Incorrect Answers:
Not Headless device authentication:
A headless system is a computer that operates without a monitor, graphical user interface (GUI) or peripheral devices, such as keyboard and mouse.
Headless computers are usually embedded systems in various devices or servers in multi-server data center environments. Industrial machines, automobiles, medical equipment, cameras, household appliances, airplanes, vending machines and toys are among the myriad possible hosts of embedded systems.
Box 2: Client Credentials
How to include additional client data
In case you need to store additional details about a client that don't fit into the standard parameter set the custom data parameter comes to help:
POST /c2id/clients HTTP.1
Host: demo.c2id.com
Content-Type: application/json
Authorization: Bearer ztucZS1ZyFKgh0tUEruUtiSTXhnexmd6
{
"redirect_uris" : [ "https://myapp.example.com/callback" ],
"data" : { "reg_type" : "3rd-party",
"approved" : true,
"author_id" : 792440 }
}
The data parameter permits arbitrary content packaged in a JSON object. To set it you will need the master registration token or a one-time access token with a client-reg:data scope.
Incorrect Answers:
Authorization protocols provide a state parameter that allows you to restore the previous state of your application. The state parameter preserves some state object set by the client in the Authorization request and makes it available to the client in the response.
Reference:
https://developer.okta.com/blog8/04/oauth-authorization-code-grant-type
https://connect2id.com/products/server/docs/guides/client-registration

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**QUESTION** 153
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 are designing an Azure solution for a company that has four departments. Each department will deploy several Azure app services and Azure SQL databases.
You need to recommend a solution to report the costs for each department to deploy the app services and the databases. The solution must provide a consolidated view for cost reporting that displays cost broken down by department.
Solution: Create a separate resource group for each department. Place the resources for each department in its respective resource group.
Does this meet the goal?

A. Yes
B. No

Answer: B

Explanation:
Instead create a resources group for each resource type. Assign tags to each resource group.
Note: Tags enable you to retrieve related resources from different resource groups. This approach is helpful when you need to organize resources for billing or management.
Reference:
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-using-tags

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**QUESTION** 154
You are designing a solution that will include containerized applications running in an Azure Kubernetes Service (AKS) cluster.
You need to recommend a load balancing solution for HTTPS traffic. The solution must meet the following requirements:
Automatically configure load balancing rules as the applications are deployed to the cluster.
Support Azure Web Application Firewall (WAF).
Support cookie-based affinity.
Support URL routing.
What should you include the recommendation?

A. an NGINX ingress controller
B. Application Gateway Ingress Controller (AGIC)
C. an HTTP application routing ingress controller

D. the Kubernetes load balancer service

Answer: B

Explanation:
Much like the most popular Kubernetes Ingress Controllers, the Application Gateway Ingress Controller provides several features, leveraging Azures native Application Gateway L7 load balancer.
To name a few:
URL routing
Cookie-based affinity
Secure Sockets Layer (SSL) termination
End-to-end SSL
Support for public, private, and hybrid web sites
Integrated support of Azure web application firewall
Application Gateway redirection support isn't limited to HTTP to HTTPS redirection alone. This is a generic redirection mechanism, so you can redirect from and to any port you define using rules. It also supports redirection to an external site as well.
Reference:
https://docs.microsoft.com/en-us/azure/application-gateway/features

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**QUESTION** 155
You plan to deploy an Azure App Service web app that will have multiple instances across multiple Azure regions.
You need to recommend a load balancing service for the planned deployment. The solution must meet the following requirements:
Maintain access to the app in the event of a regional outage.
Support Azure Web Application Firewall (WAF).
Support cookie-based affinity.
Support URL routing.
What should you include in the recommendation?

A. Azure Front Door
B. Azure Load Balancer
C. Azure Traffic Manager
D. Azure Application Gateway

Answer: B

Explanation:
Azure Traffic Manager performs the global load balancing of web traffic across Azure regions, which have a regional load balancer based on Azure Application Gateway. This combination gets you the benefits of Traffic Manager many routing rules and Application Gateways capabilities such as WAF, TLS termination, path-based routing, cookie-based session affinity among others.
Reference:
https://docs.microsoft.com/en-us/azure/application-gateway/features

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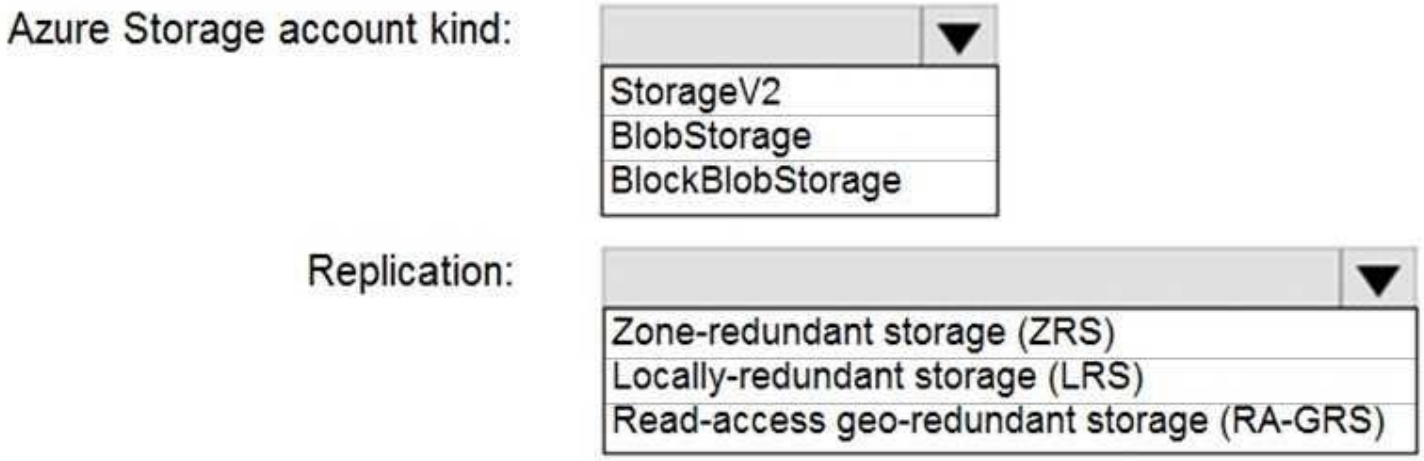
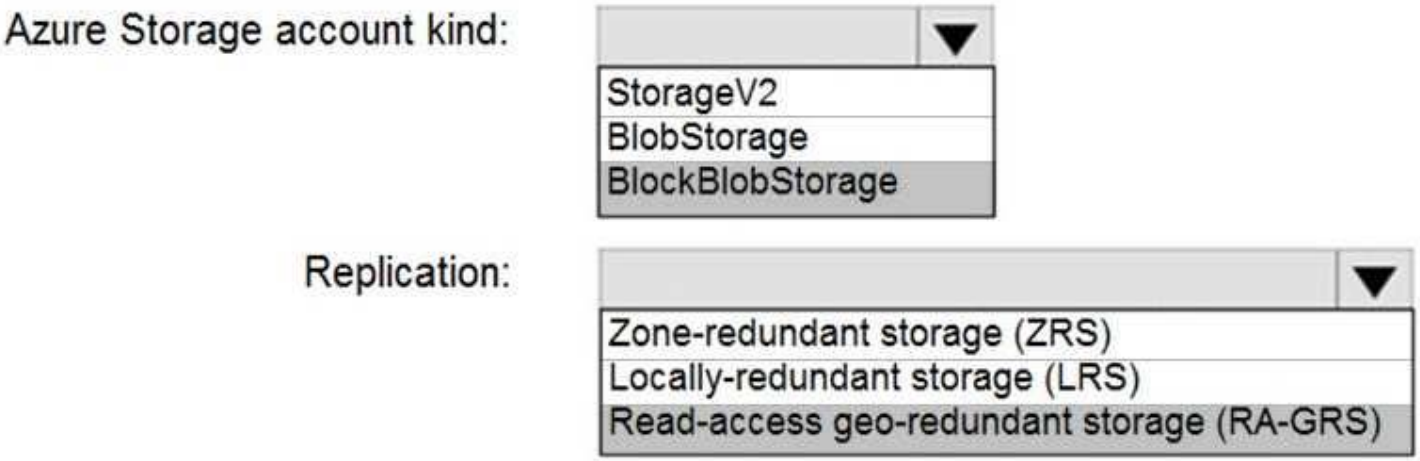
**QUESTION** 156
HOTSPOT
You plan to develop a new app that will store business critical dat
a. The app must meet the following requirements:
Prevent new data from being modified for one year.
Minimize read latency.
Maximize data resiliency.
You need to recommend a storage solution for the app.
What should you recommend? To answer, select the appropriate options in the answer area.




Answer:




Explanation:
Reference:
https://docs.microsoft.com/en-us/azure/storage/common/storage-account-overview
https://docs.microsoft.com/en-us/azure/storage/common/storageredundancy?
toc=/azure/storage/blobs/toc.json

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**QUESTION** 157
You have an application named App1. App1 generates log files that must be archived for five years.
The log files must be readable by App1 but must not be modified.
Which storage solution should you recommend for archiving?

A. Ingest the log files into an Azure Log Analytics workspace
B. Use an Azure Blob storage account and a time-based retention policy
C. Use an Azure Blob storage account configured to use the Archive access tier
D. Use an Azure file share that has access control enabled

Answer: B

Explanation:
Immutable storage for Azure Blob storage enables users to store business-critical data objects in a WORM (Write Once, Read Many) state.
Immutable storage supports:
Time-based retention policy support: Users can set policies to store data for a specified interval.

When a time-based retention policy is set, blobs can be created and read, but not modified or deleted. After the retention period has expired, blobs can be deleted but not overwritten.
Reference:
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-immutable-storage

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**QUESTION** 158
You have an Azure subscription that contains a Windows Virtual Desktop tenant.
You need to recommend a solution to meet the following requirements:
Start and stop Windows Virtual Desktop session hosts based on business hours.
Scale out Windows Virtual Desktop session hosts when required.
Minimize compute costs.
What should you include in the recommendation?

A. Microsoft Intune
B. a Windows Virtual Desktop automation task
C. Azure Automation
D. Azure Service Health

Answer: C

Explanation:
Reference:
https://www.ciraltos.com/automatically-start-and-stop-wvd-vms-with-azure-automation/
https://wvdlogix.net/windows-virtual-desktop-host-pool-automation-2
https://getnerdio.com/academy/how-to-optimize-windows-virtual-desktop-wvd-azure-costs-withevent-based-autoscaling-and-azure-vm-scale-sets/

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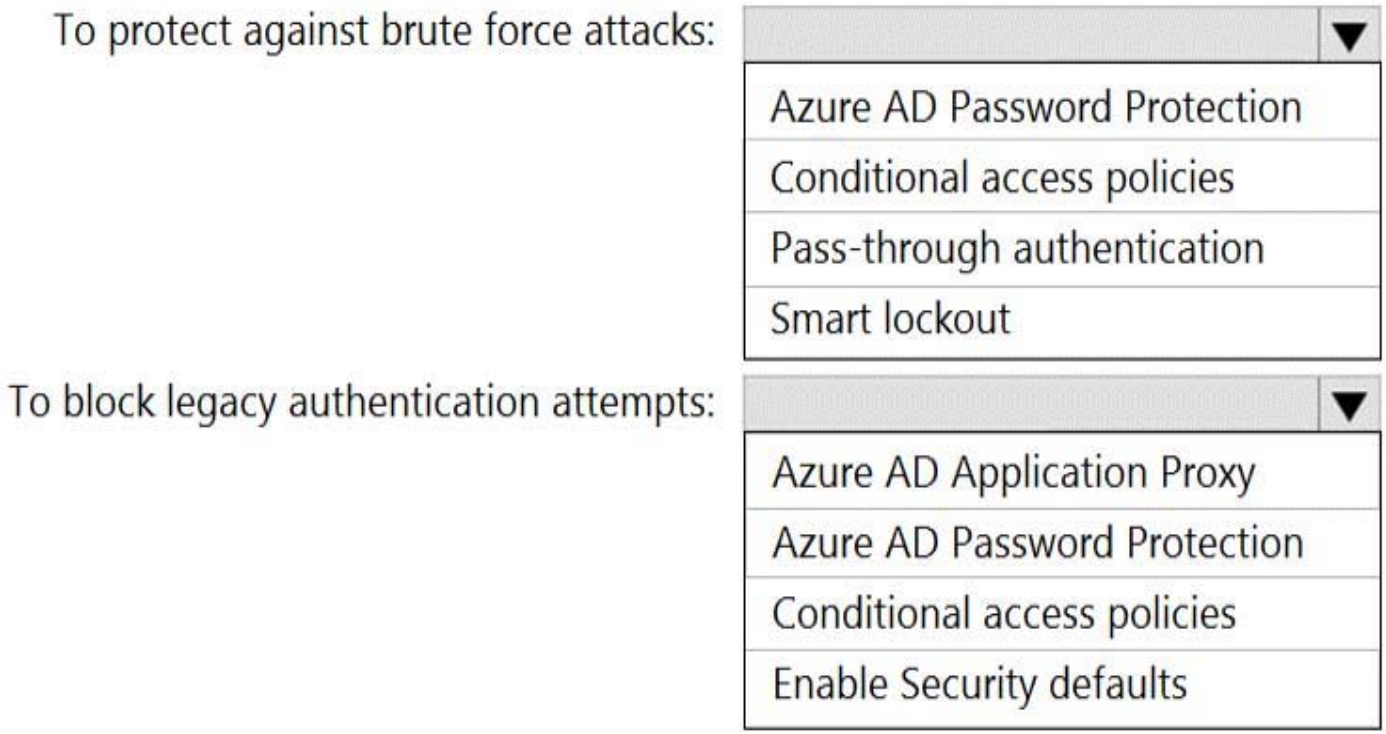
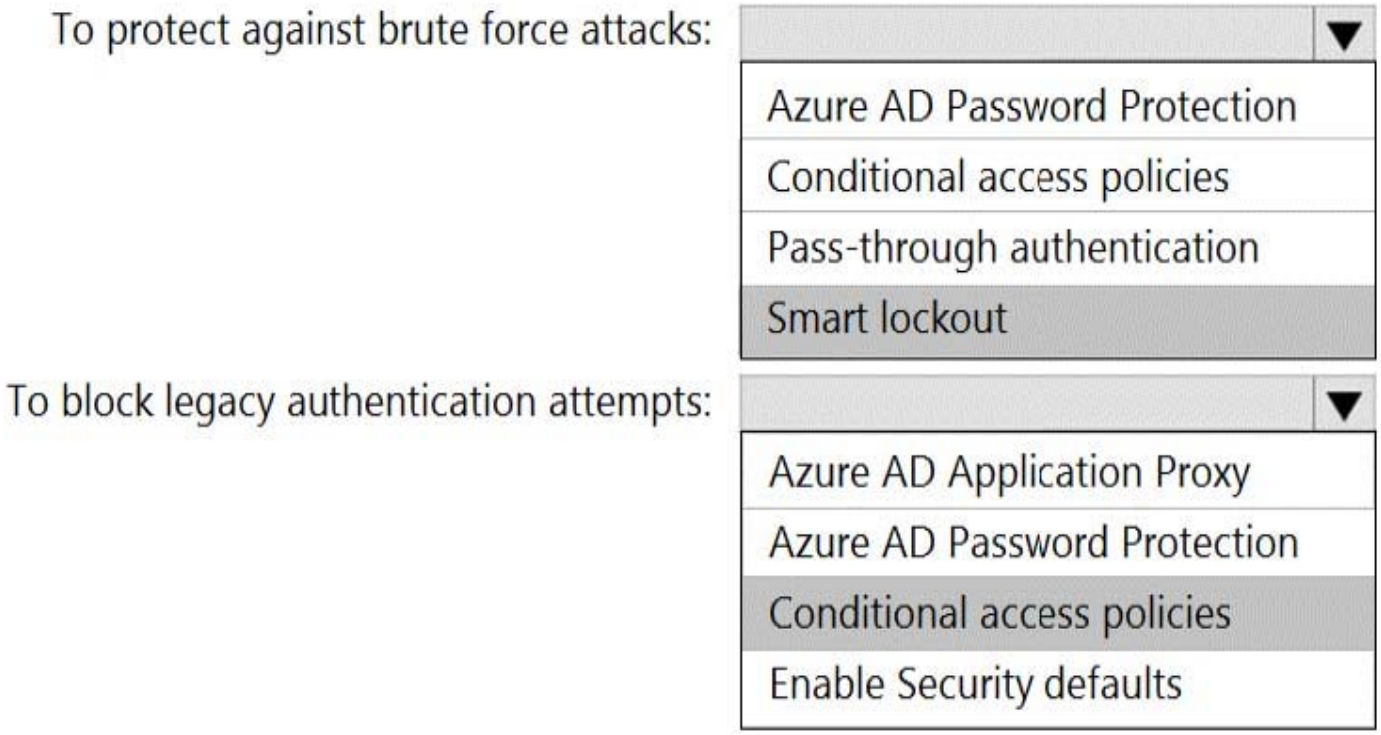
**QUESTION** 159
HOTSPOT
You have the Free edition of a hybrid Azure Active Directory (Azure AD) tenant. The tenant uses password hash synchronization.
You need to recommend a solution to meet the following requirements:
Prevent Active Directory domain user accounts from being locked out as the result of brute force attacks targeting Azure AD user accounts.
Block legacy authentication attempts to Azure AD integrated apps.
Minimize costs.
What should you recommend for each requirement? To answer, select the appropriate options in the

answer area.
NOTE: Each correct selection is worth one point.




Answer:




Explanation:
Box 1: Smart lockout
Smart lockout helps lock out bad actors that try to guess your users' passwords or use brute-force methods to get in. Smart lockout can recognize sign-ins that come from valid users and treat them differently than ones of attackers and other unknown sources. Attackers get locked out, while your users continue to access their accounts and be productive.
Box 2: Conditional access policies
If your environment is ready to block legacy authentication to improve your tenant's protection, you can accomplish this goal with Conditional Access.
How can you prevent apps using legacy authentication from accessing your tenant's resources? The recommendation is to just block them with a Conditional Access policy. If necessary, you allow only certain users and specific network locations to use apps that are based on legacy authentication.
Reference:
https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-password-smartlockout
https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/block-legacyauthentication

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**QUESTION** 160
You have an Azure subscription. The subscription contains an app that is hosted in the East US, Central Europe, and East Asia regions.
You need to recommend a data-tier solution for the app. The solution must meet the following requirements:
Support multiple consistency levels.
Be able to store at least 1 TB of data.
Be able to perform read and write operations in the Azure region that is local to the app instance.
What should you include in the recommendation?

A. an Azure Cosmos DB database
B. a Microsoft SQL Server Always On availability group on Azure virtual machines
C. an Azure SQL database in an elastic pool
D. Azure Table storage that uses geo-redundant storage (GRS) replication

Answer: A

Explanation:
Azure Cosmos DB approaches data consistency as a spectrum of choices. This approach includes more
options than the two extremes of strong and eventual consistency. You can choose from five welldefined levels on the consistency spectrum.
With Cosmos DB any write into any region must be replicated and committed to all configured regions within the account.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/consistency-levels-tradeoffs

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**QUESTION** 161
The accounting department at your company migrates to a new financial accounting software. The accounting department must keep file-based database backups for seven years for compliance purposes. It is unlikely that the backups will be used to recover data.
You need to move the backups to Azure. The solution must minimize costs.
Where should you store the backups?

A. Azure Blob storage that uses the Archive tier
B. Azure SQL Database
C. Azure Blob storage that uses the Cool tier

D. a Recovery Services vault

Answer: A

Explanation:
Azure Front Door enables you to define, manage, and monitor the global routing for your web traffic by optimizing for best performance and instant global failover for high availability. With Front Door, you can transform your global (multi-region) consumer and enterprise applications into robust, highperformance personalized modern applications, APIs, and content that reaches a global audience with Azure.
Front Door works at Layer 7 or HTTP/HTTPS layer and uses anycast protocol with split TCP and Microsoft's global network for improving global connectivity.
Reference:
https://docs.microsoft.com/en-us/azure/frontdoor/front-door-overview

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**QUESTION** 162
You have an Azure subscription.
You need to deploy an Azure Kubernetes Service (AKS) solution that will use Windows Server 2019 nodes.
The solution must meet the following requirements:
Minimize the time it takes to provision compute resources during scale-out operations.
Support autoscaling of Windows Server containers.
Which scaling option should you recommend?

A. cluster autoscaler
B. horizontal pod autoscaler
C. Kubernetes version 1.20.2 or newer
D. Virtual nodes with Virtual Kubelet ACI

Answer: D

Explanation:
Azure Container Instances (ACI) lets you quickly deploy container instances without additional infrastructure overhead. When you connect with AKS, ACI becomes a secured, logical extension of your AKS cluster. The virtual nodes component, which is based on Virtual Kubelet, is installed in your AKS cluster that presents ACI as a virtual Kubernetes node. Kubernetes can then schedule pods that run as ACI instances through virtual nodes, not as pods on VM nodes directly in your AKS cluster.