**AZ-104 dump**

* 1. You are configuring an Alert rule. You need to identify the composition of the alert rule from the following Possible Option list and match it with the appropriate statements given.
  + Metric
  + Resource
  + Conditions
  + Log
  + Actions
  + Alert Details
  + Alert can notify you when a web server has returned several 404 or 500 responses.
    - Log
  + Alert can be applied to different solutions
    - Resource
  + Using webhook
    - Actions
  + Assessing the alert rule, can be metric, logs etc.
    - Conditions
  + Alert name and alert description should be there
    - Alert Details
  + Alerts provide an alert trigger when a specified threshold is exceeded.
    - Metric

0/13 points

Explanation

Every alert or notification available in Azure Monitor is the product of a rule. Some of these rules are built into the Azure platform. You use alert rules to create custom alerts and notifications. No matter which target resource or data source you use, the composition of an alert rule remains the same. Resource, Conditions, Actions and Alert details are the composition of Alert rule.

Reference link

<https://learn.microsoft.com/en-us/training/modules/incident-response-with-alerting-on-azure/2-explore-azure-monitor-alert-types>

* 2. You are going to deploy a Virtual Machine in a Tenant named Tenant1. After deploying it you want to configure Internet Information Service. The service should be configured automatically.  
  What option you will choose?

Powershell Scripts

Desired State Configuration

Azure CLI

ARM Templates

0/12 points

Explanation

Desired State Configuration (DSC) is a management platform in Windows PowerShell. DSC enables deploying and managing configuration data for software services and managing the environment in which these services run.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-machine-extensions/4-implement-desired-state-configuration>

* 3. You have an Azure Kubernetes Service Cluster named AK1. For configuring an Autoscaler in AK1 what are the commands you need to execute? Select two answers.

the az aks command

kubectl command

Set-AzVM cmdlet

Set-AzAks cmdlet

0/12 points

Reference link

<https://learn.microsoft.com/en-us/azure/aks/cluster-autoscaler>

* 4. You are configuring an alert that enables you to not select any particular service to determine the Health check instead the alert will apply to the entire region in Azure. What kind of alert you are configuring here? Select one answer.

Resource Specific alert

Service Health alert

Activity Log alert

Application alert

0/13 points

Explanation

Service health alerts aren't like all the other alert types you've seen so far in this module. The only difference is that you no longer need to select a resource, because the alert is for a whole region in Azure. What you can select is the kind of health event on which you want to be alerted.

Reference link

<https://learn.microsoft.com/en-us/training/modules/incident-response-with-alerting-on-azure/6-activity-log-alerts>

* 5. Case Study  
  Your company uses an Azure storage account for storing large numbers of video and audio files. Containers are used to store each type of file and access is limited to those media files. Additionally, the files can only be accessed through shared access signatures. Following are the requirements, which the company wants to apply.  
  • The ability to revoke access to the files and to change the period for which users can access the files.  
  • The company is planning a delegation model for Azure storage. Applications in the production environment must have unrestricted access to Azure Storage resources.  
  • You're researching how to use network configuration rules, shared access signatures (SAS), and stored access policies to implement secure access to Azure Storage.  
    
  You want to implement secure storage for the company’s media files in the easiest way. Which solution you will choose? Select one answer

Create a Stored Access Policy

Create a Shared Access Signature

Configure Key vault

Configure Storage Encryption.

0/12 points

Explanation

If a SAS is compromised, you can mitigate attacks by limiting the SAS validity to a short time. This practice is important if you can't reference a stored access policy. Near-term expiration times also limit the amount of data that can be written to a blob by limiting the time available to upload to it.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-storage-security/7-apply-best-practices>

* 6. You have deployed multiple applications in your Azure subscription. You are going to take reports about the performance counters of all the applications including CPU usage, Memory allocations etc. Also, your Media department wants a report showing all applications which pages are most popular, at what times of day, and where your users are. To create these reports what should you do? Select one answer.

Configure Azure logging.

Configure Continuous Deployment

Configure Azure Application Insights

Configure Metrics data

0/12 points

Explanation

Request rates, response times, and failure rates - Find out which pages are most popular, at what times of day, and where your users are. See which pages perform best. If your response times and failure rates go high when there are more requests, then perhaps you have a resourcing problem. Performance counters from your Windows or Linux server machines, such as CPU, memory, and network usage.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-app-services/10-use-application-insights>

* 7. You are configuring Application Gateway for your Web Application. You need to make sure which servers are available for load-balancing in a back-end pool and also want to send a request to the server. What should you configure?

Frontend IP

Routing rules

Listeners

Health Probe

0/13 points

Explanation

Health probes determine which servers are available for load-balancing in a back-end pool. The Application Gateway uses a health probe to send a request to a server. When the server returns an HTTP response with a status code between 200 and 399, the server is considered healthy.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-application-gateway/4-app-gateway-components>

* 8. Your Organization has an Azure subscription named sub1. The subscription has multiple virtual networks. Your manager asked you to implement firewall rules to deny traffic based on IP address ranges. What should you do?

Dynamically assigned IP addresses

Statically assigned IP addresses

Assigned Public IP for all networks

Assigned Private IP for all networks

0/13 points

Explanation

Firewall rules that allow or deny traffic using IP address ranges. IP address-based security models that require apps or services to have a static IP address.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-networks/5-plan-addressing>

* 9. You are working with a retailer. In your organization, you have a very large web farm with more than 100 virtual machines. You want to use Log Analytics to ensure these Virtual Machines are responding to all the requests from the clients. To automate the process, you and your team will create a search query. Which source table should be used for that? Select one answer

Event

Heartbeat

Syslog

Alert

0/13 points

Explanation

Heartbeat Records logged by Log Analytics agents once per minute to report on agent health.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-log-analytics/5-structure-queries>

* 10. Your organization has an Azure AD Premium license. Your manager asked you to display the retail organization's branding on the Azure sign-in page to reassure users that they're passing credentials to a legitimate system. To meet the requirement, you are going to apply custom branding. What are the correct steps you need to do in the Azure portal to achieve the requirement? Select one answer.

Sign In Azure Portal>Azure Active Directory>Manage>Company branding>Configure

Sign In Azure Portal>Azure Active Directory>Users>Company branding>Configure

Sign In Azure Portal>Azure Active Directory>Enterprise applications>Company branding>Configure

Sign In Azure Portal>Azure Active Directory>Devices>Company branding>Configure

0/12 points

Explanation

Let's use Azure Active Directory (Azure AD) to set up the custom branding.  
1. Sign in to the Azure portal with the same account you used to activate the sandbox.  
2. Go to your Azure AD organization by selecting Azure Active Directory. If you're not in the right Azure AD organization, go to your Azure profile in the upper-right corner and select Switch directory to find your organization.  
3. Under Manage, select Company branding > Configure.  
4. Next to Sign-in page background image, select Browse. Select your page background image.  
5. Next to the Banner logo, select Browse. Select your logo image.

Reference link

<https://learn.microsoft.com/en-us/training/modules/allow-users-reset-their-password/5-exercise-customize-directory-branding>

* 11. Your organization Contoso wants to collaborate with another organization named ABC company. Abc company does not have an IT department. You want to give access easily to one of the employees of ABC company without having administrator privileges. Which of the following option will you choose? Select one answer.

Azure Active Directory Federation

Azure AD B2B

Azure AD Join

Azure AD Connect

0/12 points

Explanation

With Azure AD B2B, you don't take on the responsibility of managing and authenticating the credentials and identities of partners. Your partners can collaborate with you even if they don't have an IT department.

Reference link

<https://learn.microsoft.com/en-us/training/modules/create-users-and-groups-in-azure-active-directory/6-collaborate-guest-accounts-azure-ad-b2b>

* 12. You have multiple Virtual Networks (VNets) named VNET1, VNET2, VNET3 and VNET4 in your Azure subscription. Each Vnet has multiple subnets and Network Security Groups. You have established VNet peering between VNET1 to VNET2, VNET2 to VNET3 and VNET3 to VNET4. You need to establish communication between VNET2 and VNET4. What should you do? Select one answer.

Site-to-Site Connectivity

Point-to-Site connectivity

Configure Express Route

Configure Service Chaining

0/13 points

Explanation

Virtual network peering enables the next hop in a user-defined route to be the IP address of a virtual machine in the peered virtual network, or a VPN gateway. Service chaining lets you define user routes. These routes direct traffic from one virtual network to a virtual appliance, or virtual network gateway.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-vnet-peering/5-determine-service-chaining-uses>

* 13. As an Azure Administrator, you want to create Azure policies to enforce organizational standards and assess compliance at scale. The following list provides the steps to create an Azure policy. You need to drag and drop by arranging it in sequential order in the answer area.
  + Determines Compliance
  + Scope the Initiative definition
  + Create an Initiative definition
  + Create Policy definitions
  + Scope the Initiative definition
  + Create an Initiative definition
  + Create Policy definitions
  + Determines Compliance
  + Create Policy definitions
  + Create an Initiative definition
  + Scope the Initiative definition
  + Determines Compliance

6/12 points

Explanation

Following are the steps to create azure policy.  
1. Create Policy Definitions  
2. Create an Initiative definition  
3. Scope the Initiative definition  
4. Determines Compliance.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-policy/4-create-azure-policies>

* 14. You are configuring an Azure Load Balancer for your shopping cart application named ShopStopper. While configuring Load Balancer you need to make sure that the traffic from the client to the servers should be handled successfully. To meet this requirement you have to configure Session persistence. The following list provides three behaviors of Session persistence. You need to drag the correct option appropriate to the statement given in the answer area to identify each behavior's purpose.
  + None
  + Client IP
  + Client IP and Protocol
  + Client IP
  + Client IP and Protocol
  + It specifies that successive requests from the same client IP address will be handled by the same virtual machine.
  + It specifies that successive requests from the same client IP address and protocol combination will be handled by the same virtual machine.
  + It specifies any virtual machine can handle the request.
  + Client IP
  + Client IP and Protocol
  + None
  + It specifies that successive requests from the same client IP address will be handled by the same virtual machine.
  + It specifies that successive requests from the same client IP address and protocol combination will be handled by the same virtual machine.
  + It specifies any virtual machine can handle the request.

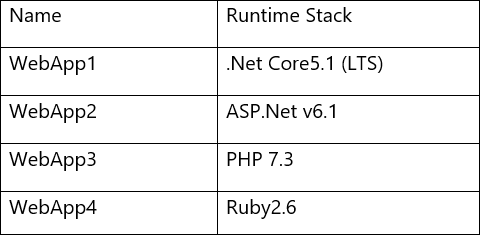
8/13 points

Explanation

Session persistence specifies how traffic from a client should be handled. The default behavior (None) is that successive requests from a client may be handled by any virtual machine. You can change this behavior.  
None (default) specifies any virtual machine can handle the request.  
Client IP specifies that successive requests from the same client IP address will be handled by the same virtual machine.  
Client IP and protocol specifies that successive requests from the same client IP address and protocol combination will be handled by the same virtual machine.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-load-balancer/8-configure-session-persistence>

* 15. You have to configure multiple Azure Web Applications. The following table shows the configuration details:  
    
  What is the minimum number of App service plan you should create for Web Applications? Select one answer.

1

2

3

4

0/13 points

Explanation

An App Service plan defines a set of compute resources for a web app to run. Whatever apps you put into this App Service plan run on these compute resources as defined by your App Service plan.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-app-service-plans/2-implement-azure>

* 16. Your organization wants to do an asynchronous replication of blob containers between regions. To configure the blob object replications, you need to have several aspects in mind. Which of the following statements are true about blob object replication? Select two answers.

Object replication doesn’t require that blob versioning be enabled on both the source and destination accounts.

Object replication is supported when the source and destination accounts are in the Hot or Cool tier.

Object replication doesn't support blob snapshots.

Object replication copies pages in a container asynchronously according to the policy rules that you configure.

6/12 points

Explanation

There are several considerations to keep in mind when planning your configuration for blob object replication.  
• Object replication requires that blob versioning is enabled on both the source and destination accounts.  
• Object replication doesn't support blob snapshots. Any snapshots on a blob in the source account aren't replicated in the destination account.  
• Object replication is supported when the source and destination accounts are in the Hot or Cool tier. The source and destination accounts can be in different tiers.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-blob-storage/6-determine-blob-object-replication>

* 17. Contoso has a goal to launch a web application using Azure App Service. The database for this application is MySQL, and the development team has decided to use PHP as the programming language. To ensure the web app can handle a high traffic volume and is always available, which choice should you pick?

Use an Azure Virtual Machine (VM) with MySQL and PHP installed to host the application and configure auto-scaling.

Create a new Azure App Service plan and an Azure App Service web app. Use the MySQL in-app feature for the database, and configure auto-scaling.

Create a new Azure App Service plan and an Azure App Service web app. Provision a MySQL database instance on an Azure Virtual Machine (VM), connect the web app and configure auto-scaling.

Create a new Azure App Service plan and an Azure App Service web app. Provision an Azure Database for MySQL instance, connect the web app and configure auto-scaling.

0/12 points

Explanation

Azure Database for MySQL provides a highly available, scalable, and managed database service that can be easily integrated with Azure App Service. Additionally, Azure App Service allows easy auto-scaling of the application.

Reference link

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

* 18. Contoso, a fictional company, has migrated its on-premises data storage to Microsoft Azure. The company is concerned about data security and wants to apply Azure Storage security best practices. As a security expert, you have been tasked with ensuring that Contoso's data is secure. Which of the following best practices should you apply to enhance the security of Contoso's Azure Storage?

Implement Shared Access Signatures (SAS) to control access to Contoso's storage resources.

Apply role-based access control (RBAC) to limit the permissions of Contoso's employees.

Enable Virtual Network Service Endpoints to secure Contoso's data in transit.

Apply dynamic data masking to protect Contoso’s confidential data.

All of the above

4/12 points

Explanation

To enhance the security of Contoso's Azure Storage, applying the following best practices is recommended. Implement Shared Access Signatures (SAS) to control access to Contoso's storage resources. SAS provides a secure way to grant limited access to resources in the storage account without revealing the account key. Apply role-based access control (RBAC) to limit the permissions of Contoso's employees. RBAC allows the assignment of specific roles to users, groups, or applications. Only authorized personnel can perform specific actions on the storage account. Enable Virtual Network Service Endpoints to secure Contoso's data in transit. Virtual Network Service Endpoints provide secure and direct access to Azure Storage resources over a private endpoint in the virtual network.

Reference link

<https://docs.microsoft.com/en-us/azure/storage/common/storage-security-guide?toc=/azure/storage/blobs/toc.json#apply-best-practices-for-securing-azure-storage>

* 19. You are going to deploy a Web Application named WebApp1 into Azure Portal. You need to customize the domain address of WebApp1. You need to map multiple IP addresses against a single domain. What should you do? Select one answer.

Configure CNAME record

Configure A or AAA record

Configure SOA record

Configure TXT record

13/13 points

Explanation

A record is for mapping IP address to domain. Multiple IP addresses will makes a record set.

Reference link

<https://learn.microsoft.com/en-us/training/modules/host-domain-azure-dns/2-what-is-azure-dns>

* 20. Your organization has a subscription named Sub1. You have deployed a Web Application to Sub1. After deploying it into production, every time you push your code changes to that slot, App Service automatically swaps the app into production after it's warmed up in the source slot. What should you enable to achieve this? Select one answer.

Enable Workflow in Github

Configure CI/CD

Enable Auto swap

Enable Swap to production

0/12 points

Explanation

Auto swap streamlines Azure DevOps scenarios where you want to deploy your app continuously with zero cold starts and zero downtime for customers of the app. When the auto swap is enabled from a slot into production, every time you push your code changes to that slot, App Service automatically swaps the app into production after it's warmed up in the source slot.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-app-services/5-create-deployment-slots>

* 21. You are configuring an Action group to notify users that an alert has been triggered. You need to configure the method in which actions are performed when the action group triggers. To do so, you need to know the various actions. From the following options list, match the actions with the appropriate statements
  + Automation runbook
  + WebHook
  + Azure Function
  + Logic App
  + Logic App
  + Azure Function
  + Automation runbook
  + WebHook
  + Allows external applications to communicate with your system through HTTP/HTTPS endpoint.
  + It is a serverless compute service that lets you run event-triggered code without having to explicitly provision or manage infrastructure.
  + It helps to connect your business-critical apps and services by automating your workflows.
  + It is the ability to define, build, orchestrate, manage, and report on workflows that support system and network operational processes.
  + WebHook
  + Azure Function
  + Logic App
  + Automation runbook
  + Allows external applications to communicate with your system through HTTP/HTTPS endpoint.
  + It is a serverless compute service that lets you run event-triggered code without having to explicitly provision or manage infrastructure.
  + It helps to connect your business-critical apps and services by automating your workflows.
  + It is the ability to define, build, orchestrate, manage, and report on workflows that support system and network operational processes.

3/13 points

Explanation

Automation runbook - An automation runbook can define, build, orchestrate, manage, and report on workflows that support system and network operational processes.  
Azure Function – Azure functions is a serverless compute service that lets you run event-triggered code without having to explicitly provision or manage infrastructure.  
ITSM – Connect Azure and a supported IT Service Management (ITSM) product/service. This requires an ITSM Connection.  
Logic App – Logic apps connect your business-critical apps and services by automating your workflows.  
Webhook – A webhook is a HTTPS or HTTP endpoint that allows external applications to communicate with your system.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-alerts/4-create-action-groups>

* 22. You have deployed a Virtual machine named VM1. When you deploy a VM, Azure applies several default security rules to the VM. These rules allow or deny traffic to or from the VM. You might override Azure's default rules or create additional rules. In this situation, you need to determine if traffic is being directed to the intended destination. Which of the following features of Network Watcher should you configure? Select one answer.

NSG Flow

VPN Diagnostics

IP Flow Verify

Next Hop

0/13 points

Explanation

Next Hop: To determine if traffic is being directed to the intended destination by showing the next hop. This will help determine if networking routing is correctly configured. The next hop also returns the route table associated with the next hop.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-network-watcher/2-describe-features>

* 23. You are working with a Security Team. You have an on-premises application accessing data from multiple virtual networks. You need to configure a Private link between your on-premises application and Virtual Network. The Following explains the uses of Private Link. Select any two uses of the Private link.

Private connectivity to services on Azure

Services are not delivered directly to your customers’ virtual networks.

Protection against data exfiltration for Azure resources

Allows users to access from anywhere through the internet.

6/13 points

Explanation

Private connectivity to services on Azure. Traffic remains on the Microsoft network, with no public internet access. Connect privately to services running in other Azure regions. Private Link is global and has no regional restrictions.  
Protection against data exfiltration for Azure resources. Use Private Link to map private endpoints to Azure PaaS resources. When there is a security incident within your network, only the mapped resource would be accessible, eliminating the threat of data exfiltration.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-network-routing-endpoints/6-identify-private-link-uses>

* 24. An administrator creates an Azure Virtual Machine Scale Set with five virtual machines. Later, alerts show the VMs are all running at max capacity with the CPU being fully consumed. However, more VMs are not deployed in the scale set.  
  What should be done to ensure that more VMs are deployed when the CPU is 75% consumed?

Enable Autoscale option

Configure Metrics

Configure App service plan

Change the CPU percentage to 50%.

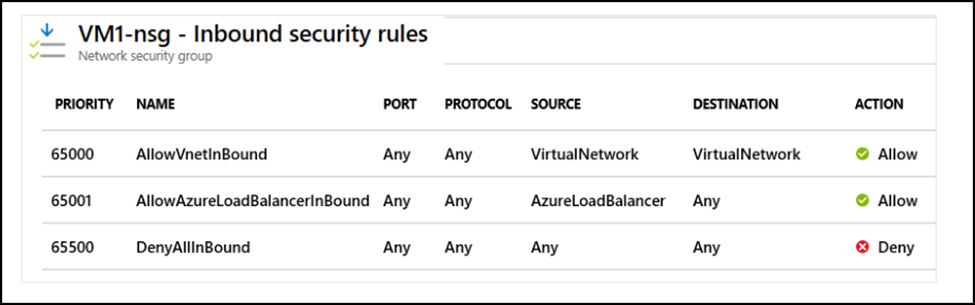
0/13 points

Explanation

To meet the scenario requirements, enable the autoscale option so that more VMs are created when the CPU is 75% consumed.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-machine-availability/9-implement-autoscale>

* 25. From the below NSG configuration exhibit which of the following statement is true?  
  

The rules deny all inbound traffic except from the virtual network and Azure load balancers.

The rules allow all inbound traffic except from the virtual network and Azure Load Balancers

The rules allow only Load balancers

The rules deny both Virtual Network and Azure Load balancers.

0/13 points

Explanation

Security rules in network security groups enable you to filter the type of network traffic that can flow in and out of virtual network subnets and network interfaces.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-network-security-groups/3-determine-network-security-groups-rules>

* 26. You are going to deploy multiple Virtual machines having Windows Server Operating System by using Azure Resource Manager Template. While completing the deployment of the Virtual machines you need to make sure that NGINX should be available on all the Virtual machines. What should you do?

Execute Publish-AzVMDscConfogurtaion cmdlet

Configure Azure Application Insights

Configure Azure Custom Script Extension

Configure Microsoft endpoint management device

0/12 points

Explanation

A Custom Script Extension(CSE) can be used to automatically launch and execute virtual machine customization tasks post configuration. Your script extension may perform simple tasks such as stopping the virtual machine or installing a software component. However, the script could be more complex and perform a series of tasks.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-machine-extensions/3-implement-custom-script-extensions>

* Answer

27.

You are planning to deploy multiple virtual machines in your Azure subscription for different types of applications. There are multiple requirements you need to meet while choosing virtual machine sizes.  
  
Use the dropdown menus to select the answer choice which will meet the requirements for appropriate workloads.  
  
You want to implement medium-traffic web servers, network appliances, batch processes, and application servers.

Memory optimized

High disk throughput and IO ideal for Big Data, SQL, NoSQL databases, data warehousing, and large transactional databases.

Compute Optimized

You want to implement virtual machines targeted for heavy graphic rendering and video editing, as well as model training and inferencing (ND) with deep learning.

You are planning to deploy multiple virtual machines in your Azure subscription for different types of applications. There are multiple requirements you need to meet while choosing virtual machine sizes.  
  
Use the dropdown menus to select the answer choice which will meet the requirements for appropriate workloads.  
  
You want to implement medium-traffic web servers, network appliances, batch processes, and application servers.

Compute Optimized

High disk throughput and IO ideal for Big Data, SQL, NoSQL databases, data warehousing, and large transactional databases.

Storage Optimized

You want to implement virtual machines targeted for heavy graphic rendering and video editing, as well as model training and inferencing (ND) with deep learning.

GPU

0/13 points

Explanation

Compute Optimized: High CPU-to-memory ratio. Good for medium traffic web servers, network appliances, batch processes, and application servers.  
Storage Optimized: High disk throughput and IO ideal for Big Data, SQL, NoSQL databases, data warehousing, and large transactional databases.  
GPU: Specialized virtual machines targeted for heavy graphic rendering and video editing, as well as model training and inferencing (ND) with deep learning. Available with single or multiple GPUs.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-machines/4-determine-virtual-machine-sizing>

* 28. Your team wants to migrate a distributed on-premises app named WebApp1 to an Azure subscription. After the migration, it has been seen that WebApp1 hosted on several Azure virtual machines. You need to make sure that WebApp1 always runs on at least eight virtual machines during planned Azure maintenance. What should you create? Select the most effective answer.

One virtual machine scale set that has 10 virtual machines instances

One Availability Set that has three fault domains and one update domain

One Availability Set that has 10 update domains and one fault domain

One virtual machine scale set that has 12 virtual machines instances

0/13 points

Explanation

An update domain is a logical group of the underlying hardware that can undergo maintenance or be rebooted at the same time. As you create VMs within an availability set, the Azure platform automatically distributes your VMs across these update domains. This approach ensures that at least one instance of your application always remains running as the Azure platform undergoes periodic maintenance.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-machine-availability/2-plan-for-maintenance-downtime>

* Answer

29.

You have an Azure Virtual Network having a Virtual Machine named WebApp1. WebApp1 has the following configurations:  
• Subnet : 10.0.0.0/24  
• Availability Set : WebA1  
• Private IP Address: 10.0.0.1  
• Public IP Address: 40.90.219.6  
• Network Security Group(NSG): Not Configured  
  
You deployed a Standard Azure Load Balancer named ALB1. You need to configure ALB1 to connect to Web App1. What are the changes you should apply in WebApp1?  
  
For each statement select the appropriate answer from the dropdown.  
  
Before You create a Backend pool on ALB1, you must

Create and assign an NSG to WebApp1

Before you connect WebApp1 from ALB1, you must

Change the Private IP Address of WebApp1 to static

You have an Azure Virtual Network having a Virtual Machine named WebApp1. WebApp1 has the following configurations:  
• Subnet : 10.0.0.0/24  
• Availability Set : WebA1  
• Private IP Address: 10.0.0.1  
• Public IP Address: 40.90.219.6  
• Network Security Group(NSG): Not Configured  
  
You deployed a Standard Azure Load Balancer named ALB1. You need to configure ALB1 to connect to Web App1. What are the changes you should apply in WebApp1?  
  
For each statement select the appropriate answer from the dropdown.  
  
Before You create a Backend pool on ALB1, you must

Remove the Public IP Address from WebApp1

Before you connect WebApp1 from ALB1, you must

Create and configure an NSG

0/13 points

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-load-balancer/3-implement-public>

* 30. You are configuring an Azure Load Balancer for your Enterprise Web Application deployed in an Azure subscription. You want to configure up to 500 instances in the backend pool of the Azure Load Balancer. Which of the following edition of the Backend pool you will choose to meet the requirement?

Premium

Standard

Basic

Shared

13/13 points

Explanation

In the Standard SKU, you can have up to 1000 instances in the backend pool. In the Basic SKU, you can have up to 300 instances.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-load-balancer/6-create-backend-pools>

12345

* 31. As an Azure Administrator, you want to configure Service endpoints to secure your virtual networks. Which of the following Service endpoint enables secure access to messaging capabilities from workloads like virtual machines that are bound to virtual networks, with the network traffic path being secured at both ends? Select the best possible answer.

Azure Storage

Azure Cosmos DB

Azure Service Bus and Azure Events Hubs

Azure Key vault

13/13 points

Explanation

Azure Service Bus and Azure Event Hubs. Generally available in all Azure regions. The integration of Service Bus with Virtual Network (VNet) service endpoints enables secure access to messaging capabilities from workloads like virtual machines that are bound to virtual networks, with the network traffic path being secured on both ends.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-network-routing-endpoints/5-determine-service-endpoint-services>

* 32. Your organization has a subscription named Tenant1. You have deployed a Windows Server Datacenter Virtual Machine named WS1 to Tenant1. You want to change the Availability set for WS1.  
  What option you will choose? Select one answer.

Assign WS1 to a new Availability set.

Move WS1 to the new Availability Set

Redeploy WS1 from the recovery point

Move WS1 to another resource group

0/12 points

Explanation

You can create a virtual machine and an Availability Set at the same time. A VM can only be added to an Availability Set when it is created. To change the Availability Set, you need to delete and then recreate the virtual machine.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-machine-availability/3-setup-availability-sets>

* 33. You want to deploy multiple applications in your Azure subscription. You want to store different categories of data in your storage account. The following list has different types of storage and you need to match each type of storage with each requirement given.
  + Azure Queue Storage
  + Azure managed disks
  + Azure Blob storage
  + Azure File share
  + Azure Table storage
  + Azure File share
  + Azure Blob storage
  + Azure Table storage
  + Azure managed disks
  + You want to store database files, web static content, and custom application code.
  + You want to store emails, Rich text files, binary files, videos, and images.
  + You want to store the messages sent by the Web API applications.
  + You want to store SQL databases and Azure Cosmos DB.
  + You want to share data between on-premises and cloud servers by using SMB protocol.
  + Azure Blob storage
  + Azure Queue Storage
  + Azure managed disks
  + Azure Table storage
  + Azure File share
  + You want to store database files, web static content, and custom application code.
  + You want to store emails, Rich text files, binary files, videos, and images.
  + You want to store the messages sent by the Web API applications.
  + You want to store SQL databases and Azure Cosmos DB.
  + You want to share data between on-premises and cloud servers by using SMB protocol.

3/12 points

Explanation

Azure Storage offers four data services that can be accessed by using an Azure storage account:  
Azure Blob Storage (containers): A massively scalable object store for text and binary data.  
Azure Files: Managed file shares for cloud or on-premises deployments.  
Azure Queue Storage: A messaging store for reliable messaging between application components.  
Azure Table Storage: A NoSQL store for schemaless storage of structured data or relational data.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-storage-accounts/2-implement-azure-storage>

* 34. You are configuring Network Watcher to monitor, diagnose, view metrics, and enable or disable logs for resources in an Azure virtual network. You want to quickly diagnose the connectivity issues from or to the internet and from or to the on-premises environment. Which of the following features of Network watcher will you configure to view it? Select one answer.

Packet Capture

Next Hope

Verify IP Flow

VPN Diagnostics

0/13 points

Explanation

Verify IP Flow: Quickly diagnose connectivity issues from or to the internet and from or to the on-premises environment.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-network-watcher/2-describe-features>

* Answer

35.

You are configuring a Blob storage account for your enterprise application deployed in your Azure subscription. When you are configuring a Blob storage account, you need to verify different access tiers and choose the appropriate access tier for your application. For each requirement, select one option.  
  
Data should frequently be read and written in the Azure storage account also should have the lowest access cost

Hot tier

When you want to do input/output intensive workloads which require low and consistent storage latency

Archive tier

You are configuring a Blob storage account for your enterprise application deployed in your Azure subscription. When you are configuring a Blob storage account, you need to verify different access tiers and choose the appropriate access tier for your application. For each requirement, select one option.  
  
Data should frequently be read and written in the Azure storage account also should have the lowest access cost

Hot tier

When you want to do input/output intensive workloads which require low and consistent storage latency

Premium Blob storage

6/12 points

Explanation

The Hot tier is optimized for frequent reads and writes of objects in the Azure storage account. A good usage case is data that is actively being processed. By default, new storage accounts are created in the Hot tier. This tier has the lowest access costs, but higher storage costs than the Cool and Archive tiers.  
Premium Blob Storage is best suited for I/O intensive workloads that require low and consistent storage latency. Premium Blob Storage uses solid-state drives (SSDs) for fast and consistent response times. This storage is best for workloads that perform many small transactions. An example would be a mapping application that requires frequent and fast updates.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-storage-accounts/4-determine-storage-account-kinds>

* 36. You are configuring Azure backup files and folders that rely on the Microsoft Azure Recovery Services (MARS) agent to be installed on the Windows client or server. Identify the features of the MARS agent from the following list. Select three options.

No separate backup server required.

You have more flexibility and granular scheduling options for running backups.

Not application aware; file, folder, and volume-level restore only

Back up files and folders on physical or virtual Windows OS

You can manage backups for multiple machines that you gather into protection groups in a single console.

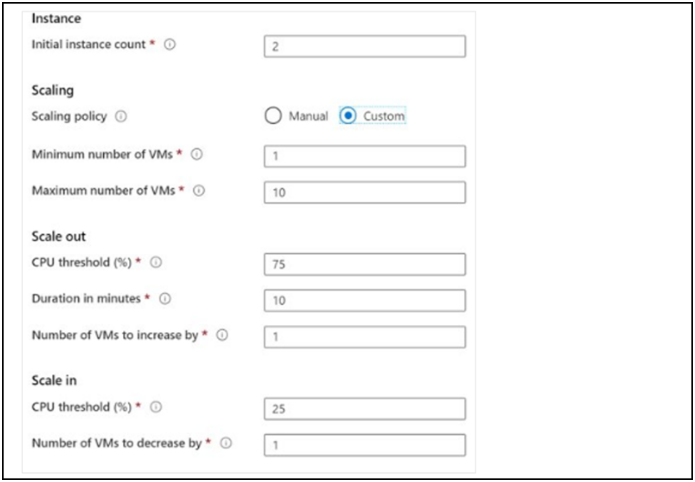
8/13 points

Explanation

The MARS agent is a fully featured agent that has many features.  
• Back up files and folders on physical or virtual Windows OS (VMs can be on-premises or in Azure).  
• No separate backup server required.  
• Not application aware; file, folder, and volume-level restore only.  
• Backup and restore content.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-file-folder-backups/6-manage-azure-recovery-services-agent>

* 37. You are configuring Auto scale sets in your Azure environment.  
    
    
    
  The above diagram shows the configuration you have done for enabling auto-scale.  
  For each of the following statements, select yes, if the statement is true based on the above diagram, otherwise select no.

|  |  |
| --- | --- |
| The Virtual machines increases by 10 based on the demand | Yes  No |
| In ten minutes, if the CPU threshold reaches 75 percentage or above scale set added by one virtual machine | Yes  No |
| When CPU threshold reaches 25 percentage one virtual machine increased on the scale set. | Yes  No |

9/13 points

Explanation

Initial count of the VM is two. Adding or reducing by one vm and maximum number of vms should be 10 in the scale set. In ten minutes, when the CPU threshold reaches 75% or above sacel set added by one virtual machine and cpu threshold reaches 25% then scale set reduced by one vm.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-machine-availability/10-configure-autoscale>

* 38. You create a new Azure Function written in PowerShell. At runtime, the function fails to execute. You need to see the exceptions encountered at the function level. What should you enable?  
  Please select the correct answer below.

Turn on Application Insights at the function level

Turn on Log Analytics at the function level

Turn on Azure Monitor at the function level

Enable Log Stream

Enable Process Explorer

0/12 points

Explanation

Application Insights, a feature of Azure Monitor, is an extensible Application Performance Management (APM) service for developers and DevOps professionals. It can be used to monitor live applications.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-app-services/10-use-application-insights>

* 39. Your manager asked you to configure an Express route in your environment. To configure the Express route you need to identify the various Express route connection models. Identify the models from the following Option list and match them with the Matching statements from the appropriate statements given.
  + Colocated at a Cloud exchange
  + Point-to-Point Ethernet connection
  + Any-to Any(IPVPN) Networks
  + Site-to-Site Express Route
  + Point-to-Point Ethernet connection
  + Colocated at a Cloud exchange
  + Site-to-Site Express Route
  + Any-to Any(IPVPN) Networks
  + The Microsoft cloud can be interconnected to your WAN to make it appear just like any other branch office.
  + You order virtual cross-connections to the Microsoft cloud through the third-party provider’s Ethernet exchange.
  + You can connect On-premises datacenter with Virtual network
  + You connect your on-premises datacenters/offices to the Microsoft cloud
  + Any-to Any(IPVPN) Networks
  + Colocated at a Cloud exchange

4/13 points

Explanation

You create a connection between your on-premises network and the Microsoft cloud in three different ways, Colocated at a cloud exchange, Point-to-point Ethernet Connection, and Any-to-any (IPVPN) Connection.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-expressroute-virtual-wan/4-coexist-site-to-site-expressroute>

* 41. As an Azure Administrator, you want to provide joining capabilities to employees who work from home or are in remote branch offices with limited on-premises infrastructure. Which of the following option will you choose? Select one option.

Azure Sync

Hybrid identity

Azure AD Join

Azure RBAC

12/12 points

Explanation

Azure AD join can be used in various scenarios like: You want to provide joining capabilities to workers who work from home or are in remote branch offices with limited on-premises infrastructure.

Reference link

<https://learn.microsoft.com/en-us/azure/active-directory/devices/concept-azure-ad-join>

* 42. Which of the following is a powerful reporting and analytics tool and is used for insights into the behavior and running of your environment and applications? Select the most effective answer.

Azure Log Analytics

Azure Application Insights

Azure Monitor

Azure Load Balancer

0/13 points

Explanation

Azure Monitor is a powerful reporting and analytics tool. Use it for insights into the behavior and running of your environment and applications. You can then respond proactively to faults in your system.

Reference link

<https://learn.microsoft.com/en-us/training/modules/incident-response-with-alerting-on-azure/2-explore-azure-monitor-alert-types>

* 43. You are going to apply different replication strategies as per your organizational requirements. While configuring the replication strategy you need to identify each requirement and its appropriate solution. You need to match which replication strategy is appropriate for each requirement given.
  + Zone Redundant Storage
  + Geo-Zone Redundant Storage
  + Geo-Redundant Storage
  + Read-Access Geo-Zone Redundant
  + Geo-Zone Redundant Storage
  + Read-Access Geo-Zone Redundant
  + Geo-Redundant Storage
  + Zone Redundant Storage
  + You want to do a write operation that is first committed to the primary location and replicated then again replicated asynchronously to the secondary location.
  + You want to replicate your data synchronously across three different locations in the same region with high performance and low latency.
  + When a failover happens without taking Vendor initiative the users need to access the data.
  + Data should be copied into different locations in the primary region and should be replicated in the secondary region.
  + Geo-Zone Redundant Storage
  + Read-Access Geo-Zone Redundant
  + Zone Redundant Storage
  + Geo-Redundant Storage
  + You want to do a write operation that is first committed to the primary location and replicated then again replicated asynchronously to the secondary location.
  + You want to replicate your data synchronously across three different locations in the same region with high performance and low latency.
  + When a failover happens without taking Vendor initiative the users need to access the data.
  + Data should be copied into different locations in the primary region and should be replicated in the secondary region.

6/12 points

Explanation

Zone-redundant storage: one-redundant storage (ZRS) replicates your storage account synchronously across three Azure availability zones in the primary region.  
Geo-redundant storage: A write operation is first committed to the primary location and replicated using LRS. The update is then replicated asynchronously to the secondary region. When data is written to the secondary location, it's also replicated within that location using LRS.  
Geo-zone-redundant storage: Geo-zone-redundant storage (GZRS) combines the high availability provided by redundancy across availability zones with protection from regional outages provided by geo-replication.  
Read-Access Geo-Zone Redundant Storage: When you enable read access to the secondary region, then your data is always available to be read from the secondary, including in a situation where the primary region becomes unavailable. Read-access geo-redundant storage (RA- GRS) or read-access geo-zone-redundant storage (RA-GZRS) configurations permit read access to the secondary region.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-storage-accounts/5-determine-replication-strategies>

* 44. You want to configure Recovery Services Vault for storing backup data for various Azure services. Within an Azure subscription, how many Recovery Services Vault can be created per region? Select one answer.

100

50

500

350

0/13 points

Explanation

Within an Azure subscription, you can create up to 500 Recovery Services vaults per region.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-file-folder-backups/4-setup-recovery-service-vault-backup-options>

* 45. Contoso, a software development business, aims to run an application on Azure App Service. They need a reliable and, flexible environment to meet the application's growing needs. Additionally, they want to facilitate continuous deployment, ensuring the app is secure. Lastly, they want to use deployment slots to examine the application before implementing it.
  + Can Contoso configure the App Service Plan to scale the application automatically based on usage?
  + Can Contoso use Azure DevOps to enable continuous deployment of the application?
  + Can Contoso use Deployment Slots to test the application before it goes live?
  + Can Contoso configure the App Service Plan to scale the application automatically based on usage?
  + Can Contoso use Deployment Slots to test the application before it goes live?
  + Yes
  + No
  + Can Contoso use Deployment Slots to test the application before it goes live?

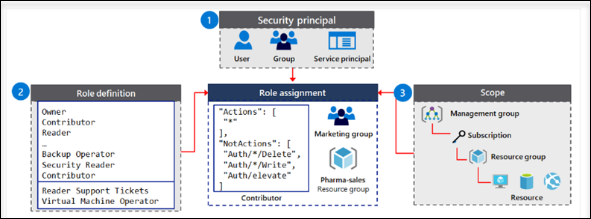
4/12 points

Explanation

To meet the requirements of Contoso, the company needs to configure the App Service Plan to scale the application automatically based on usage. This feature ensures that the application can handle any sudden spikes in traffic. Azure App Service offers a highly scalable application environment, allowing users to create multiple deployment slots. To enable continuous deployment of the application, Contoso can use Azure DevOps. Azure DevOps provides comprehensive tools for automating the deployment process, including continuous integration and continuous deployment (CI/CD) pipelines. Deployment slots allow users to test the application before it goes live. Contoso can use deployment slots to create a separate staging environment, allowing them to validate any changes to the application before deploying them to the production environment.

Reference link

<https://docs.microsoft.com/en-us/azure/app-service/overview-hosting-plans>

* You are working at a pharmaceutical company as an Azure Administrator. The following diagram shows an example of how scopes can be applied to a role to grant varying levels of access for different users.  
    
    
    
  Based on the above diagram identify which of the following statements is true. Select two options.

Six built-in roles are implemented, and two custom roles are defined: Reader Support Tickets and Virtual Machine Operator.

Users in the Marketing group are granted access to create or manage any Azure resource in the Pharma-sales resource group.

The contributor is not having permission to access any of the resources

The built-in Contributor role has three sets of permissions: Actions, Contributions and NotActions.

6/12 points

Explanation

This scenario has the following access management configuration:  
1. Three security principals are supported: user, group, and service principal.2. Six built-in roles are implemented, and two custom roles are defined: Reader Support Tickets and Virtual Machine Operator.  
3. The built-in Contributor role has two sets of permissions: Actions and NotActions.  
  
• The Contributor role is assigned at different scopes to the Marketing group and Pharma-sales resource group:  
1. Users in the Marketing group are granted access to create or manage any Azure resource in the Pharma-sales resource group.  
2. Marketing users aren't granted access to resources outside the Pharma-sales resource group unless they have another role assignment that grants them access to the resource group.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-role-based-access-control/4-create-role-assignment>

* Answer

52.

Your manager asked you to configure Azure Storage accounts for various requirements. When you are configuring it you got two requirements. Following are the requirements:  
For each requirement select one option.  
  
Configure Azure files to enable synchronization between On-premises and cloud servers

Select Standard v2

Configure storage account for applications with high transaction rates

Select Premium block blobs

Your manager asked you to configure Azure Storage accounts for various requirements. When you are configuring it you got two requirements. Following are the requirements:  
For each requirement select one option.  
  
Configure Azure files to enable synchronization between On-premises and cloud servers

Select Standard general purpose v2

Configure storage account for applications with high transaction rates

Select Premium block blobs

6/12 points

Reference link

[https://learn.microsoft.com/en-us/training/modules/configure-storage-accounts/4-determine-storage-account-kindsExplanation Premium storage accounts for block blobs and append blobs. Recommended for applications with high transaction rates. Use Premium block blobs if you work with smaller objects or require consistently low storage latency. This storage is designed to scale with your applications.](https://learn.microsoft.com/en-us/training/modules/configure-storage-accounts/4-determine-storage-account-kindsExplanation%20Premium%20storage%20accounts%20for%20block%20blobs%20and%20append%20blobs.%20Recommended%20for%20applications%20with%20high%20transaction%20rates.%20Use%20Premium%20block%20blobs%20if%20you%20work%20with%20smaller%20objects%20or%20require%20consistently%20low%20storage%20latency.%20This%20storage%20is%20designed%20to%20scale%20with%20your%20applications.)

* 53. Contoso is looking for ways to host various web applications requiring different resources and configurations efficiently. They are currently using Azure App Service plans for this purpose. To guarantee the highest performance and cost-efficiency, what should Contoso consider when establishing and configuring App Service plans?

The number of web applications that will be hosted on each App Service plan

The size and type of virtual machines (VMs) that will be used in each App Service plan

The geographical region of the Azure data center where each App Service plan will be deployed

The maximum number of connections allowed in each App Service plan

0/12 points

Explanation

When creating and configuring App Service plans, Contoso should consider the size and type of VMs used in each plan. The VM size determines the number of vCPUs and the amount of memory available to each application, which can impact the application's performance. Additionally, the type of VM can impact the cost of the App Service plan. By choosing the appropriate VM size and type, Contoso can optimize performance while minimizing costs.

Reference link

<https://docs.microsoft.com/en-us/azure/app-service/overview-hosting-plans>

* 54. You are working as an Azure Administrator. As part of the daily routine, you need to assess systems update requirements and plan patches. Which of the following service helps you to collect and analyze data generated by resources in your cloud and on-premises environments?

Azure Monitor

Azure Log Analytics

Azure Logs

Azure Application Insights

0/13 points

Explanation

Log Analytics is a service that helps you collect and analyze data generated by resources in your cloud and on-premises environments.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-log-analytics/2-determine-uses>

* 55. You are working at Contoso Organization as an Azure Administrator. Your manager asks you to provide accessibility of both on-premises and cloud resources to all the hybrid users. What type of Azure Active Directory edition will you choose to meet the requirement? Select one answer

Azure Active Directory Microsoft 365 Apps

Azure Active Directory Free

Azure Active Directory Premium

Azure Active Directory Basic

12/12 points

Explanation

In addition to the Free features, the Premium P1 edition lets your hybrid users access both on-premises and cloud resources. This edition supports advanced administration like dynamic groups, self-service group management, and cloud write-back capabilities.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-active-directory/5-select-editions>

* 56. You have deployed a retailer App in your Azure subscription. The performance of this app is critical to day-to-day operations. There are three administrators to be informed to address any issues if the app triggers. What would you configure to get notified if there is a problem comes?

Configure an Alert Team

Configure an Action Group

Configure Azure Application Insights

Configure Logs

0/13 points

Explanation

An action group is a collection of notification preferences defined by the owner of an Azure subscription. Azure Monitor and Service Health alerts use action groups to notify users that an alert has been triggered.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-alerts/4-create-action-groups>

* 57. Contoso has employed you as a specialist in Compliance and Governance. They want to implement an Azure Policy, which will prevent the formation of virtual machines that do not have a specific tag. Which Azure CLI command should be used to achieve this objective?

az policy definition create with parameters for the policy name, policy rule, and policy parameters.

az policy set-definition create with parameters for the policy name, policy rule, and policy parameters.

az policy assignment create with parameters for the policy name, policy rule, and policy parameters.

az policy event create with parameters for the policy name, policy rule, and policy parameters.

0/12 points

Explanation

To create an Azure Policy that will deny the creation of virtual machines that do not have a specific tag, we need to create a policy set definition that contains a policy definition. The policy definition will use the 'deny' effect, and the policy rule will include a condition that checks whether the virtual machine has the required tag. We can use the az policy set-definition create command to create the policy set definition, which includes the policy definition and then apply the policy set definition using the az policy assignment create command. The az policy definition create command is used to create a standalone policy definition without the associated policy set definition. The az policy event create command is used to create an event triggered when a policy violation occurs.

Reference link

<https://learn.microsoft.com/en-us/azure/governance/policy/overview>

* 58. WebApp1?

Kubernetes

Azure Container Networking Interface

Hybrid Connection Endpoints

Azure Private Link

0/13 points

Explanation

With Azure Container Networking Interface (CNI), every pod gets an IP address from the subnet and can be accessed directly. These IP addresses must be unique across your network space, and must be planned in advance. Each node has a configuration parameter for the maximum number of pods that it supports

Reference link

<https://learn.microsoft.com/en-us/azure/aks/configure-azure-cni>

* 59. Case Study  
  Your company uses an Azure storage account for storing large numbers of video and audio files. Containers are used to store each type of file and access is limited to those media files. Additionally, the files can only be accessed through shared access signatures. Following are the requirements which the company wants to apply.  
  • The ability to revoke access to the files and to change the period for which users can access the files.  
  • The company is planning a delegation model for Azure storage. Applications in the production environment must have unrestricted access to Azure Storage resources.  
  • You're researching how to use network configuration rules, shared access signatures (SAS), and stored access policies to implement secure access to Azure Storage.  
  You want to protect your data by ensuring your organizational security and compliance commitments are met. Which solution you will apply? Select one answer.

Create a Stored Access Policy

Create a Shared Access Signature

Use Access keys

Configure Azure Storage Encryption.

0/12 points

Explanation

Azure Storage encryption for data at rest protects your data by ensuring your organizational security and compliance commitments are met. The encryption and decryption processes happen automatically. Because your data is secured by default, you don't need to modify your code or applications.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-storage-security/5-determine-storage-service-encryption>

* 60. You are configuring an Application Gateway for your Shopping cart Application ShopStopper. ShopStopper accesses its data from two domains based on the locations of your company branches. You have to ensured that there will be no performance issues while configuring the Application gateway. How optimistically can you implement an Application gateway? Select one answer

Configure a Path-based routing

Configure a Multi-site routing

Configure a zone redundancy for storage

Configure a Site-to site connectivity

0/13 points

Explanation

Multiple site routing configures more than one web application on the same application gateway instance. In a multi-site configuration, you register multiple DNS names (CNAMEs) for the IP address of the Application Gateway, specifying the name of each site. Application Gateway uses separate listeners to wait for requests for each site.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-application-gateway/3-determine-routing>

45678

* 61. You are implementing multiple Virtual Networks. You are configuring Site-to-Site, Point-to-Site and VNet-to-VNet connectivity. You want to implement a secure environment that scrutinizes all incoming traffic and blocks unauthorized traffic from passing on to the internal network. Your goal is to prevent unwanted or unsecured network traffic from reaching key systems. What should you configure? Select the most effective answer.

Azure Firewall

Network Virtual Appliances

Azure Load Balancer

Azure Monitor

0/13 points

Explanation

Network virtual appliances (NVAs) are virtual machines that control the flow of network traffic by controlling routing. You can use an NVA to filter traffic inbound to a virtual network, to block malicious requests, and to block requests made from unexpected resources.

Reference link

<https://learn.microsoft.com/en-us/training/modules/control-network-traffic-flow-with-routes/4-network-virtual-appliances>

* 62. Contoso, Ltd. is a global manufacturing company with offices all over the world. Contoso products are produced using blueprint files created and maintained by the company and they work with their partner organizations to bring their product in the market. You are working as a cloud administrator there.  
  Current Environment:  
  To facilitate business operations, Contoso uses several types of servers including the following:  
  File servers  
  Domain controllers  
  Microsoft SQL Server servers  
  There is an Active Directory forest called contoso.com on your network. Servers and client computers are joined to Active Directory. You have an application called App1 that is visible to the public. App1 is a public-facing application you have. The following three tiers are there in App1:  
  A SQL database  
  A web front end  
  A processing middle tier  
  Each tier consists of five virtual machines. Users can only access the web front end via HTTPS.  
  Requirements:  
  Planned Changes:  
  Contoso plans to implement the following infrastructure changes:  
  Migrate all App1 tiers to Azure.  
  Move existing production plan files to Azure Blob storage.  
  Create a hybrid catalog to support the upcoming Microsoft Office 365 migration project.  
  Technical requirements:  
  Contoso must meet the following technical requirements:  
  Migrate all App1 VMs to Azure.  
  Minimize the number of open ports between App1 tiers.  
  Make sure all App1 virtual machines are protected with backups.  
  Copy blueprint files over the Internet to Azure.  
  Ensure that the plan files are saved to the storage level of the repository.  
  Ensure partner access to plan files is secure and temporary.  
  Avoid storing user passwords or password hashes in Azure.  
  Use unmanaged standard storage for virtual machine hard disks.  
  Ensure that when users connect devices to Azure Active Directory (Azure AD), users use a mobile device for authentication.  
  Reduce administrative efforts whenever possible.  
  User Requirements:  
  Contoso has identified the following requirements for users:  
  Allows only users who are part of the group named Pilot to join the device to Azure AD.  
  Set a new user named Admin1 as a service administrator for your Azure subscription.  
  Admin1 should receive email notifications of service outages.  
  Verify that a new user named user3 can create network objects for your Azure subscription.  
    
  You must move the blueprint files to Azure as part of the task. Which of the following option you will choose?

Generate an access key. Map a drive, and then copy the files by using File Explorer.

Use Azure Storage Explorer to copy the files.

Use the Azure Import/Export service.

Generate a shared access signature (SAS). Map a drive, and then copy the files by using File Explorer.

0/12 points

Explanation

Azure Storage Explorer is a free tool from Microsoft that allows you to work with Azure Storage data on Windows, macOS, and Linux. You can use it to upload and download data from Azure blob storage.  
Scenario:  
Planned Changes include: moving the existing product blueprint files to Azure Blob storage. Technical Requirements include: Copy the blueprint files to Azure over the Internet.

Reference link

<https://learn.microsoft.com/en-us/azure/vs-azure-tools-storage-manage-with-storage-explorer?tabs=windows>

* 63. You have a Web Application named WebApp1. You want to deploy it in your Azure subscription. You are going to deploy the webapp1.contoso.com domain by using Azure DNS. You configure a public DNS zone. From the following possible options, list arrange the options in sequential order by doing drag and drop.
  + Get your Azure DNS name servers
  + Verify delegation of domain name services
  + Configure your custom DNS settings
  + Update the domain registrar setting
  + Identify Virtual networks
  + Create a DNS zone in Azure
  + Configure your custom DNS settings
  + Identify Virtual networks
  + Create a DNS zone in Azure
  + Get your Azure DNS name servers
  + Update the domain registrar setting
  + Verify delegation of domain name services
  + Configure your custom DNS settings

0/13 points

Reference link

<https://learn.microsoft.com/en-us/training/modules/host-domain-azure-dns/3-configure-azure-dns-host-domain>

* 64. As an Azure Administrator, you want to segregate duties within your team and grant only the amount of access to users that they need to perform their jobs. Which of the following option you will choose to meet the requirement?

Azure AD roles

Azure RBAC roles

Azure Policies

Azure AD Join

12/12 points

Explanation

Using Azure RBAC, you can segregate duties within your team and grant only the amount of access to users that they need to perform their jobs. Instead of giving everybody unrestricted permissions in your Azure subscription or resources, you can allow only certain actions at a particular scope.

Reference link

<https://learn.microsoft.com/en-us/azure/role-based-access-control/best-practices>

* 65. Contoso, a software development business, wants to utilize an Azure CLI-based approach to handle its Virtual Machines (VMs). This will help them ensure improved automation, scalability, and performance. Contoso is trying to mechanize the creation of their VMs depending on the requirements and deploy the apps to them, as well as configure the VMs' networking, storage, and security settings. What Azure CLI command should Contoso use to generate a new VM in Azure with a managed disk?

az vm create --resource-group <resource-group-name> --name <vm-name> --image <image-name> --admin-username <username> --generate-ssh-keys --size <vm-size> --os-disk-name <disk-name> --storage-sku Standard\_LRS

az vm create --resource-group <resource-group-name> --name <vm-name> --image <image-name> --admin-username <username> --generate-ssh-keys --size <vm-size> --os-disk-name <disk-name> --managed-disk --storage-sku Standard\_LRS

az vm create --resource-group <resource-group-name> --name <vm-name> --image <image-name> --admin-username <username> --generate-ssh-keys --size <vm-size> --os-disk-name <disk-name> --managed-disk --storage-sku Premium\_LRS

az vm create --resource-group <resource-group-name> --name <vm-name> --image <image-name> --admin-username <username> --generate-ssh-keys --size <vm-size> --os-disk-name <disk-name> --storage-account-type Standard\_LRS

0/12 points

Explanation

To create a new VM in Azure with a managed disk, Contoso should use the az vm create command with the --managed-disk option. This command creates a new VM in Azure with a managed disk instead of a storage account, which provides better reliability, scalability, and performance. In addition, Contoso can specify the storage SKU of the managed disk using the --storage-sku option, which can be either Standard\_LRS or Premium\_LRS. The --os-disk-name option specifies the name of the managed disk for the operating system, while the --image option specifies the image name to use for the VM. The --size option specifies the VM size, while the --admin-username and --generate-ssh-keys options specify the SSH username and the public SSH key for the VM. The --resource-group and --name options specify the name of the resource group and the name of the VM, respectively.

Reference link

<https://docs.microsoft.com/en-us/azure/aks/cluster-autoscaler>

* 66. You are deploying a Web Application to Azure Portal, it has an Application layer and a Data layer. WEBASG and DBASG are the Application layer Security Groups for Web servers and Databases respectively. The following are the requirements.  
  Shoppers access the company’s product catalog hosted on Web Servers. The Web Servers must be accessible from the internet over HTTP port 80 and HTTPS port 443.  
  Inventory information is located on Database Servers. The Database Servers must be accessible over port 1433. Only the Web Servers should have access to the Database Servers.  
  What should you do? Select three answers

Priority:100, deny access from the internet to WEBASG with port 80 and 443.

Priority: 100, allow access from the internet to WEBASG with port 80 and 443.

Priority: 130, deny access from WEBASG to DBASG with port 1433.

Priority: 110, allow access from WEBASG to DBASG with port 1433.

Priority: 120, deny access from anywhere to DBASG with port 1433.

Priority: 120, allow access from anywhere to DBASG with port 1433.

8/13 points

Explanation

SGs work in the same way as NSGs but provide an application-centric way of looking at your infrastructure. You join virtual machines to the ASG, and then use the ASG as a source or destination in NSG rules.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-network-security-groups/6-implement-asgs>

* 67. Case Study  
  Your company uses an Azure storage account for storing large numbers of video and audio files. Containers are used to store each type of file and access is limited to those media files. Additionally, the files can only be accessed through shared access signatures. Following are the requirements which the company wants to apply.  
  • The ability to revoke access to the files and to change the period for which users can access the files.  
  • The company is planning a delegation model for Azure storage. Applications in the production environment must have unrestricted access to Azure Storage resources.  
  • You're researching how to use network configuration rules, shared access signatures (SAS), and stored access policies to implement secure access to Azure Storage.  
    
  You want to implement secure access to Azure storage for the users. Which solution you will choose? Select one answer

Create a Stored Access Policy

Create a Shared Access Signature

Use Access keys

Configure Storage Encryption.

0/12 points

Explanation

For your Azure Storage security solution, you can use Azure Key Vault to manage your encryption keys. The Azure Key Vault APIs can be used to generate encryption keys. You can also create your encryption keys and store them in a key vault.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-storage-security/6-create-customer-managed-keys>

* 68.  
  Contoso is an international organization that offers a broad spectrum of products and services worldwide. It combines on-site and cloud-based applications, such as an e-commerce website, a customer relationship management (CRM) system, and a file server. Contoso's infrastructure is a hybrid cloud environment, including on-site servers and virtual machines (VMs) in Microsoft Azure. Contoso uses Azure for hosting VMs, storage accounts, and other services. The e-commerce website and CRM system are both running on VMs in Azure, while the file server is on-premises. Customers of Contoso can only access the e-commerce website through a public-facing IP address, and the CRM system and file server can only be reached from within the company's private network.  
    
  Planned Changes:  
    
  Contoso plans to migrate the file server from on-premises to Azure to improve scalability and availability. The company also plans to implement Azure Storage to provide scalable and secure storage for the e-commerce website and CRM system.  
    
  Technical Requirements:  
    
  The storage solution should be scalable and provide high availability.  
    
  The storage solution should be secure and protect sensitive customer data.  
    
  The storage solution should support the existing infrastructure and application environment.  
    
  The file server should be migrated to Azure with minimal downtime.  
    
  The migration should be fine with Contoso's existing security and compliance posture.  
    
  User Requirements:  
    
  Customers should be able to access the e-commerce website without any disruption.  
    
  Employees should be able to access the CRM system and file server from anywhere with an internet connection.  
    
  Contoso wants to ensure that customer data is secure in Azure Storage. Which of the following Azure Storage security features should you implement?

Network Access Control Lists

Azure Storage Firewalls

Azure Private Endpoints

Azure Firewall

12/12 points

Explanation

Azure Private Endpoints allow customers to access Azure Storage accounts and data securely from their virtual network. Private Endpoints allow customers to access their storage accounts and data over a private endpoint within their virtual network, thus, reducing the risk of data exfiltration.

Reference link

<https://docs.microsoft.com/en-us/azure/storage/common/storage-private-endpoints>

* 69. Your organization wants to deploy three virtual machines(VMs) named WEB1, WEB2, and WEB3. These virtual machines are going to host a web application named WebApp1. You want to make sure that if a single datacenter becomes unavailable there should be at least two virtual machines available. What should you do?

All three virtual machines in a single Availability Zone

All virtual machines in a single Availability Set

Each virtual machine in a separate Availability Zone

Each virtual machine in a separate Availability Set

0/12 points

Explanation

An Availability Zone in an Azure region is a combination of a fault domain and an update domain. For example, if you create three or more VMs across three zones in an Azure region, your VMs are effectively distributed across three fault domains and three update domains. The Azure platform recognizes this distribution across updated domains to make sure that VMs in different zones are not updated at the same time.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-virtual-machine-availability/5-review-availability-zones>

* 70. You are configuring an App Service plan scaling to handle the load of your applications deployed in your Azure subscription.  
  For each of the following statements, select yes if the statement is true regarding the App service plan, otherwise select no.

|  |  |
| --- | --- |
| You cannot automatically scale between the minimum and maximum using the rules you create. | Yes  No |
| Ensure the maximum and minimum values are different and have an adequate margin between them. | Yes  No |
| Having a maximum instance count limits your total possible hourly cost. | Yes  No |

5/13 points

Explanation

Considerations to implement App service plan scaling  
. Having a minimum instance count makes sure your application is always running even under no load.  
. Having a maximum instance count limits your total possible hourly cost.  
. You can automatically scale between the minimum and maximum using rules you create.  
. Ensure the maximum and minimum values are different and have an adequate margin between them.  
. Always use a scale-out and scale-in rule combination that performs an increase and decrease.  
. Choose the appropriate statistic for your diagnostics metric (Average, Minimum, Maximum and Total).  
. Always select a safe default instance count. The default instance count is important because autoscale scales your service to that count when metrics are not available.  
. Always configure autoscale notifications.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-app-service-plans/5-plan-scaling>

* 71. Contoso, a software development firm, aims to launch a fresh Azure Kubernetes Service (AKS) application. The business must ensure that the application is continuously accessible and can quickly expand its capacity to manage any abrupt augment increase in traffic. Additionally, Contoso must securely save and quickly access data and application logs. Moreover, Contoso wishes to verify that the application can converse with other services inside the Kubernetes cluster.  
    
  Which feature of AKS should Contoso use to meet these requirements?

Kubernetes Network Policies

Kubernetes Cluster Autoscaler

Kubernetes Storage Classes

Kubernetes Node Pools

12/12 points

Explanation

To ensure that the application is highly available and can scale quickly to handle sudden spikes in traffic, Contoso should use Kubernetes Cluster Autoscaler. This feature automatically adjusts the number of nodes in a Kubernetes cluster to match the application's demands. If the application experiences a sudden spike in traffic, the cluster will automatically scale up to handle the increased workload. To store data and application logs securely and access them quickly, Contoso can use Kubernetes Storage Classes. Kubernetes Storage Classes provide a way to define different storage types for use with Kubernetes, including standard storage and premium storage. To ensure that the application can communicate with other services within the Kubernetes cluster, Contoso should use Kubernetes Network Policies. These policies define the rules for communication between pods in a Kubernetes cluster.

Reference link

<https://docs.microsoft.com/en-us/azure/aks/cluster-autoscaler>

* 72. You have two Virtual Networks named VNET1 and VNET2 in your Azure Subscription. You are going to configure VNet Peering across VNET1 and VNET2 by configuring the VPN Gateways. You need to make sure that VNET2 can be able to use VNET1's gateway to get to resources outside the peering. What should you do? Select one answer

Select allow gateway transit on VNET1 and use remote gateways on VNET2.

Select allow gateway transit on VNET2 and use remote gateways on VNET1.

Select allow gateway transit and use remote gateways on both VNET1 and VNET2.

Select allow gateway transit for VNET1 and VNET2.

0/13 points

Explanation

Select allow gateway transit on VNET1 and use remote gateways on VNET2. VNET1 will allow VNET2 to transit external resources, and VNET2 will expect to use a remote gateway.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-vpn-gateway/4-create-gateway-subnet>

* 73. You want to create an App service plan for your organization. The plan includes two highly optimized applications along with databases. Also, the solution has fourteen instances and six deployment slots. Based on the traffic needs, it automatically adjusts the number of virtual machines.  
  What kind of app service plan should you choose? Select one answer.

Shared

Standard

Premium

Isolated

0/12 points

Explanation

The Standard service plan is designed for running production workloads. Pricing is based on the size and number of instances you run. Built-in network load-balancing support automatically distributes traffic across instances. The Standard plan includes an auto-scale that can automatically adjust the number of virtual machine instances running to match your traffic needs. The Standard service plan with Linux runtime environments supports Web App for Containers.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-app-service-plans/3-determine-plan-pricing>

* 74. Contoso, Ltd. is a global manufacturing company with offices all over the world. Contoso products are produced using blueprint files created and maintained by the company and they work with their partner organizations to bring their product in the market. You are working as a cloud administrator there.  
  Current Environment:  
  To facilitate business operations, Contoso uses several types of servers including the following:  
  File servers  
  Domain controllers  
  Microsoft SQL Server servers  
  There is an Active Directory forest called contoso.com on your network. Servers and client computers are joined to Active Directory. You have an application called App1 that is visible to the public. App1 is a public-facing application you have. The following three tiers are there in App1:  
  A SQL database  
  A web front end  
  A processing middle tier  
  Each tier consists of five virtual machines. Users can only access the web front end via HTTPS.  
  Requirements:  
  Planned Changes:  
  Contoso plans to implement the following infrastructure changes:  
  Migrate all App1 tiers to Azure.  
  Move existing production plan files to Azure Blob storage.  
  Create a hybrid catalog to support the upcoming Microsoft Office 365 migration project.  
  Technical requirements:  
  Contoso must meet the following technical requirements:  
  Migrate all App1 VMs to Azure.  
  Minimize the number of open ports between App1 tiers.  
  Make sure all App1 virtual machines are protected with backups.  
  Copy blueprint files over the Internet to Azure.  
  Ensure that the plan files are saved to the storage level of the repository.  
  Ensure partner access to plan files is secure and temporary.  
  Avoid storing user passwords or password hashes in Azure.  
  Use unmanaged standard storage for virtual machine hard disks.  
  Ensure that when users connect devices to Azure Active Directory (Azure AD), users use a mobile device for authentication.  
  Reduce administrative efforts whenever possible.  
  User Requirements:  
  Contoso has identified the following requirements for users:  
  Allows only users who are part of the group named Pilot to join the device to Azure AD.  
  Set a new user named Admin1 as a service administrator for your Azure subscription.  
  Admin1 should receive email notifications of service outages.  
  Verify that a new user named user3 can create network objects for your Azure subscription.  
    
  You must determine Contoso's storage requirements. Select Yes if the statement is true for each of the following statements. else, choose No.

|  |  |
| --- | --- |
| Contoso requires a Storage account that supports Blob storage | Yes  No |
| Contoso requires a Storage account that supports Azure Table storage | Yes  No |
| Contoso requires a Storage account that supports Azure File storage | Yes  No |

12/12 points

Explanation

Contoso is moving the existing product blueprint files to Azure Blob storage.For the hard disks of the virtual machines, use unmanaged standard storage. We use Page Blobs for these.

Reference link

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-pageblob-overview?tabs=dotnet>

* 75. As an Azure Administrator, you are going to configure Azure Active Directory. You want to include some of the prominent features of AAD.  
  The following list has the features of AAD and you need to drag the correct option appropriate to the statement given in the answer area to identify each feature's purpose.
  + Single Sign-on
  + Ubiquitous device support
  + Secure Remote Access
  + Sensitive data protection
  + Single Sign-on
  + Ubiquitous device support
  + Secure Remote Access
  + Users can launch apps from a personalized web-based access panel, mobile app, Microsoft 365, or custom company portals by using their existing work credentials.
  + Users can sign in with the same set of credentials to access all their apps.
  + Admins can monitor for suspicious sign-in activity and potential vulnerabilities in a consolidated view of users and resources in the directory.
  + Users can access on-premises web apps from everywhere, including from the same portal.
  + Ubiquitous device support
  + Single Sign-on
  + Sensitive data protection
  + Secure Remote Access
  + Users can launch apps from a personalized web-based access panel, mobile app, Microsoft 365, or custom company portals by using their existing work credentials.
  + Users can sign in with the same set of credentials to access all their apps.
  + Admins can monitor for suspicious sign-in activity and potential vulnerabilities in a consolidated view of users and resources in the directory.
  + Users can access on-premises web apps from everywhere, including from the same portal.

0/12 points

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-azure-active-directory/2-describe-benefits-features>

* 76. You are working as an Azure Administrator. You are going to take backups of all the resources. You need to make sure that some of the backups should be highly available. For that, you should know about the various replication strategies provided by Azure backups. Identify the two replication strategies which Microsoft Azure backup offers. Select two answers.

Locally Redundant Storage replication Strategy

Zone Redundant Storage replication strategy

Geo-Zone Redundant Storage replication strategy

Geo-Redundant Storage replication strategy.

6/13 points

Explanation

Azure Backup offers two types of replication to keep your storage/data highly available.  
o Locally redundant storage (LRS) replicates your data three times (it creates three copies of your data) in a storage scale unit in a datacenter. All copies of the data exist within the same region. LRS is a low-cost option for protecting your data from local hardware failures.  
o Geo-redundant storage (GRS) is the default and recommended replication option. GRS replicates your data to a secondary region (hundreds of miles away from the primary location of the source data). GRS costs more than LRS, but GRS provides a higher level of durability for your data, even if there is a regional outage.

Reference link

<https://learn.microsoft.com/en-us/training/modules/configure-file-folder-backups/2-describe-azure-backup-benefits>

* 77. You are working in a Healthcare Organization. You configure Azure Load Balancers for the Healthcare applications. You have front-end web servers that need to call business logic that's hosted on multiple middle-tier servers. You need to distribute the traffic evenly. You need to ensure that no traffic is allowed from internet sources. You need to choose the most effective solution? Select one answer.

Azure External Load Balancer

Azure Internal Load Balancer

Azure Firewall

Azure Monitor

13/13 points

Explanation

An internal load balancer distributes a load from internal Azure resources to other Azure resources.

Reference link

<https://learn.microsoft.com/en-us/training/modules/improve-app-scalability-resiliency-with-load-balancer/2-load-balancer-features>

* 78. Contoso has a cloud-based Azure network composed of several subdivisions that are used to provide their services. They need to create an additional subnet for a new application while ensuring it can connect to the other subnets and be blocked off from the internet.  
  Which of the following are valid solutions to meet Contoso's requirements?

Configure a network security group (NSG) for the new subnet to allow inbound and outbound traffic from the existing subnets while blocking internet traffic.

Use a network virtual appliance (NVA) to filter traffic between the new subnet and the existing subnets while blocking internet traffic.

Configure a service endpoint for the new subnet to allow traffic from the existing subnets while blocking internet traffic.

Configure a private endpoint for the new application to allow traffic from the existing subnets while blocking internet traffic.

6/12 points

Explanation

Configuring a network security group (NSG) is a common way to control traffic in Azure virtual networks. In this case, Contoso can create an NSG for the new subnet to allow traffic from the existing subnets while blocking internet traffic. Another solution is to use a service endpoint, which allows traffic from a specific subnet to Azure services, such as Azure Storage or Azure SQL Database, without going over the internet. In this case, Contoso can configure a service endpoint for the new subnet to allow traffic from the existing subnets while blocking internet traffic. A virtual network appliance (NVA) or a private endpoint is unnecessary.

Reference link

<https://learn.microsoft.com/en-us/azure/virtual-network/manage-network-security-group?tabs=network-security-group-portal#create-change-or-delete-a-network-security-group>

* 79. You need to create a variable for the Azure Function, that can be retrieved from the code. Specifically, you want to create a Storage Connection variable to access the Azure Storage. Where should you create the variable?  
  Please select the correct answer below.

In General settings

In Application settings

In App keys section

In App files section

In Proxies tab

12/12 points

Explanation

The Application settings tab maintains settings that are used by the function app. The connection string for this account is stored securely in app settings in Azure. By downloading the setting into the local.settings.json file, you can use the connection to write to a Storage queue in the same account when running the function locally.

Reference link

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-add-output-binding-storage-queue-cli?tabs=in-process%2Cbash%2Cbrowser&pivots=programming-language-csharp>

* 80. Contoso plans to deploy several virtual machines (VMs) on Azure to support their production environment. They want to ensure their VMs are highly available and can survive hardware or software failures. Which options can Contoso use to achieve high availability for their VMs?

Scale sets

Availability zones

Availability sets

Virtual machine scale sets

12/12 points

Explanation

Availability zones allow you to deploy your VMs across multiple data centers within an Azure region. Each availability zone has its independent power source, network, and cooling, which helps ensure that the failure of one zone won't affect the others. By spreading VMs across availability zones, you can ensure your applications remain available and accessible during a datacenter-level outage.

Reference link

<https://docs.microsoft.com/en-us/azure/virtual-machines/availability#availability-zones-for-virtual-machines>