You need to upgrade the storage for App1. The solution must meet the following requirements:
Enable simultaneous write operations in multiple Azure regions.
Ensure that write latency is less than 10 ms.
Support indexing on all columns.
Minimize development effort.
Which data platform should you use?

A. Azure SQL Database
B. Azure SQL Managed Instance
C. Azure Cosmos DB
D. Table storage that uses geo-zone-redundant storage (GZRS) replication

Answer: D

Explanation:
Azure Cosmos DB Table API has
Single-digit millisecond latency for reads and writes, backed with <10-ms latency reads and <15-ms latency writes at the 99th percentile, at any scale, anywhere in the world.
Automatic and complete indexing on all properties, no index management.
Turnkey global distribution from one to 30+ regions. Support for automatic and manual failovers at any time, anywhere in the world.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/table-support

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QUESTION 174
You plan to archive 10 TB of on-premises data files to Azure.
You need to recommend a data archival solution. The solution must minimize the cost of storing the data files.
Which Azure Storage account type should you include in the recommendation?

A. Standard StorageV2 (general purpose v2)
B. Standard Storage (general purpose v1)
C. Premium StorageV2 (general purpose v2)
D. Premium Storage (general purpose v1)

Answer: A

Explanation:
Standard StorageV2 supports the Archive access tier, which would be the cheapest solution.
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-introduction

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QUESTION 175
You plan to move a web application named App! from an on-premises data center to Azure.
App1 depends on a custom COM component that is installed on the host server.
You need to recommend a solution to host App1 in Azure. The solution must meet the following requirements:
App1 must be available to users if an Azure data center becomes unavailable.
Costs must be minimized.
What should you include in the recommendation?

A. In two Azure regions, deploy a load balancer and a virtual machine scale set.
B. In two Azure regions, deploy a Traffic Manager profile and a web app.
C. In two Azure regions, deploy a load balancer and a web app.
D. Deploy a load balancer and a virtual machine scale set across two availability zones.

Answer: D

Explanation:
(https://docs.microsoft.com/en-us/dotnet/azure/migration/app-service#com-and-com-components)
Azure App Service does not allow the registration of COM components on the platform. If your app makes use of any COM components, these need to be rewritten in managed code and deployed with the site or application. https://docs.microsoft.com/en-us/dotnet/azure/migration/app-service
"Azure App Service with Windows Containers If your app cannot be migrated directly to App Service, consider App Service using Windows Containers, which enables usage of the GAC, COM components, MSIs, full access to .NET FX APIs, DirectX, and more."

QUESTION 176
You have an Azure subscription.
You need to deploy an Azure Kubernetes Service (AKS) solution that will use Linux nodes. The solution must meet the following requirements:
Minimize the time it takes to provision compute resources during scale-out operations.
Support autoscaling of Linux containers.
Minimize administrative effort.

Which scaling option should you recommend?

A. Virtual Kubelet
B. cluster autoscaler
C. horizontal pod autoscaler
D. AKS virtual nodes

Answer: D

Explanation:
https://docs.microsoft.com/en-us/azure/aks/virtual-nodes

QUESTION 177
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 plan to deploy multiple instances of an Azure web app across several Azure regions.
You need to design an access solution for the app. The solution must meet the following replication requirements:
Support rate limiting.
Balance requests between all instances.
Ensure that users can access the app in the event of a regional outage.
Solution: You use Azure Application Gateway to provide access to the app.
Does this meet the goal?

A. Yes
B. No

Answer: B

Explanation:

QUESTION 178
You need to recommend a solution to deploy containers that run an application. The application has two tiers.

Each tier is implemented as a separate Docker Linux-based image. The solution must meet the following requirements:
The front-end tier must be accessible by using a public IP address on port 80.
The backend tier must be accessible by using port 8080 from the front-end tier only.
Both containers must be able to access the same Azure file share.
If a container fails, the application must restart automatically.
Costs must be minimized.
What should you recommend using to host the application?

A. Azure Kubernetes Service (AKS)
B. Azure Service Fabric
C. Azure Container instances
D. Azure Container registries

Answer: C

Explanation:
Azure Container Instances enables a layered approach to orchestration, providing all of the scheduling and management capabilities required to run a single container, while allowing orchestrator platforms to manage multi-container tasks on top of it.
Because the underlying infrastructure for container instances is managed by Azure, an orchestrator platform does not need to concern itself with finding an appropriate host machine on which to run a single container.
Azure Container Instances can schedule both Windows and Linux containers with the same API.
Orchestration of container instances exclusively
Because they start quickly and bill by the second, an environment based exclusively on Azure Container Instances offers the fastest way to get started and to deal with highly variable workloads.
Reference:
https://docs.microsoft.com/en-us/azure/container-instances/container-instances-overview
https://docs.microsoft.com/en-us/azure/container-instances/container-instances-orchestratorrelationship

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QUESTION 179
You architect a solution that calculates 3D geometry from height-map data.
You have the following requirements:
Perform calculations in Azure.
Each node must communicate data to every other node.
Maximize the number of nodes to calculate multiple scenes as fast as possible.

Require the least amount of effort to implement.
You need to recommend a solution.
Which two actions should you recommend? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. Create a render farm that uses Azure Batch.
B. Enable parallel file systems on Azure.
C. Enable parallel task execution on compute nodes.
D. Create a render farm that uses virtual machine (VM) scale sets.
E. Create a render farm that uses virtual machines (VMs).

Answer: AC

Explanation:

QUESTION 180
Your company plans to publish APIs for its services by using Azure API Management.
You discover that service responses include the AspNet-Version header.
You need to recommend a solution to remove AspNet-Version from the response of the published APIs.
What should you include in the recommendation?

A. a new product
B. a modification to the URL scheme
C. a new policy
D. a new revision

Answer: C

Explanation:
Reference:
https://docs.microsoft.com/en-us/azure/api-management/transform-api

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QUESTION 181
You have an Azure subscription that contains a storage account.
An application sometimes writes duplicate files to the storage account.
You have a PowerShell script that identifies and deletes duplicate files in the storage account.

Currently, the script is run manually after approval from the operations manager.
You need to recommend a serverless solution that performs the following actions:
Runs the script once an hour to identify whether duplicate files exist
Sends an email notification to the operations manager requesting approval to delete the duplicate files
Processes an email response from the operations manager specifying whether the deletion was approved
Runs the script if the deletion was approved
What should you include in the recommendation?

A. Azure Logic Apps and Azure Functions
B. Azure Pipelines and Azure Service Fabric
C. Azure Logic Apps and Azure Event Grid
D. Azure Functions and Azure Batch

Answer: A

Explanation:
You can schedule a powershell script with Azure Logic Apps.
When you want to run code that performs a specific job in your logic apps, you can create your own function by using Azure Functions. This service helps you create Node.js, C#, and F# functions so you don't have to build a complete app or infrastructure to run code. You can also call logic apps from inside Azure functions. Azure Functions provides serverless computing in the cloud and is useful for performing tasks such as these examples:
Reference:
https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-azure-functions

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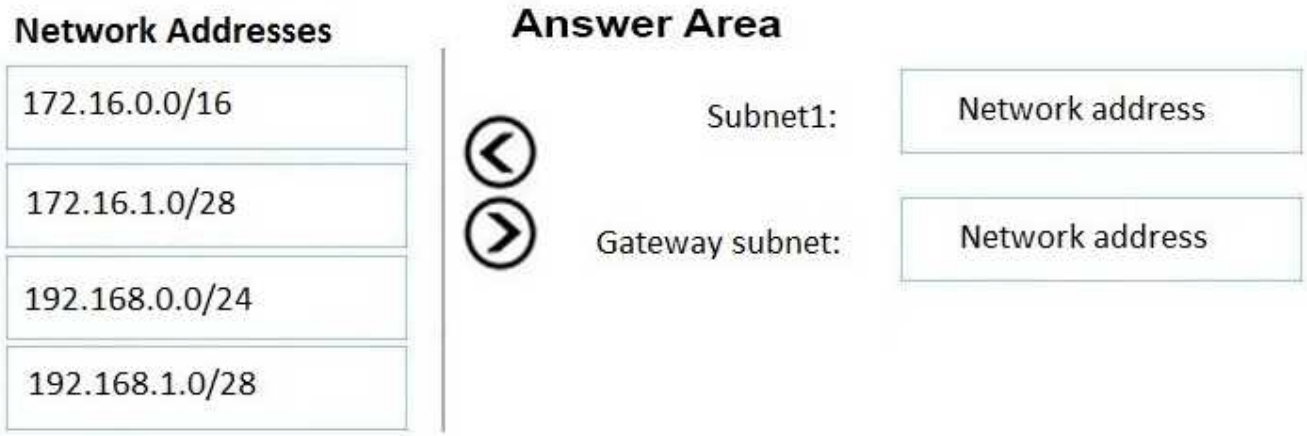
QUESTION 182
DRAG DROP
You have an on-premises network that uses on IP address space of 172.16.0.0
You plan to deploy 25 virtual machines to a new azure subscription.
You identity the following technical requirements.
All Azure virtual machines must be placed on the same subnet subnet1.
All the Azure virtual machines must be able to communicate with all on premises severs.
The servers must be able to communicate between the on-premises network and Azure by using a site to site VPN.
You need to recommend a subnet design that meets the technical requirements.

What should you include in the recommendation? To answer, drag the appropriate network addresses to the correct subnet. Each network address 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.



Answer:

Explanation:

QUESTION 183
You are designing an Azure solution.
The network traffic for the solution must be securely distributed by providing the following features:
HTTPS protocol
Round robin routing
SSL offloading
You need to recommend a load balancing option.
What should you recommend?

A. Azure Load Balancer
B. Azure Traffic Manager
C. Azure Internal Load Balancer (ILB)
D. Azure Application Gateway

Answer: D

Explanation:
If you are looking for Transport Layer Security (TLS) protocol termination ("SSL offload") or per-HTTP/HTTPS
request, application-layer processing, review Application Gateway.
Application Gateway is a layer 7 load balancer, which means it works only with web traffic (HTTP, HTTPS, WebSocket, and HTTP). It supports capabilities such as SSL termination, cookie-based session affinity, and round robin for load-balancing traffic. Load Balancer load-balances traffic at layer 4 (TCP or UDP).
Reference:
https://docs.microsoft.com/en-us/azure/application-gateway/application-gateway-faq

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QUESTION 184
Your company, named Contoso, Ltd, implements several Azure logic apps that have HTTP triggers:
The logic apps provide access to an on-premises web service.
Contoso establishes a partnership with another company named Fabrikam, Inc.
Fabrikam does not have an existing Azure Active Directory (Azure AD) tenant and uses third-party OAuth 2.0 identity management to authenticate its users.
Developers at Fabrikam plan to use a subset of the logics apps to build applications that will integrate with the on-premises web service of Contoso.
You need to design a solution to provide the Fabrikam developers with access to the logic apps. The solution must meet the following requirements:
Requests to the logic apps from the developers must be limited to lower rates than the requests from the users at Contoso.
The developers must be able to rely on their existing OAuth 2.0 provider to gain access to the logic apps.
The solution must NOT require changes to the logic apps.
The solution must NOT use Azure AD guest accounts.
What should you include in the solution?

A. Azure AD business-to-business (B2B)

B. Azure Front Door
C. Azure API Management
D. Azure AD Application Proxy

Answer: C

Explanation:
API Management helps organizations publish APIs to external, partner, and internal developers to unlock the potential of their data and services.
You can secure API Management using the OAuth 2.0 client credentials flow.
Reference:
https://docs.microsoft.com/en-us/azure/api-management/api-management-key-concepts
https://docs.microsoft.com/en-us/azure/api-management/api-management-features
https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-protectbackend-with-aad#enable-oauth-20-user-authorization-in-the-developer-console

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QUESTION 185
You need to design a solution that will execute custom C# code in response to an event routed to Azure Event Grid. The solution must meet the following requirements:
The executed code must be able to access the private IP address of a Microsoft SQL Server instance that runs on an Azure virtual machine.
Costs must be minimized.
What should you include in the solution?

A. Azure Logic Apps in the integrated service environment
B. Azure Functions in the Dedicated plan and the Basic Azure App Service plan
C. Azure Logic Apps in the Consumption plan
D. Azure Functions in the Consumption plan

Answer: D

Explanation:
When you create a function app in Azure, you must choose a hosting plan for your app. There are three basic hosting plans available for Azure Functions: Consumption plan, Premium plan, and Dedicated (App Service) plan.
For the Consumption plan, you don't have to pay for idle VMs or reserve capacity in advance.
Connect to private endpoints with Azure Functions

As enterprises continue to adopt serverless (and Platform-as-a-Service, or PaaS) solutions, they often need a way to integrate with existing resources on a virtual network. These existing resources could be databases, file storage, message queues or event streams, or REST APIs.
Reference:
https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale
https://techcommunity.microsoft.com/t5/azure-functions/connect-to-private-endpoints-with-azurefunctions/ba-p6615

QUESTION 186
The developers at your company are building a containerized Python Django app.
You need to recommend platform to host the app. The solution must meet the following requirements:
Support autoscaling.
Support continuous deployment from an Azure Container Registry.
Provide built-in functionality to authenticate app users by using Azure Active Directory (Azure AD).
Which platform should you include in the recommendation?

A. Azure Container instances
B. an Azure App Service instance that uses containers
C. Azure Kubernetes Service (AKS)

Answer: C

Explanation:
To keep up with application demands in Azure Kubernetes Service (AKS), you may need to adjust the number of nodes that run your workloads. The cluster autoscaler component can watch for pods in your cluster that can't be scheduled because of resource constraints. When issues are detected, the number of nodes in a node pool is increased to meet the application demand.
Azure Container Registry is a private registry for hosting container images. It integrates well with orchestrators like Azure Container Service, including Docker Swarm, DC/OS, and the new Azure Kubernetes service.
Moreover, ACR provides capabilities such as Azure Active Directory-based authentication, webhook support, and delete operations.
Reference:
https://docs.microsoft.com/en-us/azure/aks/cluster-autoscaler
https://medium.com/velotio-perspectives/continuous-deployment-with-azure-kubernetes-serviceazurecontainerregistry-jenkins-ca337940151b