:

| Answer Area                                                                                                   | Yes                              | No                               |
|---------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|
| Running the command at line 10 a second time invalidates the previously generated SAS token.                  | <input type="radio"/>            | <input checked="" type="radio"/> |
| Web browsers can open the welcome.txt file directly by using the full URI and the SAS token for the file.     | <input checked="" type="radio"/> | <input type="radio"/>            |
| If the primary storage key is regenerated, the SAS token is still valid until its expiration date is reached. | <input type="radio"/>            | <input checked="" type="radio"/> |

- 15) You are maintaining an application that uses the Azure Content Delivery Network (CDN) to serve terabytes of content that is stored in page blobs. Your bill for CDN services is higher than you expect. You need to monitor the application to find issues that increase costs. Which two operations should you monitor?

Each correct answer presents part of the solution.

- A. The Time-To-Live (TTL) of the blobs.
- B. The country of origin for the client computer and the CDN region.
- C. The number of requests that result in an HTTP status code over 400.
- D. The allocated size of page blobs.
- E. The expiration date of the blobs.

Answer: B,D

Additional notes: <https://azure.microsoft.com/en-us/blog/understanding-windows-azure-cdn-billing/>

- 16) You store data by using table storage in Azure. The storage analytics logs do not contain any data. You must configure the Azure storage account to retain logs for the maximum length of time that Azure permits. In the Azure management portal, what should you do?

- A. Set the monitoring level to Minimal, and set the number of days the data in the logs is retained to 0.



- B. Set the monitoring level to Verbose, and set the number of days the data in the logs is retained to 365.
- C. Set the monitoring level to Minimal, and set the number of days the data in the logs is retained to 99
- D. Set the monitoring level to Verbose, and set the number of days the data in the logs is retained to 30.

Answer: A

Additional Note: <https://azure.microsoft.com/en-us/documentation/articles/storage-monitor-storage-account/>

To set the data retention policy, in Retention (in days), type the number of days of data to retain from 1 to 365 days. If you do not want to set a retention policy, enter zero. If there is no retention policy, it is up to you to delete the monitoring data. We recommend setting a retention policy based on how long you want to retain storage analytics data for your account so that old and unused analytics data can be deleted by system at no cost.

Choice 'A' would allow us to have the maximum duration for logs, but there is no retention policy being set so log deletion should be manual and logging will stop when logs reach 20TB of size . while choice 'B' sets a retention policy to the max number of days allowed which is 365

- 17) The Azure Queue service hosts a queue named userRegistrationQueue. You are developing a web job to process messages from the queue. You create a new console application by using Microsoft Visual Studio. You also create an Azure storage connection string and store the connection string in the application configuration file.

All trigger listeners and jobs must run on the current thread. You need to ensure that the web job processes the messages from the queue. How should you complete the relevant code? To answer, drag the appropriate code segments to the correct location or locations. Each code segment 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.

| Code Segments                                                          | Answer Area                                                                                                                                     |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>var host = new Microsoft.Azure.Jobs.JobHost();</pre>              | <pre>static void Main()<br/>{<br/>    var cloudQueue = CreateCloudQueue();<br/>    AddMessageToQueue(cloudQueue);<br/>    <br/>    <br/>}</pre> |
| <pre>var host = new Microsoft.Azure.Jobs.JobHostConfiguration();</pre> |                                                                                                                                                 |
| <pre>host.RunOnBackgroundThread();</pre>                               |                                                                                                                                                 |
| <pre>host.RunAndBlock();</pre>                                         |                                                                                                                                                 |
| <pre>host.GetService(typeof (CloudQueue));</pre>                       |                                                                                                                                                 |
| <pre>host.NameResolver.Resolve("userRegistrationQueue");</pre>         |                                                                                                                                                 |

Answer:



```
static void Main()
{
 var cloudQueue = CreateCloudQueue();
 AddMessageToQueue(cloudQueue);

 var host = new Microsoft.Azure.Jobs.JobHost();

 host.RunAndBlock();
}
```