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AZ-104

Microsoft Azure Administrator (beta)

Version 2.0

Manage Azure identities and governance

Question Set 1

QUESTION 1

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription that contains the following users in an Azure Active Directory tenant named contoso.onmicrosoft.com:

Name	Role	Scope
User1	Global administrator	Azure Active Directory
User2	Global administrator	Azure Active Directory
User3	User administrator	Azure Active Directory
User4	Owner	Azure Subscription

User1 creates a new Azure Active Directory tenant named external.contoso.onmicrosoft.com.

You need to create new user accounts in external.contoso.onmicrosoft.com.

Solution: You instruct User2 to create the user accounts.

Does that meet the goal?

- A. Yes
- B. No

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Only a global administrator can add users to this tenant.

Reference:

<https://docs.microsoft.com/en-us/azure/devops/organizations/accounts/add-users-to-azure-ad>

QUESTION 2

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

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You have an Azure subscription that contains the following users in an Azure Active Directory tenant named contoso.onmicrosoft.com:

Name	Role	Scope
User1	Global administrator	Azure Active Directory
User2	Global administrator	Azure Active Directory
User3	User administrator	Azure Active Directory
User4	Owner	Azure Subscription

User1 creates a new Azure Active Directory tenant named external.contoso.onmicrosoft.com.

You need to create new user accounts in external.contoso.onmicrosoft.com.

Solution: You instruct User4 to create the user accounts.

Does that meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Only a global administrator can add users to this tenant.

Reference:

<https://docs.microsoft.com/en-us/azure/devops/organizations/accounts/add-users-to-azure-ad>

QUESTION 3

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

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You have an Azure subscription that contains the following users in an Azure Active Directory tenant named contoso.onmicrosoft.com:

Name	Role	Scope
User1	Global administrator	Azure Active Directory
User2	Global administrator	Azure Active Directory
User3	User administrator	Azure Active Directory
User4	Owner	Azure Subscription

User1 creates a new Azure Active Directory tenant named external.contoso.onmicrosoft.com.

You need to create new user accounts in external.contoso.onmicrosoft.com.

Solution: You instruct User3 to create the user accounts.

Does that meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Only a global administrator can add users to this tenant.

Reference:

<https://docs.microsoft.com/en-us/azure/devops/organizations/accounts/add-users-to-azure-ad>

QUESTION 4
HOTSPOT

You have an Azure subscription named Subscription1 that contains a resource group named RG1.

In RG1, you create an internal load balancer named LB1 and a public load balancer named LB2.

You need to ensure that an administrator named Admin1 can manage LB1 and LB2. The solution must follow the principle of least privilege.

Which role should you assign to Admin1 for each task? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

To add a backend pool to LB1:

Contributor on LB1
Network Contributor on LB1
Network Contributor on RG1
Owner on LB1

To add a health probe to LB2:

Contributor on LB2
Network Contributor on LB2
Network Contributor on RG1
Owner on LB2

Correct Answer:

Answer Area

To add a backend pool to LB1:

Contributor on LB1
Network Contributor on LB1
Network Contributor on RG1
Owner on LB1

To add a health probe to LB2:

Contributor on LB2
Network Contributor on LB2
Network Contributor on RG1
Owner on LB2

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Network Contributor role lets you manage networks, but not access them.

Reference:

<https://docs.microsoft.com/en-us/azure/role-based-access-control/built-in-roles>

QUESTION 5

You have an Azure subscription that contains an Azure Active Directory (Azure AD) tenant named contoso.com and an Azure Kubernetes Service (AKS) cluster named AKS1.

An administrator reports that she is unable to grant access to AKS1 to the users in contoso.com.

You need to ensure that access to AKS1 can be granted to the contoso.com users.

What should you do first?

- A. From contoso.com, modify the Organization relationships settings.
- B. From contoso.com, create an OAuth 2.0 authorization endpoint.
- C. Recreate AKS1.
- D. From AKS1, create a namespace.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://kubernetes.io/docs/reference/access-authn-authz/authentication/>

QUESTION 6

You have a Microsoft 365 tenant and an Azure Active Directory (Azure AD) tenant named contoso.com.

You plan to grant three users named User1, User2, and User3 access to a temporary Microsoft SharePoint document library named Library1.

You need to create groups for the users. The solution must ensure that the groups are deleted automatically after 180 days.

Which two groups should you create? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. an Office 365 group that uses the Assigned membership type
- B. a Security group that uses the Assigned membership type
- C. an Office 365 group that uses the Dynamic User membership type
- D. a Security group that uses the Dynamic User membership type
- E. a Security group that uses the Dynamic Device membership type

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

You can set expiration policy only for Office 365 groups in Azure Active Directory (Azure AD).

Note: With the increase in usage of Office 365 Groups, administrators and users need a way to clean up unused groups. Expiration policies can help remove inactive groups from the system and make things cleaner.

When a group expires, all of its associated services (the mailbox, Planner, SharePoint site, etc.) are also deleted.

You can set up a rule for dynamic membership on security groups or Office 365 groups.

Incorrect Answers:

B, D, E: You can set expiration policy only for Office 365 groups in Azure Active Directory (Azure AD).

Reference:

<https://docs.microsoft.com/en-us/office365/admin/create-groups/office-365-groups-expiration-policy?view=o365-worldwide>

QUESTION 7

HOTSPOT

You have an Azure Active Directory (Azure AD) tenant named contoso.com that contains the users shown in the following table:

Name	Type	Member of
User1	Member	Group1
User2	Guest	Group1
User3	Member	None
UserA	Member	Group2
UserB	Guest	Group2

User3 is the owner of Group1.

Group2 is a member of Group1.

You configure an access review named Review1 as shown in the following exhibit:

Create an access review

Access reviews enable reviewers to attest user's membership in a group or access to an application.

* Review name

Description

* Start date

Frequency

Duration (in days)

End

* Number of times

* End date

Users

Users to review

Scope Guest users only
 Everyone

* Group

Reviewers

Reviewers

Programs

Link to program

Upon completion settings

Advanced settings

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
User3 can perform an access review of User1	<input type="radio"/>	<input type="radio"/>
User3 can perform an access review of UserA	<input type="radio"/>	<input type="radio"/>
User3 can perform an access review of UserB	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
User3 can perform an access review of User1	<input checked="" type="radio"/>	<input type="radio"/>
User3 can perform an access review of UserA	<input checked="" type="radio"/>	<input type="radio"/>
User3 can perform an access review of UserB	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/governance/create-access-review>

QUESTION 8
HOTSPOT

You have the Azure management groups shown in the following table:

Name	In management group
Tenant Root Group	<i>Not applicable</i>
ManagementGroup11	Tenant Root Group
ManagementGroup12	Tenant Root Group
ManagementGroup21	ManagementGroup11

You add Azure subscriptions to the management groups as shown in the following table:

Name	Management group
Subscription1	ManagementGroup21
Subscription2	ManagementGroup12

You create the Azure policies shown in the following table:

Name	Parameter	Scope
Not allowed resource types	virtualNetworks	Tenant Root Group
Allowed resource types	virtualNetworks	ManagementGroup12

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
You can create a virtual network in Subscription1.	<input type="radio"/>	<input type="radio"/>
You can create a virtual machine in Subscription2.	<input type="radio"/>	<input type="radio"/>
You can add Subscription1 to ManagementGroup11.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
You can create a virtual network in Subscription1.	<input type="radio"/>	<input checked="" type="radio"/>
You can create a virtual machine in Subscription2.	<input checked="" type="radio"/>	<input type="radio"/>
You can add Subscription1 to ManagementGroup11.	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: No

Virtual networks are not allowed at the root and is inherited. Deny overrides allowed.

Box 2: Yes

Virtual Machines can be created on a Management Group provided the user has the required RBAC permissions.

Box 3: Yes

Subscriptions can be moved between Management Groups provided the user has the required RBAC permissions.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/management-groups/overview>

<https://docs.microsoft.com/en-us/azure/governance/management-groups/manage#moving-management-groups-and-subscriptions>

QUESTION 9

You have an Azure policy as shown in the following exhibit:

SCOPE

* Scope ([Learn more about setting the scope](#))

Subscription 1

Exclusions

Subscription 1/ContosoRG1

BASICS

* Policy definition

Not allowed resource types

* Assignment name ⓘ

Not allowed resource types

Assignment ID

/subscriptions/5eb8d0b6-ce3b-4ce0-a631-9f5321bedabb/providers/Microsoft.Authorization/policyAssignments/0e6fb866bf854f54accae2a9

Description**Assigned by**

admin1@contoso.com

PARAMETERS

* Not allowed resource types ⓘ

Microsoft.Sql/servers

What is the effect of the policy?

- A. You are prevented from creating Azure SQL servers anywhere in Subscription 1.
- B. You can create Azure SQL servers in ContosoRG1 only.
- C. You are prevented from creating Azure SQL Servers in ContosoRG1 only.
- D. You can create Azure SQL servers in any resource group within Subscription 1.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

You are prevented from creating Azure SQL servers anywhere in Subscription 1 with the exception of ContosoRG1

QUESTION 10

HOTSPOT

You have an Azure subscription that contains the resources shown in the following table:

Name	Type	Resource group	Tag
RG6	Resource group	<i>Not applicable</i>	<i>None</i>
VNET1	Virtual network	RG6	Department: D1

You assign a policy to RG6 as shown in the following table:

Section	Setting	Value
Scope	Scope	Subscription1/RG6
	Exclusions	<i>None</i>
Basics	Policy definition	Apply tag and its default value
	Assignment name	Apply tag and its default value
Parameters	Tag name	Label
	Tag value	Value1

To RG6, you apply the tag: RGroup: RG6.

You deploy a virtual network named VNET2 to RG6.

Which tags apply to VNET1 and VNET2? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

VNET1:

None
Department: D1 only
Department: D1, and RGroup: RG6 only
Department: D1, and Label: Value1 only
Department: D1, RGroup: RG6, and Label: Value1

VNET2:

None
RGroup: RG6 only
Label: Value1 only
RGroup: RG6, and Label: Value1

Correct Answer:

Answer Area

VNET1:

None
Department: D1 only
Department: D1, and RGroup: RG6 only
Department: D1, and Label: Value1 only
Department: D1, RGroup: RG6, and Label: Value1

VNET2:

None
RGroup: RG6 only
Label: Value1 only
RGroup: RG6, and Label: Value1

Section: (none)

Explanation

Explanation/Reference:

Explanation:

VNET1: Department: D1, and Label:Value1 only.

Tags applied to the resource group or subscription are not inherited by the resources.

Note: Azure Policy allows you to use either built-in or custom-defined policy definitions and assign them to either a specific resource group or across a whole Azure subscription.

VNET2: Label:Value1 only.

Incorrect Answers:

RGROUP: RG6

Tags applied to the resource group or subscription are not inherited by the resources.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/tag-policies>

QUESTION 11

You have an Azure subscription named AZPT1 that contains the resources shown in the following table:

Name	Type
storage1	Azure Storage account
VNET1	Virtual network
VM1	Azure virtual machine
VM1Managed	Managed disk for VM1
RVAULT1	Recovery Services vault for the site recovery of VM1

You create a new Azure subscription named AZPT2.

You need to identify which resources can be moved to AZPT2.

Which resources should you identify?

- A. VM1, storage1, VNET1, and VM1Managed only
- B. VM1 and VM1Managed only
- C. VM1, storage1, VNET1, VM1Managed, and RVAULT1
- D. RVAULT1 only

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

You can move a VM and its associated resources to a different subscription by using the Azure portal.

You can now move an Azure Recovery Service (ASR) Vault to either a new resource group within the current subscription or to a new subscription.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/move-resource-group-and-subscription>

<https://docs.microsoft.com/en-us/azure/key-vault/general/keyvault-move-subscription>

QUESTION 12

You recently created a new Azure subscription that contains a user named Admin1.

Admin1 attempts to deploy an Azure Marketplace resource by using an Azure Resource Manager template. Admin1 deploys the template by using Azure PowerShell and receives the following error message: "User failed validation to purchase resources. Error message: "Legal terms have not been accepted for this item on this subscription. To accept legal terms, please go to the Azure portal (<http://go.microsoft.com/fwlink/?LinkId=534873>) and configure programmatic deployment for the Marketplace item or create it there for the first time."

You need to ensure that Admin1 can deploy the Marketplace resource successfully.

What should you do?

- A. From Azure PowerShell, run the `Set-AzApiManagementSubscription` cmdlet
- B. From the Azure portal, register the Microsoft.Marketplace resource provider
- C. From Azure PowerShell, run the `Set-AzMarketplaceTerms` cmdlet
- D. From the Azure portal, assign the Billing administrator role to Admin1

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/powershell/module/az.marketplaceordering/set-azmarketplaceterms?view=azps-4.1.0>

QUESTION 13

You have an Azure Active Directory (Azure AD) tenant that contains 5,000 user accounts.

You create a new user account named AdminUser1.

You need to assign the User administrator administrative role to AdminUser1.

What should you do from the user account properties?

- A. From the Licenses blade, assign a new license
- B. From the Directory role blade, modify the directory role
- C. From the Groups blade, invite the user account to a new group

Correct Answer: B

Section: (none)**Explanation****Explanation/Reference:**

Explanation:

Assign a role to a user

1. Sign in to the Azure portal with an account that's a global admin or privileged role admin for the directory.
2. Select Azure Active Directory, select Users, and then select a specific user from the list.
3. For the selected user, select Directory role, select Add role, and then pick the appropriate admin roles from the Directory roles list, such as Conditional access administrator.
4. Press Select to save.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-users-assign-role-azure-portal>

QUESTION 14

You have an Azure Active Directory (Azure AD) tenant named contoso.onmicrosoft.com that contains 100 user accounts.

You purchase 10 Azure AD Premium P2 licenses for the tenant.

You need to ensure that 10 users can use all the Azure AD Premium features.

What should you do?

- A. From the Licenses blade of Azure AD, assign a license
- B. From the Groups blade of each user, invite the users to a group
- C. From the Azure AD domain, add an enterprise application
- D. From the Directory role blade of each user, modify the directory role

Correct Answer: A

Section: (none)**Explanation****Explanation/Reference:**

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/license-users-groups>

QUESTION 15

You have an Azure subscription named Subscription1 and an on-premises deployment of Microsoft System Center Service Manager.

Subscription1 contains a virtual machine named VM1.

You need to ensure that an alert is set in Service Manager when the amount of available memory on VM1 is below 10 percent.

What should you do first?

- A. Create an automation runbook
- B. Deploy a function app
- C. Deploy the IT Service Management Connector (ITSM)
- D. Create a notification

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The IT Service Management Connector (ITSMC) allows you to connect Azure and a supported IT Service Management (ITSM) product/service, such as the Microsoft System Center Service Manager.

With ITSMC, you can create work items in ITSM tool, based on your Azure alerts (metric alerts, Activity Log alerts and Log Analytics alerts).

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/platform/itsmc-overview>

QUESTION 16

You sign up for Azure Active Directory (Azure AD) Premium.

You need to add a user named admin1@contoso.com as an administrator on all the computers that will be joined to the Azure AD domain.

What should you configure in Azure AD?

- A. Device settings from the Devices blade
- B. Providers from the MFA Server blade
- C. User settings from the Users blade
- D. General settings from the Groups blade

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When you connect a Windows device with Azure AD using an Azure AD join, Azure AD adds the following security principles to the local administrators group on the device:

- The Azure AD global administrator role
- The Azure AD device administrator role
- The user performing the Azure AD join

In the Azure portal, you can manage the device administrator role on the Devices page. To open the Devices page:

1. Sign in to your Azure portal as a global administrator or device administrator.
2. On the left navbar, click Azure Active Directory.
3. In the Manage section, click Devices.
4. On the Devices page, click Device settings.
5. To modify the device administrator role, configure Additional local administrators on Azure AD joined devices.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/devices/assign-local-admin>

QUESTION 17

HOTSPOT

You have Azure Active Directory tenant named Contoso.com that includes following users:

Name	Role
User1	Cloud device administrator
User2	User administrator

Contoso.com includes following Windows 10 devices:

Name	Join type
Device1	Azure AD registered
Device2	Azure AD joined

You create following security groups in Contoso.com:

Name	Membership Type	Owner
Group1	Assigned	User2
Group2	Dynamic Device	User2

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
User1 can add Device2 to Group1	<input type="radio"/>	<input type="radio"/>
User2 can add Device1 to Group1	<input type="radio"/>	<input type="radio"/>
User2 can add Device2 to Group2	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
User1 can add Device2 to Group1	<input checked="" type="radio"/>	<input type="radio"/>
User2 can add Device1 to Group1	<input type="radio"/>	<input checked="" type="radio"/>
User2 can add Device2 to Group2	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)
Explanation:

Explanation/Reference:

Explanation:

Box 1: Yes

User1 is a Cloud Device Administrator.

Device2 is Azure AD joined.

Group1 has the assigned to join type. User1 is the owner of Group1.

Note: Assigned groups - Manually add users or devices into a static group.

Azure AD joined or hybrid Azure AD joined devices utilize an organizational account in Azure AD

Box 2: No

User2 is a User Administrator.

Device1 is Azure AD registered.

Group1 has the assigned join type, and the owner is User1.

Note: Azure AD registered devices utilize an account managed by the end user, this account is either a Microsoft account or another locally managed credential.

Box 3: Yes

User2 is a User Administrator.

Device2 is Azure AD joined.

Group2 has the Dynamic Device join type, and the owner is User2.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/devices/overview>

QUESTION 18

You have an Azure subscription that contains a resource group named RG26.

RG26 is set to the West Europe location and is used to create temporary resources for a project. RG26 contains the resources shown in the following table.

Name	Type	Location
VM1	Virtual machine	North Europe
RGV1	Recovery Services vault	North Europe
SQLDB01	Azure SQL database	North Europe
AZSQL01	Azure SQL database server	North Europe
sa001	Storage account	West Europe

SQLDB01 is backed up to RGV1.

When the project is complete, you attempt to delete RG26 from the Azure portal. The deletion fails.

You need to delete RG26.

What should you do first?

- A. Delete VM1
- B. Stop VM1
- C. Stop the backup of SQLDB01
- D. Delete sa001

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 19

You have an Azure subscription named Subscription1 that contains a virtual network named VNet1. VNet1 is in a resource group named RG1.

Subscription1 has a user named User1. User1 has the following roles:

- Reader
- Security Admin
- Security Reader

You need to ensure that User1 can assign the Reader role for VNet1 to other users.

What should you do?

- A. Remove User 1 from the Security Reader role for Subscription1. Assign User1 the Contributor role for RG1.
- B. Assign User1 the Owner role for VNet1.
- C. Remove User1 from the Security Reader and Reader roles for Subscription1.
- D. Assign User1 the Network Contributor role for RG1.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Has full access to all resources including the right to delegate access to others.

Reference:

<https://docs.microsoft.com/en-us/azure/role-based-access-control/overview>

QUESTION 20

You have an Azure Active Directory (Azure AD) tenant named contosocloud.onmicrosoft.com.

Your company has a public DNS zone for contoso.com.

You add contoso.com as a custom domain name to Azure AD.

You need to ensure that Azure can verify the domain name.

Which type of DNS record should you create?

- A. MX
- B. NSEC

- C. SRV
- D. NSEC3

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/azure/dns/dns-web-sites-custom-domain>

Implement and manage storage

Question Set 1

QUESTION 1

DRAG DROP

You have an on-premises file server named Server1 that runs Windows Server 2016.

You have an Azure subscription that contains an Azure file share.

You deploy an Azure File Sync Storage Sync Service, and you create a sync group.

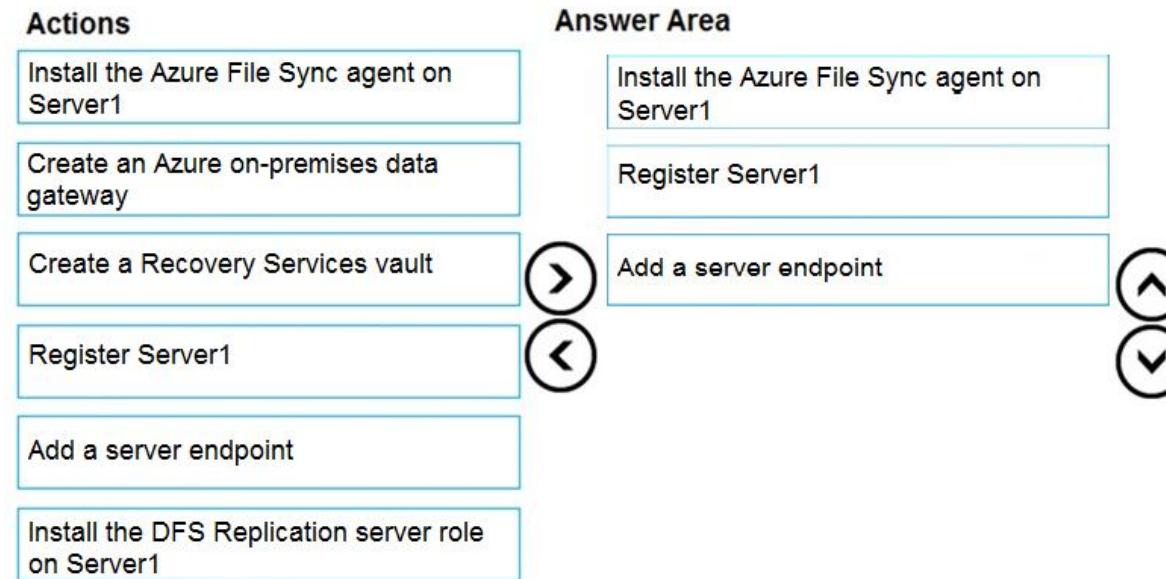
You need to synchronize files from Server1 to Azure.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions	Answer Area
Install the Azure File Sync agent on Server1	
Create an Azure on-premises data gateway	
Create a Recovery Services vault	▶
Register Server1	◀
Add a server endpoint	↑
Install the DFS Replication server role on Server1	↓

Correct Answer:



Section: (none)

Explanation

Explanation/Reference:

Explanation:

Step 1: Install the Azure File Sync agent on Server1

The Azure File Sync agent is a downloadable package that enables Windows Server to be synced with an Azure file share

Step 2: Register Server1.

Register Windows Server with Storage Sync Service

Registering your Windows Server with a Storage Sync Service establishes a trust relationship between your server (or cluster) and the Storage Sync Service.

Step 3: Add a server endpoint

Create a sync group and a cloud endpoint.

A sync group defines the sync topology for a set of files. Endpoints within a sync group are kept in sync with each other. A sync group must contain one cloud endpoint, which represents an Azure file share and one or more server endpoints. A server endpoint represents a path on registered server.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-deployment-guide>

QUESTION 2**HOTSPOT**

You plan to create an Azure Storage account in the Azure region of East US 2.

You need to create a storage account that meets the following requirements:

- Replicates synchronously.
- Remains available if a single data center in the region fails.

How should you configure the storage account? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Replication:

Geo-redundant storage (GRS)
Locally-redundant storage (LRS)
Read-access geo-redundant storage (RA GRS)
Zone-redundant storage (ZRS)

Account type:

Blob storage
Storage (general purpose v1)
StorageV2 (general purpose v2)

Correct Answer:

Answer Area

Replication:

Geo-redundant storage (GRS)
Locally-redundant storage (LRS)
Read-access geo-redundant storage (RA GRS)
Zone-redundant storage (ZRS)

Account type:

Blob storage
Storage (general purpose v1)
StorageV2 (general purpose v2)

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: Zone-redundant storage (ZRS)

Zone-redundant storage (ZRS) replicates your data synchronously across three storage clusters in a single region.

LRS would not remain available if a data center in the region fails

GRS and RA GRS use asynchronous replication.

Box 2: StorageV2 (general purpose V2)

ZRS only support GPv2.

Reference:

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

<https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy-zrs>

QUESTION 3

You have an Azure Storage account named storage1.

You plan to use AzCopy to copy data to storage1.

You need to identify the storage services in storage1 to which you can copy the data.

What should you identify?

- A. blob, file, table, and queue
- B. blob and file only
- C. file and table only
- D. file only
- E. blob, table, and queue only

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

AzCopy is a command-line utility that you can use to copy blobs or files to or from a storage account.

Incorrect Answers:

A, C, E: AzCopy does not support table and queue storage services.

D: AzCopy supports file storage services, as well as blob storage services.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-v10>

QUESTION 4

HOTSPOT

You have an Azure Storage account named storage1 that uses Azure Blob storage and Azure File storage.

You need to use AzCopy to copy data to the blob storage and file storage in storage1.

Which authentication method should you use for each type of storage? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Blob storage:

Azure Active Directory (Azure AD) only
Shared access signatures (SAS) only
Access keys and shared access signatures (SAS) only
Azure Active Directory (Azure AD) and shared access signatures (SAS) only
Azure Active Directory (Azure AD), access keys, and shared access signatures (SAS)

File storage:

Azure Active Directory (Azure AD) only
Shared access signatures (SAS) only
Access keys and shared access signatures (SAS) only
Azure Active Directory (Azure AD) and shared access signatures (SAS) only
Azure Active Directory (Azure AD), access keys, and shared access signatures (SAS)

Correct Answer:**Answer Area**

Blob storage:

Azure Active Directory (Azure AD) only
Shared access signatures (SAS) only
Access keys and shared access signatures (SAS) only
Azure Active Directory (Azure AD) and shared access signatures (SAS) only
Azure Active Directory (Azure AD), access keys, and shared access signatures (SAS)

File storage:

Azure Active Directory (Azure AD) only
Shared access signatures (SAS) only
Access keys and shared access signatures (SAS) only
Azure Active Directory (Azure AD) and shared access signatures (SAS) only
Azure Active Directory (Azure AD), access keys, and shared access signatures (SAS)

Section: (none)**Explanation****Explanation/Reference:**

Explanation:

You can provide authorization credentials by using Azure Active Directory (AD), or by using a Shared Access Signature (SAS) token.

Box 1:

Both Azure Active Directory (AD) and Shared Access Signature (SAS) token are supported for Blob storage.

Box 2:

Only Shared Access Signature (SAS) token is supported for File storage.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-v10>

QUESTION 5

You have an Azure subscription that contains an Azure Storage account.

You plan to create an Azure container instance named container1 that will use a Docker image named Image1. Image1 contains a Microsoft SQL Server instance that requires persistent storage.

You need to configure a storage service for Container1.

What should you use?

- A. Azure Files
- B. Azure Blob storage
- C. Azure Queue storage
- D. Azure Table storage

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

You have an app named App1 that runs on two Azure virtual machines named VM1 and VM2.

You plan to implement an Azure Availability Set for App1. The solution must ensure that App1 is available during planned maintenance of the hardware hosting VM1 and VM2.

What should you include in the Availability Set?

- A. one update domain

- B. two fault domains
- C. one fault domain
- D. two update domains

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Microsoft updates, which Microsoft refers to as planned maintenance events, sometimes require that VMs be rebooted to complete the update. To reduce the impact on VMs, the Azure fabric is divided into update domains to ensure that not all VMs are rebooted at the same time.

Incorrect Answers:

A: An update domain is a group of VMs and underlying physical hardware that can be rebooted at the same time.

B, C: A fault domain shares common storage as well as a common power source and network switch. It is used to protect against unplanned system failure.

References:

<https://petri.com/understanding-azure-availability-sets>

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/tutorial-availability-sets>

QUESTION 7

HOTSPOT

You have an Azure subscription named Subscription1 that contains the resources shown in the following table:

Name	Type	Location	Resource group
RG1	Resource group	East US	<i>Not applicable</i>
RG2	Resource group	West US	<i>Not applicable</i>
Vault1	Recovery Services vault	West Europe	RG1
storage1	Storage account	East US	RG2
storage2	Storage account	West US	RG1
storage3	Storage account	West Europe	RG2
Analytics1	Log Analytics workspace	East US	RG1
Analytics2	Log Analytics workspace	West US	RG2
Analytics3	Log Analytics workspace	West Europe	RG1

You plan to configure Azure Backup reports for Vault1.

You are configuring the Diagnostics settings for the AzureBackupReports log.

Which storage accounts and which Log Analytics workspaces can you use for the Azure Backup reports of Vault1? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Storage accounts:

storage1 only
storage2 only
storage3 only
storage1, storage2, and storage3

Log Analytics workspaces:

Analytics1 only
Analytics2 only
Analytics3 only
Analytics1, Analytics2, and Analytics3

Correct Answer:

Answer Area

Storage accounts:

storage1 only
storage2 only
storage3 only
storage1, storage2, and storage3

Log Analytics workspaces:

Analytics1 only
Analytics2 only
Analytics3 only
Analytics1, Analytics2, and Analytics3

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: storage3 only

Vault1 and storage3 are both in West Europe.

Box 2: Analytics3

Vault1 and Analytics3 are both in West Europe.

Reference:

<https://docs.microsoft.com/en-us/azure/backup/backup-azure-configure-reports>

QUESTION 8

HOTSPOT

You have an Azure subscription named Subscription1.

In Subscription1, you create an Azure file share named share1.

You create a shared access signature (SAS) named SAS1 as shown in the following exhibit:

Allowed services

Blob File Queue Table

Allowed resource types

Service Container Object

Allowed permissions

Read Write Delete List Add Create Update Process

Start and expiry date/time

Start

2018-09-01  2:00:00 PM

End

2018-09-14  2:00:00 PM

(UTC+02:00) --- Current Timezone --- 

Allowed IP addresses

193.77.134.10-193.77.134.50 

Allowed protocols

HTTPS only HTTPS and HTTP

Signing key

key1 

Generate SAS and connection string

To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

If on September 2, 2018, you run Microsoft Azure Storage Explorer on a computer that has an IP address of 193.77.134.1, and you use SAS1 to connect to the storage account, you [answer choice].

If on September 10, 2018, you run the net use command on a computer that has an IP address of 193.77.134.50, and you use SAS1 as the password to connect to share1, you [answer choice].

will be prompted for credentials
will have no access
will have read, write, and list access
will have read-only access

will be prompted for credentials
will have no access
will have read, write, and list access
will have read-only access

Correct Answer:

Answer Area

If on September 2, 2018, you run Microsoft Azure Storage Explorer on a computer that has an IP address of 193.77.134.1, and you use SAS1 to connect to the storage account, you [answer choice].

If on September 10, 2018, you run the net use command on a computer that has an IP address of 193.77.134.50, and you use SAS1 as the password to connect to share1, you [answer choice].

will be prompted for credentials
will have no access
will have read, write, and list access
will have read-only access

will be prompted for credentials
will have no access
will have read, write, and list access
will have read-only access

Section: (none)
Explanation

Explanation/Reference:

Explanation:

Box 1: Will have no access

The IP 193.77.134.1 does not have access on the SAS.

Box 2: Will have read, write, and list access

The net use command is used to connect to file shares.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-dotnet-shared-access-signature-part-1>

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

QUESTION 9

You have an on-premises server that contains a folder named D:\Folder1.

You need to copy the contents of D:\Folder1 to the public container in an Azure Storage account named contosodata.

Which command should you run?

- A. `https://contosodata.blob.core.windows.net/public`
- B. `azcopy sync D:\folder1 https://contosodata.blob.core.windows.net/public --snapshot`
- C. `azcopy copy D:\folder1 https://contosodata.blob.core.windows.net/public --recursive`
- D. `az storage blob copy start-batch D:\Folder1 https://contosodata.blob.core.windows.net/public`

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The azcopy copy command copies a directory (and all of the files in that directory) to a blob container. The result is a directory in the container by the same name.

Incorrect Answers:

B: The azcopy sync command replicates the source location to the destination location. However, the file is skipped if the last modified time in the destination is more recent.

D: The az storage blob copy start-batch command copies multiple blobs to a blob container.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-use-azcopy-blobs>

<https://docs.microsoft.com/en-us/azure/storage/common/storage-ref-azcopy-copy>

QUESTION 10

You have an Azure subscription named Subscription1 that contains the storage accounts shown in the following table:

Name	Account kind	Azure service that contains data
storage1	Storage	File
storage2	StorageV2 (general purpose v2)	File, Table
storage3	StorageV2 (general purpose v2)	Queue
storage4	BlobStorage	Blob

You plan to use the Azure Import/Export service to export data from Subscription1.

You need to identify which storage account can be used to export the data.

What should you identify?

- A. storage1
- B. storage2
- C. storage3
- D. storage4

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Azure Import/Export service supports the following of storage accounts:

- Standard General Purpose v2 storage accounts (recommended for most scenarios)
- Blob Storage accounts
- General Purpose v1 storage accounts (both Classic or Azure Resource Manager deployments),

Azure Import/Export service supports the following storage types:

- Import supports Azure Blob storage and Azure File storage
- Export supports Azure Blob storage

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-requirements>

QUESTION 11

HOTSPOT

You have Azure subscription that includes following Azure file shares:

Name	In storage account	Location
share1	storage1	West US
share2	storage1	West US

You have the following on-premises servers:

Name	Folders
Server1	D:\Folder1, E:\Folder2
Server2	D:\Data

You create a Storage Sync Service named Sync1 and an Azure File Sync group named Group1. Group1 uses share1 as a cloud endpoint.

You register Server1 and Server2 in Sync1. You add D:\Folder1 on Server1 as a server endpoint of Group1.

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
share2 can be added as a cloud endpoint for Group1	<input type="radio"/>	<input type="radio"/>
E:\Folder2 on Server1 can be added as a server endpoint for Group1	<input type="radio"/>	<input type="radio"/>
D:\Data on Server2 can be added as a server endpoint for Group1	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
share2 can be added as a cloud endpoint for Group1	<input type="radio"/>	<input checked="" type="radio"/>
E:\Folder2 on Server1 can be added as a server endpoint for Group1	<input checked="" type="radio"/>	<input type="radio"/>
D:\Data on Server2 can be added as a server endpoint for Group1	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: No

Group1 already has a cloud endpoint named Share1.

A sync group must contain one cloud endpoint, which represents an Azure file share and one or more server endpoints.

Box 2: Yes

Yes, one or more server endpoints can be added to the sync group.

Box 3: Yes

Yes, one or more server endpoints can be added to the sync group.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-deployment-guide>

QUESTION 12

DRAG DROP

You have an Azure subscription named Subscription1.

You create an Azure Storage account named contosostorage, and then you create a file share named data.

Which UNC path should you include in a script that references files from the data file share? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Values	
blob	blob.core.windows.net
contosostorage	data
file	file.core.windows.net
portal.azure.com	subscription1

Answer Area

\ [] . [] \ []

Correct Answer:

Values	
blob	blob.core.windows.net
contosostorage	data
file	file.core.windows.net
portal.azure.com	subscription1

Answer Area
\ contosostorage . file.core.windows.net \ data

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: contosostorage

The name of account

Box 2: file.core.windows.net

Box 3: data

The name of the file share is data.

Example:

Connect
myazurefileshare

Connecting from Windows

To connect to this file share from a Windows computer, run this command:

```
> net use [drive letter]
\\myazurefileaccount.file.core.windows.net\myazurefiles
/u:AZURE\myazurefileaccount
mehLWRwJkxSZTBFs8QFd7Xl3qjwF8Tojea2Eu4BfT0e4/aIobuB1upW
```

Reference:
<https://docs.microsoft.com/en-us/azure/storage/files/storage-how-to-use-files-windows>

QUESTION 13

HOTSPOT

You have an Azure subscription that contains an Azure Storage account.

You plan to copy an on-premises virtual machine image to a container named vmimages.

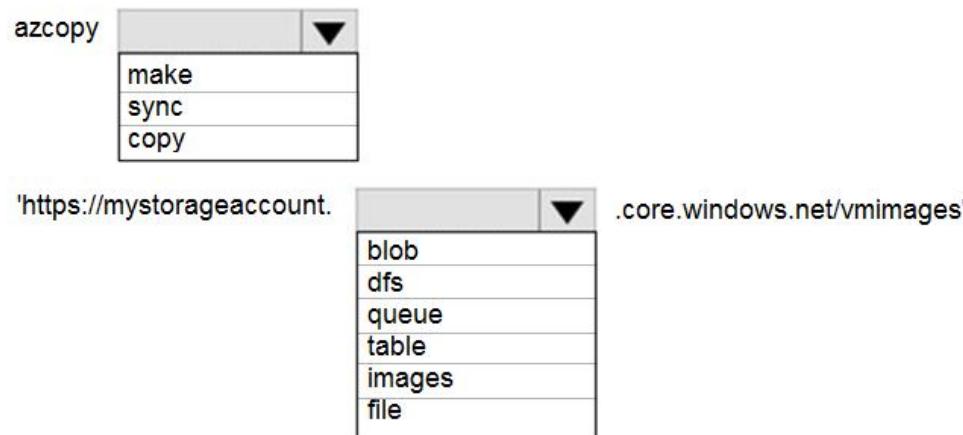
You need to create the container for the planned image.

Which command should you run? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

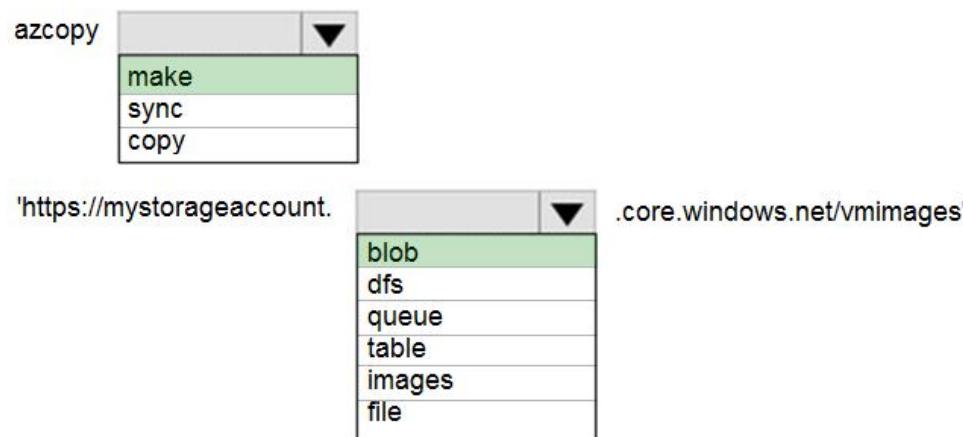
Hot Area:

Answer Area



Correct Answer:

Answer Area



Section: (none)

Explanation

Explanation/Reference:

QUESTION 14

HOTSPOT

You have an Azure File sync group that has the endpoints shown in the following table.

Name	Type
Endpoint1	Cloud endpoint
Endpoint2	Server endpoint
Endpoint3	Server endpoint

Cloud tiering is enabled for Endpoint3.

You add a file named File1 to Endpoint1 and a file named File2 to Endpoint2.

On which endpoints will File1 and File2 be available within 24 hours of adding the files? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

File1:

Endpoint1 only
Endpoint3 only
Endpoint2 and Endpoint3 only
Endpoint1, Endpoint2, and Endpoint3

File2:

Endpoint2 only
Endpoint3 only
Endpoint2 and Endpoint3 only
Endpoint1, Endpoint2, and Endpoint3

Correct Answer:

Answer Area

File1:

Endpoint1 only
Endpoint3 only
Endpoint2 and Endpoint3 only
Endpoint1, Endpoint2, and Endpoint3

File2:

Endpoint2 only
Endpoint3 only
Endpoint2 and Endpoint3 only
Endpoint1, Endpoint2, and Endpoint3

Section: (none)

Explanation

Explanation/Reference:

Explanation:

File1: Endpoint3 only

Cloud Tiering: A switch to enable or disable cloud tiering. When enabled, cloud tiering will tier files to your Azure file shares. This converts on-premises file shares into a cache, rather than a complete copy of the dataset, to help you manage space efficiency on your server. With cloud tiering, infrequently used or accessed files can be tiered to Azure Files.

File2: Endpoint1, Endpoint2, and Endpoint3

Reference:

<https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-cloud-tiering>

QUESTION 15

HOTSPOT

You have several Azure virtual machines on a virtual network named VNet1.

You configure an Azure Storage account as shown in the following exhibit.

VIRTUAL NET...	SUBNET	ADDRESS RA...	ENDPOINT ST...	RESOURCE G...	SUBSCRIPTION
VNet1	1	10.2.0.0/16	DemoRG	Production subscrip ...	
Prod		10.2.0.0/24	✓ Enabled	DemoRG	Production subscrip ...

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

The virtual machines on the 10.2.9.0/24 subnet will have network connectivity to the file shares in the storage account [answer choice].

▼
always
during a backup
never

Azure Backup will be able to back up the unmanaged hard disks of the virtual machines in the storage account [answer choice].

▼
always
during a backup
never

Correct Answer:

Answer Area

The virtual machines on the 10.2.9.0/24 subnet will have network connectivity to the file shares in the storage account [answer choice].

▼
always
during a backup
never

Azure Backup will be able to back up the unmanaged hard disks of the virtual machines in the storage account [answer choice].

▼
always
during a backup
never

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: always

Endpoint status is enabled.

Box 2: Never

After you configure firewall and virtual network settings for your storage account, select Allow trusted Microsoft services to access this storage account as an exception to enable Azure Backup service to access the network restricted storage account.

The screenshot shows the 'Firewalls and virtual networks' section of the Azure Storage Account settings. On the left, there's a sidebar with various navigation options like Overview, Activity log, Access control (IAM), Tags, and Diagnose and solve problems. Under SETTINGS, the 'Firewalls and virtual networks' option is selected. The main pane shows the 'Allow access from' section where 'Selected networks' is chosen. It also includes sections for Virtual networks (with options to add existing or new virtual networks) and Firewall (with an address range input field). The 'Exceptions' section at the bottom contains three checkboxes: 'Allow trusted Microsoft services to access this storage account' (which is checked and highlighted with a red border), 'Allow read access to storage logging from any network', and 'Allow read access to storage metrics from any network'.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/files/storage-how-to-use-files-windows>

<https://azure.microsoft.com/en-us/blog/azure-backup-now-supports-storage-accounts-secured-with-azure-storage-firewalls-and-virtual-networks/>

QUESTION 16

HOTSPOT

You have a sync group named Sync1 that has a cloud endpoint. The cloud endpoint includes a file named File1.txt.

Your on-premises network contains servers that run Windows Server 2016. The servers are configured as shown in the following table.

Name	Share	Share contents
Server1	Share1	File1.txt, File2.txt
Server2	Share2	File2.txt, File3.txt

You add Share1 as an endpoint for Sync1. One hour later, you add Share2 as an endpoint for Sync1.

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
On the cloud endpoint, File1.txt is overwritten by File1.txt from Share1.	<input type="radio"/>	<input type="radio"/>
On Server1, File1.txt is overwritten by File1.txt from the cloud endpoint.	<input type="radio"/>	<input type="radio"/>
File1.txt from Share1 replicates to Share2.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
On the cloud endpoint, File1.txt is overwritten by File1.txt from Share1.	<input checked="" type="radio"/>	<input type="radio"/>
On Server1, File1.txt is overwritten by File1.txt from the cloud endpoint.	<input type="radio"/>	<input checked="" type="radio"/>
File1.txt from Share1 replicates to Share2.	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: Yes

If you add an Azure file share that has an existing set of files as a cloud endpoint to a sync group, the existing files are merged with any other files that are already on other endpoints in the sync group.

Box 2: No

Box 3: Yes

Reference:

<https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-planning>

QUESTION 17

You have an Azure subscription that contains the storage accounts shown in the following table.

Name	Kind	Performance	Replication	Access tier
storage1	Storage (general purpose v1)	Premium	Geo-redundant storage (GRS)	None
storage2	StorageV2 (general purpose v2)	Standard	Locally-redundant storage (LRS)	Cool
storage3	StorageV2 (general purpose v2)	Premium	Read-access geo-redundant storage (RA-GRS)	Hot
storage4	BlobStorage	Standard	Locally-redundant storage (LRS)	Hot

You need to identify which storage account can be converted to zone-redundant storage (ZRS) replication by requesting a live migration from Azure support.

What should you identify?

- A. storage1
- B. storage2
- C. storage3
- D. storage4

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

ZRS currently supports standard general-purpose v2, FileStorage and BlockBlobStorage storage account types.

Incorrect Answers:

A, not C: Live migration is supported only for storage accounts that use LRS replication. If your account uses GRS or RA-GRS, then you need to first change your account's replication type to LRS before proceeding. This intermediary step removes the secondary endpoint provided by GRS/RA-GRS.

Also, only standard storage account types support live migration. Premium storage accounts must be migrated manually.

D: ZRS currently supports standard general-purpose v2, FileStorage and BlockBlobStorage storage account types.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy-zrs>

QUESTION 18

You have an Azure subscription that contains a storage account named account1.

You plan to upload the disk files of a virtual machine to account1 from your on-premises network. The on-premises network uses a public IP address space of 131.107.1.0/24.

You plan to use the disk files to provision an Azure virtual machine named VM1. VM1 will be attached to a virtual network named VNet1. VNet1 uses an IP address space of 192.168.0.0/24.

You need to configure account1 to meet the following requirements:

- Ensure that you can upload the disk files to account1.
- Ensure that you can attach the disks to VM1.
- Prevent all other access to account1.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. From the Firewalls and virtual networks blade of account1, select **Selected networks**.
- B. From the Firewalls and virtual networks blade of account1, select **Allow trusted Microsoft services to access this storage account**.
- C. From the Firewalls and virtual networks blade of account1, add the 131.107.1.0/24 IP address range.
- D. From the Firewalls and virtual networks blade of account1, add VNet1.
- E. From the Service endpoints blade of VNet1, add a service endpoint.

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A: By default, storage accounts accept connections from clients on any network. To limit access to selected networks, you must first change the default action. Azure portal

1. Navigate to the storage account you want to secure.
2. Click on the settings menu called Firewalls and virtual networks.
3. To deny access by default, choose to allow access from 'Selected networks'. To allow traffic from all networks, choose to allow access from 'All networks'.
4. Click Save to apply your changes.

E: Grant access from a Virtual Network

Storage accounts can be configured to allow access only from specific Azure Virtual Networks.

By enabling a Service Endpoint for Azure Storage within the Virtual Network, traffic is ensured an optimal route to the Azure Storage service. The identities of the virtual network and the subnet are also transmitted with each request.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-network-security>

Implement and manage storage

Testlet 2

Case study

This is a case study. **Case studies are not timed separately. You can use as much exam time as you would like to complete each case.** However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study

To display the first question in this case study, click the **Next** button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an **All Information** tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the **Question** button to return to the question.

Overview

Contoso, Ltd. is a manufacturing company that has offices worldwide. Contoso works with partner organizations to bring products to market.

Contoso products are manufactured by using blueprint files that the company authors and maintains.

Existing Environment

Currently, Contoso uses multiple types of servers for business operations, including the following:

- File servers
- Domain controllers
- Microsoft SQL Server servers

Your network contains an Active Directory forest named contoso.com. All servers and client computers are joined to Active Directory.

You have a public-facing application named App1. App1 is comprised of the following three tiers:

- A SQL database
- A web front end
- A processing middle tier

Each tier is comprised of five virtual machines. Users access the web front end by using HTTPS only.

Requirements

Planned Changes

Contoso plans to implement the following changes to the infrastructure:

- Move all the tiers of App1 to Azure.
- Move the existing product blueprint files to Azure Blob storage.
- Create a hybrid directory to support an upcoming Microsoft Office 365 migration project.

Technical Requirements

Contoso must meet the following technical requirements:

- Move all the virtual machines for App1 to Azure.
- Minimize the number of open ports between the App1 tiers.
- Ensure that all the virtual machines for App1 are protected by backups.
- Copy the blueprint files to Azure over the Internet.
- Ensure that the blueprint files are stored in the archive storage tier.
- Ensure that partner access to the blueprint files is secured and temporary.
- Prevent user passwords or hashes of passwords from being stored in Azure.
- Use unmanaged standard storage for the hard disks of the virtual machines.
- Ensure that when users join devices to Azure Active Directory (Azure AD), the users use a mobile phone to verify their identity.
- Minimize administrative effort whenever possible.

User Requirements

Contoso identifies the following requirements for users:

- Ensure that only users who are part of a group named Pilot can join devices to Azure AD.
- Designate a new user named Admin1 as the service admin for the Azure subscription.
- Admin1 must receive email alerts regarding service outages.
- Ensure that a new user named User3 can create network objects for the Azure subscription.

QUESTION 1

You need to implement a backup solution for App1 after the application is moved.

What should you create first?

- A. a recovery plan
- B. an Azure Backup Server
- C. a backup policy
- D. a Recovery Services vault

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A Recovery Services vault is a logical container that stores the backup data for each protected resource, such as Azure VMs. When the backup job for a protected resource runs, it creates a recovery point inside the Recovery Services vault.

Scenario:

There are three application tiers, each with five virtual machines.

Move all the virtual machines for App1 to Azure.

Ensure that all the virtual machines for App1 are protected by backups.

Reference:

<https://docs.microsoft.com/en-us/azure/backup/quick-backup-vm-portal>

QUESTION 2

You need to move the blueprint files to Azure.

What should you do?

- A. Generate an access key. Map a drive, and then copy the files by using File Explorer.
- B. Use Azure Storage Explorer to copy the files.
- C. Use the Azure Import/Export service.
- D. Generate a shared access signature (SAS). Map a drive, and then copy the files by using File Explorer.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

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: move the existing product blueprint files to Azure Blob storage.

Technical Requirements include: Copy the blueprint files to Azure over the Internet.

Reference:

<https://docs.microsoft.com/en-us/azure/machine-learning/team-data-science-process/move-data-to-azure-blob-using-azure-storage-explorer>

QUESTION 3

HOTSPOT

You need to identify the storage requirements for Contoso.

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
Contoso requires a storage account that supports Blob storage.	<input type="radio"/>	<input type="radio"/>
Contoso requires a storage account that supports Azure Table storage.	<input type="radio"/>	<input type="radio"/>
Contoso requires a storage account that supports Azure File Storage.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
Contoso requires a storage account that supports Blob storage.	<input checked="" type="radio"/>	<input type="radio"/>
Contoso requires a storage account that supports Azure Table storage.	<input type="radio"/>	<input checked="" type="radio"/>
Contoso requires a storage account that supports Azure File Storage.	<input type="radio"/>	<input checked="" type="radio"/>

Section: (none)

Explanation:

Explanation/Reference:

Explanation:

Box 1: Yes

Contoso is moving the existing product blueprint files to Azure Blob storage.

Use unmanaged standard storage for the hard disks of the virtual machines. We use Page Blobs for these.

Box 2: No

Box 3: No

Deploy and manage Azure compute resources

Question Set 1

QUESTION 1

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription named Subscription1. Subscription1 contains a resource group named RG1. RG1 contains resources that were deployed by using templates.

You need to view the date and time when the resources were created in RG1.

Solution: From the Subscriptions blade, you select the subscription, and then click **Programmatic deployment**.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

From the RG1 blade, click Deployments. You see a history of deployment for the resource group.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/template-tutorial-create-first-template?tabs=azure-powershell>

QUESTION 2

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription named Subscription1. Subscription1 contains a resource group named RG1. RG1 contains resources that were deployed by

using templates.

You need to view the date and time when the resources were created in RG1.

Solution: From the RG1 blade, you click **Automation script**.

Does this meet the goal?

A. Yes

B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

From the RG1 blade, click Deployments. You see a history of deployment for the resource group.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/template-tutorial-create-first-template?tabs=azure-powershell>

QUESTION 3

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription named Subscription1. Subscription1 contains a resource group named RG1. RG1 contains resources that were deployed by using templates.

You need to view the date and time when the resources were created in RG1.

Solution: From the RG1 blade, you click **Deployments**.

Does this meet the goal?

A. Yes

B. No

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

From the RG1 blade, click Deployments. You see a history of deployment for the resource group.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/template-tutorial-create-first-template?tabs=azure-powershell>

QUESTION 4

You have an Azure subscription named Subscription1.

You deploy a Linux virtual machine named VM1 to Subscription1.

You need to monitor the metrics and the logs of VM1.

What should you use?

- A. Azure HDInsight
- B. Linux Diagnostic Extension (LAD) 3.0
- C. the AzurePerformanceDiagnostics extension
- D. Azure Analysis Services

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

You can use extensions to configure diagnostics on your VMs to collect additional metric data.

The basic host metrics are available, but to see more granular and VM-specific metrics, you need to install the Azure diagnostics extension on the VM. The Azure diagnostics extension allows additional monitoring and diagnostics data to be retrieved from the VM.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/linux/tutorial-monitoring>

QUESTION 5

HOTSPOT

You have an Azure subscription named Subscription1. Subscription1 contains a virtual machine named VM1.

You install and configure a web server and a DNS server on VM1.

VM1 has the effective network security rules shown in the following exhibit:

Network Interface: **vm 1900** Effective security rules Topology

Virtual network/subnet: **VMRG-vnet/default** Public IP: **104.40.215.211** Private IP: **10.0.0.5** Accelerated networking: **Disabled**

INBOUND PORT RULES

Network security group **VM1-nsg** (attached to network interface: **vm1900**) Add inbound port rule
Impacts 0 subnets, 1 network interfaces

PRIORITY	NAME	PORT	PROTOCOL	SOURCE	DESTINATIO...	ACTION
900	Rule2	50-60	Any	Any	Any	Deny ...
1000	default-allow-rdp	3389	TCP	Any	Any	Allow ...
1010	Rule1	50-500	TCP	Any	Any	Allow ...
65000	AllowVnetIdBound	Any	Any	VirtualNet...	VirtualNet...	Allow ...
65001	AllowAzureLoadBalanc...	Any	Any	AzureLoad...	Any	Allow ...
65500	DenyAllInBound	Any	Any	Any	Any	Deny ...

OUTBOUND PORT RULES

Network security group **VM1-nsg** (attached to network interface: **vm1900**) Add outbound port
Impacts 0 subnets, 1 network interfaces

PRIORITY	NAME	PORT	PROTOCOL	SOURCE	DESTINATIO...	ACTION
1000	Rule3	80	Any	Any	Any	Deny ...
65000	AllowVnetOutBound	Any	Any	VirtualNet...	VirtualNet...	Allow ...
65001	AllowInternetOutBou...	Any	Any	Any	Internet	Allow ...
65500	DenyAllOutBound	Any	Any	Any	Any	Deny ...

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Internet users [answer choice].

can connect to only the DNS server on VM1
can connect to only the web server on VM1
can connect to the web server and the DNS server on VM1
cannot connect to the web server and the DNS server on VM1

If you delete Rule2, Internet users [answer choice].

can connect to only the DNS server on VM1
can connect to only the web server on VM1
can connect to the web server and the DNS server on VM1
cannot connect to the web server and the DNS server on VM1

Correct Answer:

Answer Area

Internet users [answer choice].

can connect to only the DNS server on VM1
can connect to only the web server on VM1
can connect to the web server and the DNS server on VM1
cannot connect to the web server and the DNS server on VM1

If you delete Rule2, Internet users [answer choice].

can connect to only the DNS server on VM1
can connect to only the web server on VM1
can connect to the web server and the DNS server on VM1
cannot connect to the web server and the DNS server on VM1

Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

You plan to deploy three Azure virtual machines named VM1, VM2, and VM3. The virtual machines will host a web app named App1.

You need to ensure that at least two virtual machines are available if a single Azure datacenter becomes unavailable.

What should you deploy?

- A. all three virtual machines in a single Availability Zone
- B. all virtual machines in a single Availability Set
- C. each virtual machine in a separate Availability Zone
- D. each virtual machine in a separate Availability Set

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Availability sets are a datacenter configuration to provide VM redundancy and availability. This configuration within a datacenter ensures that during either a planned or unplanned maintenance event, at least one virtual machine is available.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/manage-availability>

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/tutorial-availability-sets>

QUESTION 7

You have an Azure virtual machine named VM1 that runs Windows Server 2019.

You save VM1 as a template named Template1 to the Azure Resource Manager library.

You plan to deploy a virtual machine named VM2 from Template1.

What can you configure during the deployment of VM2?

- A. operating system
- B. administrator username
- C. virtual machine size
- D. resource group

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When deploying a virtual machine from a template, you must specify:

- the Resource Group name and location for the VM
- the administrator username and password
- an unique DNS name for the public IP

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/ps-template>

QUESTION 8

You have an Azure subscription that contains an Azure virtual machine named VM1. VM1 runs a financial reporting app named App1 that does not support multiple active instances.

At the end of each month, CPU usage for VM1 peaks when App1 runs.

You need to create a scheduled runbook to increase the processor performance of VM1 at the end of each month.

What task should you include in the runbook?

- A. Add the Azure Performance Diagnostics agent to VM1.
- B. Modify the VM size property of VM1.
- C. Add VM1 to a scale set.
- D. Increase the vCPU quota for the subscription.
- E. Add a Desired State Configuration (DSC) extension to VM1.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/azure/automation/automation-quickstart-dsc-configuration>

QUESTION 9

You have an Azure virtual machine named VM1 that runs Windows Server 2019.

You sign in to VM1 as a user named User1 and perform the following actions:

- Create files on drive C.
- Create files on drive D.
- Modify the screen saver timeout.
- Change the desktop background.

You plan to redeploy VM1.

Which changes will be lost after you redeploy VM1?

- A. the modified screen saver timeout
- B. the new desktop background
- C. the new files on drive D
- D. the new files on drive C

Correct Answer: A

Section: (none)

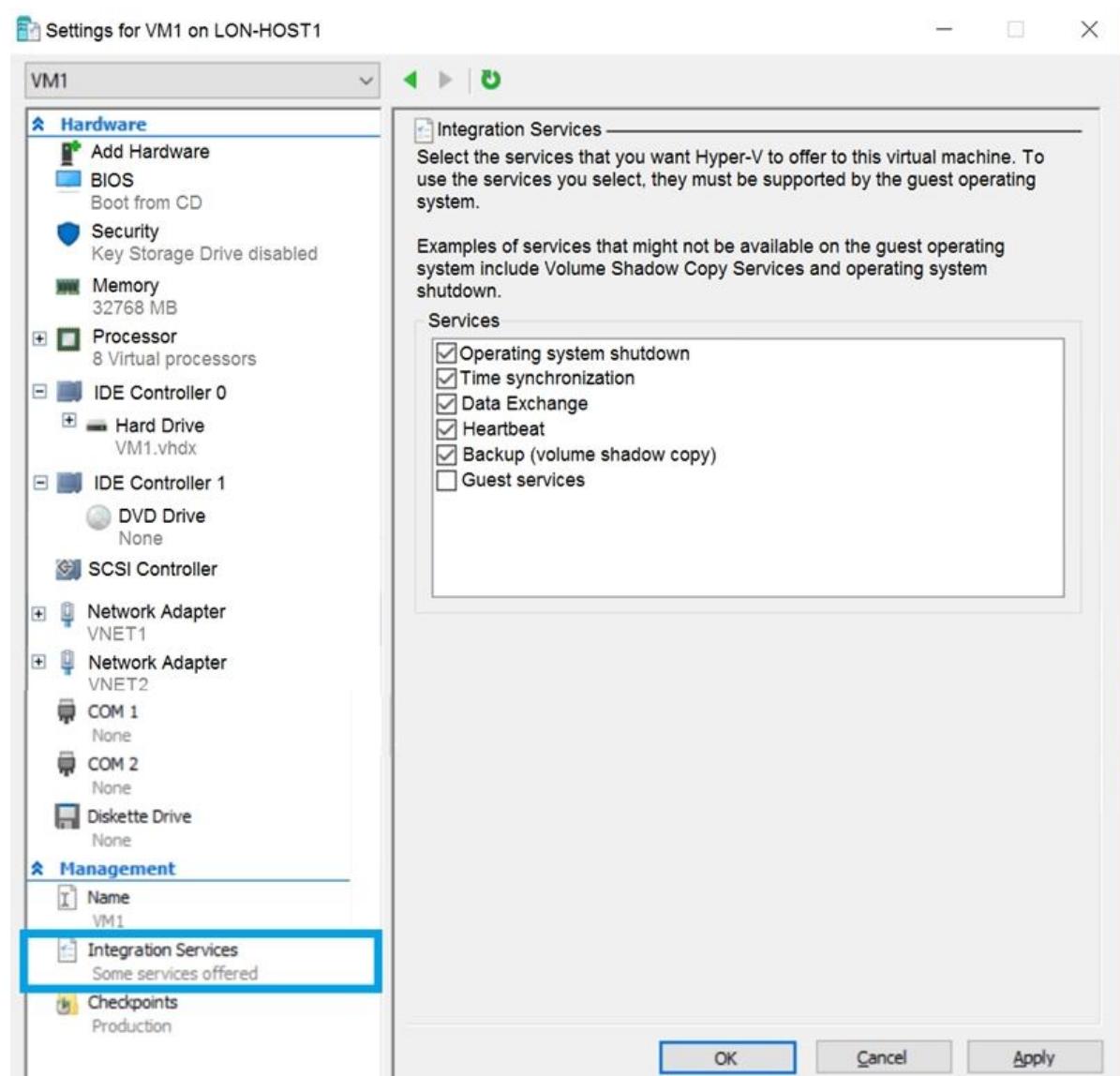
Explanation

Explanation/Reference:

QUESTION 10

You have an Azure subscription.

You have an on-premises virtual machine named VM1. The settings for VM1 are shown in the exhibit. (Click the **Exhibit** tab.)



You need to ensure that you can use the disks attached to VM1 as a template for Azure virtual machines.

What should you modify on VM1?

- A. the memory
- B. the network adapters
- C. the hard drive
- D. the processor
- E. Integration Services

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

From the exhibit we see that the disk is in the VHDX format.

Before you upload a Windows virtual machine (VM) from on-premises to Microsoft Azure, you must prepare the virtual hard disk (VHD or VHDX). Azure supports only generation 1 VMs that are in the VHD file format and have a fixed sized disk. The maximum size allowed for the VHD is 1,023 GB. You can convert a generation 1 VM from the VHDX file system to VHD and from a dynamically expanding disk to fixed-sized.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/prepare-for-upload-vhd-image>

QUESTION 11

HOTSPOT

You have an Azure subscription that contains a virtual machine scale set. The scale set contains four instances that have the following configurations:

- Operating system: Windows Server 2016
- Size: Standard_D1_v2

You run the `get-azvmss` cmdlet as shown in the following exhibit:

```
PS Azure:> (Get-AzVmss -Name WebProd -ResourceGroupName RG1).VirtualMachineProfile.OsProfile.WindowsConfiguration
ProvisionVMAgent      : True
EnableAutomaticUpdates : False
TimeZone               :
AdditionalUnattendContent :
WinRM                 :

Azure:/
PS Azure:> Get-AzVmss -Name WebProd -ResourceGroupName RG1 | Select -ExpandProperty UpgradePolicy
Mode RollingUpgradePolicy AutomaticOSUpgradePolicy
-----
Automatic              Microsoft.Azure.Management.Compute.Models.AutomaticOSUpgradePolicy

Azure:/
PS Azure:> []
```

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

When an administrator changes the virtual machine size, the size will be changed on up to [answer choice] virtual machines simultaneously.

▼
0
1
2
4

When a new build of the Windows Server 2016 image is released, the new build will be deployed to up to [answer choice] virtual machines simultaneously.

▼
0
1
2
4

Correct Answer:

Answer Area

When an administrator changes the virtual machine size, the size will be changed on up to [answer choice] virtual machines simultaneously.

0
1
2
4

When a new build of the Windows Server 2016 image is released, the new build will be deployed to up to [answer choice] virtual machines simultaneously.

0
1
2
4

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Get-AzVmssVM cmdlet gets the model view and instance view of a Virtual Machine Scale Set (VMSS) virtual machine.

Box 1: 0

The enableAutomaticUpdates parameter is set to false. To update existing VMs, you must do a manual upgrade of each existing VM.

Box 2: 4

Enabling automatic OS image upgrades on your scale set helps ease update management by safely and automatically upgrading the OS disk for all instances in the scale set.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/virtual-machine-scale-sets-upgrade-scale-set>

<https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/virtual-machine-scale-sets-automatic-upgrade>

QUESTION 12

You have an Azure subscription named Subscription1 that is used by several departments at your company. Subscription1 contains the resources in the following table:

Name	Type
storage1	Storage account
RG1	Resource group
container1	Blob container
share1	File share

Another administrator deploys a virtual machine named VM1 and an Azure Storage account named storage2 by using a single Azure Resource Manager template.

You need to view the template used for the deployment.

From which blade can you view the template that was used for the deployment?

- A. VM1
- B. RG1
- C. storage2
- D. container1

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

View template from deployment history

1. Go to the resource group for your new resource group. Notice that the portal shows the result of the last deployment. Select this link.

The screenshot shows the Azure portal interface for a resource group named 'exportsite'. On the left, there's a sidebar with options: 'Overview' (selected), 'Activity log', and 'Access control (IAM)'. The main area has a title bar with 'exportsite' and 'Resource group'. Below the title bar is a toolbar with 'Add', 'Columns', 'Delete', 'Refresh', and 'Move' buttons. A red box highlights the 'Deployments' section, which displays '1 Succeeded'.

2. You see a history of deployments for the group. In your case, the portal probably lists only one deployment. Select this deployment.

This screenshot shows the deployment details for a specific deployment. At the top, there are buttons for 'Delete', 'Cancel', 'Redeploy', and 'View template'. Below that is a search bar with placeholder text 'Search for deployments by name...'. The main table has columns 'DEPLOYMENT NAME' and 'STATUS'. One row is visible, showing 'Microsoft.WebSiteSQLDatabased1...' under 'DEPLOYMENT NAME' and 'Succeeded' with a green checkmark under 'STATUS'. A red box highlights the deployment name in the table.

3. The portal displays a summary of the deployment. The summary includes the status of the deployment and its operations and the values that you provided for parameters. To see the template that you used for the deployment, select View template.

Microsoft Azure < exportsite - Deployments > Microsoft.WebSiteSQLDatab...

	Microsoft.WebSiteSQLDatabased13386b0-9908
Deployment	Delete Cancel Refresh Redeploy View template
+	
File	
Grid	
Block	
Network	
SQL	
Key	
Cloud	

Summary

DEPLOYMENT DATE 7/5/2017 4:01:15 PM

STATUS Succeeded

DURATION 1 minute 30 seconds

RESOURCE GROUP exportsite

RELATED Events

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-manager-export-template>

QUESTION 13

You have an Azure web app named App1. App1 has the deployment slots shown in the following table:

Name	Function
webapp1-prod	Production
webapp1-test	Staging

In webapp1-test, you test several changes to App1.

You back up App1.

You swap webapp1-test for webapp1-prod and discover that App1 is experiencing performance issues.

You need to revert to the previous version of App1 as quickly as possible.

What should you do?

- A. Redeploy App1
- B. Swap the slots
- C. Clone App1
- D. Restore the backup of App1

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When you swap deployment slots, Azure swaps the Virtual IP addresses of the source and destination slots, thereby swapping the URLs of the slots. We can easily revert the deployment by swapping back.

Reference:

<https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots>

QUESTION 14

HOTSPOT

You have an Azure subscription named Subscription1. Subscription1 contains two Azure virtual machines VM1 and VM2. VM1 and VM2 run Windows Server 2016.

VM1 is backed up daily by Azure Backup without using the Azure Backup agent.

VM1 is affected by ransomware that encrypts data.

You need to restore the latest backup of VM1.

To which location can you restore the backup? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

You can perform a file recovery of
VM1 to:

- VM1 only
- VM1 or a new Azure virtual machine only
- VM1 and VM2 only
- A new Azure virtual machine only
- Any Windows computer that has Internet connectivity

You can restore VM1 to:

- VM1 only
- VM1 or a new Azure virtual machine only
- VM1 and VM2 only
- Any Windows computer that has Internet connectivity

Correct Answer:

Answer Area

You can perform a file recovery of VM1 to:

VM1 only
VM1 or a new Azure virtual machine only
VM1 and VM2 only
A new Azure virtual machine only
Any Windows computer that has Internet connectivity

You can restore VM1 to:

VM1 only
VM1 or a new Azure virtual machine only
VM1 and VM2 only
Any Windows computer that has Internet connectivity

Section: (none)

Explanation:

Explanation/Reference:

Explanation:

Note: The new VM must be in the same region.

Reference:

<https://docs.microsoft.com/en-us/azure/backup/backup-azure-arm-restore-vms>

QUESTION 15

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure virtual machine named VM1 that runs Windows Server 2016.

You need to create an alert in Azure when more than two error events are logged to the System event log on VM1 within an hour.

Solution: You create an Azure Log Analytics workspace and configure the data settings. You add the Microsoft Monitoring Agent VM extension to VM1. You create an alert in Azure Monitor and specify the Log Analytics workspace as the source.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Instead: You create an Azure Log Analytics workspace and configure the data settings. You install the Microsoft Monitoring Agent on VM1. You create an alert in Azure Monitor and specify the Log Analytics workspace as the source.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/platform/agents-overview>

QUESTION 16

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure virtual machine named VM1 that runs Windows Server 2016.

You need to create an alert in Azure when more than two error events are logged to the System event log on VM1 within an hour.

Solution: You create an Azure Log Analytics workspace and configure the data settings. You install the Microsoft Monitoring Agent on VM1. You create an alert in Azure Monitor and specify the Log Analytics workspace as the source.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Alerts in Azure Monitor can identify important information in your Log Analytics repository. They are created by alert rules that automatically run log searches at regular intervals, and if results of the log search match particular criteria, then an alert record is created and it can be configured to perform an automated response.

The Log Analytics agent collects monitoring data from the guest operating system and workloads of virtual machines in Azure, other cloud providers, and on-premises. It collects data into a Log Analytics workspace.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/learn/tutorial-response>

<https://docs.microsoft.com/en-us/azure/azure-monitor/platform/agents-overview>

QUESTION 17

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure virtual machine named VM1 that runs Windows Server 2016.

You need to create an alert in Azure when more than two error events are logged to the System event log on VM1 within an hour.

Solution: You create an Azure storage account and configure shared access signatures (SASs). You install the Microsoft Monitoring Agent on VM1. You create an alert in Azure Monitor and specify the storage account as the source.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Instead: You create an Azure Log Analytics workspace and configure the data settings. You install the Microsoft Monitoring Agent on VM1. You create an alert in Azure Monitor and specify the Log Analytics workspace as the source.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/platform/agents-overview>

QUESTION 18

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription that contains the resources shown in the following table.

Name	Type	Region
RG1	Resource group	West US
RG2	Resource group	East Asia
storage1	Storage account	West US
storage2	Storage account	East Asia
VM1	Virtual machine	West US
VNET1	Virtual network	West US
VNET2	Virtual network	East Asia

VM1 connects to VNET1.

You need to connect VM1 to VNET2.

Solution: You move VM1 to RG2, and then you add a new network interface to VM1.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Instead you should delete VM1. You recreate VM1, and then you add the network interface for VM1.

Note: When you create an Azure virtual machine (VM), you must create a virtual network (VNet) or use an existing VNet. You can change the subnet a VM is connected to after it's created, but you cannot change the VNet.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/network-overview>

QUESTION 19

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription that contains the resources shown in the following table.

Name	Type	Region
RG1	Resource group	West US
RG2	Resource group	East Asia
storage1	Storage account	West US
storage2	Storage account	East Asia
VM1	Virtual machine	West US
VNET1	Virtual network	West US
VNET2	Virtual network	East Asia

VM1 connects to VNET1.

You need to connect VM1 to VNET2.

Solution: You delete VM1. You recreate VM1, and then you create a new network interface for VM1 and connect it to VNET2.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

You should delete VM1. You recreate VM1, and then you add the network interface for VM1.

Note: When you create an Azure virtual machine (VM), you must create a virtual network (VNet) or use an existing VNet. You can change the subnet a VM is connected to after it's created, but you cannot change the VNet.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/network-overview>

QUESTION 20

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription that contains the resources shown in the following table.

Name	Type	Region
RG1	Resource group	West US
RG2	Resource group	East Asia
storage1	Storage account	West US
storage2	Storage account	East Asia
VM1	Virtual machine	West US
VNET1	Virtual network	West US
VNET2	Virtual network	East Asia

VM1 connects to VNET1.

You need to connect VM1 to VNET2.

Solution: You turn off VM1, and then you add a new network interface to VM1.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Instead you should delete VM1. You recreate VM1, and then you add the network interface for VM1.

Note: When you create an Azure virtual machine (VM), you must create a virtual network (VNet) or use an existing VNet. You can change the subnet a VM is connected to after it's created, but you cannot change the VNet.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/network-overview>

QUESTION 21

HOTSPOT

You have an Azure subscription named Subscription1 that contains the quotas shown in the following table.

Quota	Location	Usage
Standard BS Family vCPUs	West US	0 of 20
Standard D Family vCPUs	West US	0 of 20
Total Regional vCPUs	West US	0 of 20

You deploy virtual machine to Subscription1 as shown in the following table.

Name	Size	vCPUs	Location	Status
VM1	Standard_B2ms	2	West US	Running
VM20	Standard_B16ms	16	West US	Stopped (Deallocated)

You plan to deploy the virtual machines shown in the following table.

Name	Size	vCPUs
VM3	Standard_B2ms	1
VM4	Standard_D4s_v3	4
VM5	Standard_B16ms	16

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
You can deploy VM3 to West US.	<input type="radio"/>	<input type="radio"/>
You can deploy VM4 to West US.	<input type="radio"/>	<input type="radio"/>
You can deploy VM5 to West US.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
You can deploy VM3 to West US.	<input checked="" type="radio"/>	<input type="radio"/>
You can deploy VM4 to West US.	<input type="radio"/>	<input checked="" type="radio"/>
You can deploy VM5 to West US.	<input type="radio"/>	<input checked="" type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The total regional vCPUs is 20 so that means a maximum total of 20 vCPUs across all the different VM sizes. The deallocated VM with 16 vCPUs counts towards the total. VM20 and VM1 are using 18 of the maximum 20 vCPUs leaving only two vCPUs available.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/quotas>

QUESTION 22

HOTSPOT

You have an Azure subscription that contains an Azure Availability Set named WEBPROD-AS-USE2 as shown in the following exhibit.

```
PS Azure:\> az vm availability-set list -g RG1
[
  {
    "id": "/subscriptions/8372f433-2dcd-4361-b5ef-5b188fed87d0/resourceGroups/RG1/providers/Microsoft.Compute/availabilitySets/WEBPROD-AS-USE2",
    "location": "eastus2",
    "name": "WEBPROD-AS-USE2",
    "platformFaultDomainCount": 2,
    "platformUpdateDomainCount": 10,
    "proximityPlacementGroup": null,
    "resourceGroup": "RG1",
    "sku": {
      "capacity": null,
      "name": "Aligned",
      "tier": null
    },
    "statuses": null,
    "tags": {},
    "type": "Microsoft.Compute/availabilitySets",
    "virtualMachines": []
  }
]
Azure:/
```

You add 14 virtual machines to WEBPROD-AS-USE2.

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

When Microsoft performs planned maintenance in East US 2, the maximum number of unavailable virtual machines will be [answer choice].

▼
2
7
10
14

If the server rack in the Azure datacenter that hosts WEBPROD-AS-USE2 experiences a power failure, the maximum number of unavailable virtual machines will be [answer choice].

▼
2
7
10
14

Correct Answer:

Answer Area

When Microsoft performs planned maintenance in East US 2, the maximum number of unavailable virtual machines will be [answer choice].

▼
2
7
10
14

If the server rack in the Azure datacenter that hosts WEBPROD-AS-USE2 experiences a power failure, the maximum number of unavailable virtual machines will be [answer choice].

▼
2
7
10
14

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: 2

There are 10 update domains. The 14 VMs are shared across the 10 update domains so four update domains will have two VMs and six update domains will have one VM. Only one update domain is rebooted at a time. Therefore, a maximum of two VMs will be offline.

Box 2: 7

There are 2 fault domains. The 14 VMs are shared across the 2 fault domains, so 7 VMs in each fault domain. A rack failure will affect one fault domain so 7 VMs will be offline.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/manage-availability>

QUESTION 23

You deploy an Azure Kubernetes Service (AKS) cluster named Cluster1 that uses the IP addresses shown in the following table.

IP address	Assigned to
131.107.2.1	Load balancer front end
192.168.10.2	Kubernetes DNS service
172.17.7.1	Docket bridge address
10.0.10.11	Kubernetes cluster node

You need to provide internet users with access to the applications that run in Cluster1.

Which IP address should you include in the DNS record for Cluster1?

- A. 131.107.2.1
- B. 10.0.10.11
- C. 172.17.7.1
- D. 192.168.10.2

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 24

You have a deployment template named Template1 that is used to deploy 10 Azure web apps.

You need to identify what to deploy before you deploy Template1. The solution must minimize Azure costs.

What should you identify?

- A. five Azure Application Gateways
- B. one App Service plan
- C. 10 App Service plans
- D. one Azure Traffic Manager
- E. one Azure Application Gateway

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

You create Azure web apps in an App Service plan.

Reference:

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

QUESTION 25

HOTSPOT

You plan to deploy an Azure container instance by using the following Azure Resource Manager template.

```
{  
  "type": "Microsoft.ContainerInstance/containerGroups",  
  "apiVersion": "2018-10-01",  
  "name": "webprod",  
  "location": "westus",  
  "properties": {  
    "containers": [  
      {  
        "name": "webprod",  
        "properties": {  
          "image": "microsoft/iis:nanoserver",  
          "ports": [  
            {  
              "protocol": "TCP",  
              "port": 80  
            }  
          ],  
          "environmentVariables": [],  
          "resources": {  
            "requests": {  
              "memoryInGB": 1.5,  
              "cpu": 1  
            }  
          }  
        }  
      }  
    ],  
    "restartPolicy": "OnFailure",  
    "ipAddress": {  
      "ports": [  
        {  
          "protocol": "TCP",  
          "port": 80  
        }  
      ],  
      "ip": "[parameters('IPAddress')]",  
      "type": "Public"  
    },  
    "osType": "Windows"  
  }  
}
```

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the template.

Hot Area:

Answer Area

Internet users [answer choice].

can connect to the container from any device
cannot connect to the container
can only connect to the container from devices that run Windows

If Internet Information Services (IIS) in the container fail, [answer choice].

the container will restart automatically
the container will only restart manually
the container must be redeployed

Correct Answer:

Answer Area

Internet users [answer choice].

can connect to the container from any device
cannot connect to the container
can only connect to the container from devices that run Windows

If Internet Information Services (IIS) in the container fail, [answer choice].

the container will restart automatically
the container will only restart manually
the container must be redeployed

Section: (none)

Explanation

Explanation/Reference:

QUESTION 26

You have an Azure subscription that contains a virtual machine named VM1. VM1 hosts a line-of-business application that is available 24 hours a day. VM1 has

one network interface and one managed disk. VM1 uses the D4s v3 size.

You plan to make the following changes to VM1:

- Change the size to D8s v3.
- Add a 500-GB managed disk.
- Add the Puppet Agent extension.
- Enable Desired State Configuration Management.

Which change will cause downtime for VM1?

- A. Enable Desired State Configuration Management
- B. Add a 500-GB managed disk
- C. Change the size to D8s v3
- D. Add the Puppet Agent extension

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

While resizing the VM it must be in a stopped state.

Reference:

<https://azure.microsoft.com/en-us/blog/resize-virtual-machines/>

QUESTION 27

You have an app named App1 that runs on an Azure web app named webapp1.

The developers at your company upload an update of App1 to a Git repository named Git1.

Webapp1 has the deployment slots shown in the following table.

Name	Function
webapp1-prod	Production
webapp1-test	Staging

You need to ensure that the App1 update is tested before the update is made available to users.

Which two actions should you perform? Each correct answer presents part of the solution.

- A. Swap the slots
- B. Deploy the App1 update to webapp1-prod, and then test the update
- C. Stop webapp1-prod
- D. Deploy the App1 update to webapp1-test, and then test the update
- E. Stop webapp1-test

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 28

You have an Azure subscription named Subscription1 that has the following providers registered:

- Authorization
- Automation
- Resources
- Compute
- KeyVault
- Network
- Storage
- Billing
- Web

Subscription1 contains an Azure virtual machine named VM1 that has the following configurations:

- Private IP address: 10.0.0.4 (dynamic)
- Network security group (NSG): NSG1
- Public IP address: None
- Availability set: AVSet
- Subnet: 10.0.0.0/24
- Managed disks: No
- Location: East US

You need to record all the successful and failed connection attempts to VM1.

Which three actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Enable Azure Network Watcher in the East US Azure region.
- B. Add an Azure Network Watcher connection monitor.
- C. Register the MicrosoftLogAnalytics provider.
- D. Create an Azure Storage account.
- E. Register the Microsoft.Insights resource provider.
- F. Enable Azure Network Watcher flow logs.

Correct Answer: ACD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

D: NSG flow log data is written to an Azure Storage account. You need to create an Azure Storage account,

With an Azure Storage account NSG flow logs can be enabled.

A: Enable network watcher in the East US region.

C: NSG flow logging requires the Microsoft.Insights provider.

Reference:

<https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-nsg-flow-logging-portal>

QUESTION 29

You need to deploy an Azure virtual machine scale set that contains five instances as quickly as possible.

What should you do?

- A. Deploy five virtual machines. Modify the Availability Zones settings for each virtual machine.
- B. Deploy five virtual machines. Modify the Size setting for each virtual machine.
- C. Deploy one virtual machine scale set that is set to VM (virtual machines) orchestration mode.
- D. Deploy one virtual machine scale set that is set to ScaleSetVM orchestration mode.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/orchestration-modes>

QUESTION 30

You plan to create the Azure web apps shown in the following table.

Name	Runtime stack
WebApp1	.NET Core 3.0
WebApp2	ASP.NET V4.7
WebApp3	PHP 7.3
WebApp4	Ruby 2.6

What is the minimum number of App Service plans you should create for the web apps?

- A. 1
- B. 2
- C. 3
- D. 4

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 31

HOTSPOT

You have a pay-as-you-go Azure subscription that contains the virtual machines shown in the following table.

Name	Resource group	Daily cost
VM1	RG1	20 euros
VM2	RG2	30 euros

You create the budget shown in the following exhibit.

Budget1

Resource group

Edit budget

Delete budget



BUDGET SUMMARY

Name	Budget1
Scope	RG1 (Resource group)
Filters	-
Amount	1,000.00 EUR
Budget period	Resets billing month
Start date	6/20/2019
End date	6/19/2021

BUDGET ALERTS

Alert conditions	% OF BUDGET	AMOUNT	ACTION GROUP	ACTION GROUP
	50%	€500	AG1	1 Email
	70%	€700	AG2	1 SMS
	100%	€1,000	AG3	1 Azure app
Alert recipients (email)	User1@Contoso.com			

The AG1 action group contains a user named admin@contoso.com only.

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

Hot Area:

Answer Area

When the maximum amount in Budget1 is reached, [answer choice].

VM1 and VM2 are turned off
VM1 and VM2 continue to run
VM1 is turned off, and VM2 continues to run

Based on the current usage costs of the virtual machines, [answer choice].

no email notifications will be sent each month
one email notification will be sent each month
two email notifications will be sent each month
three email notifications will be sent each month

Correct Answer:

Answer Area

When the maximum amount in Budget1 is reached, [answer choice].

VM1 and VM2 are turned off
VM1 and VM2 continue to run
VM1 is turned off, and VM2 continues to run

Based on the current usage costs of the virtual machines, [answer choice].

no email notifications will be sent each month
one email notification will be sent each month
two email notifications will be sent each month
three email notifications will be sent each month

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: VM1 is turned off, and VM2 continues to run

The budget alerts are for Resource Group RG1, which include VM1, but not VM2.

Box 2: one email notification will be sent each month.

Budget alerts for Resource Group RG1, which include VM1, but not VM2. VM1 consumes 20 Euro/day. The 50%, 500 Euro limit, will be reached in 25 days, and an email will be sent.

The 70% and 100% alert conditions will not be reached within a month, and they don't trigger email actions anyway.

Credit alerts: Credit alerts are generated automatically at 90% and at 100% of your Azure credit balance. Whenever an alert is generated, it's reflected in cost alerts and in the email sent to the account owners. 90% and 100% will not be reached though.

Reference:

<https://docs.microsoft.com/en-us/azure/cost-management-billing/costs/cost-mgt-alerts-monitor-usage-spending>

Configure and manage virtual networking

Question Set 1

QUESTION 1

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription that contains 10 virtual networks. The virtual networks are hosted in separate resource groups.

Another administrator plans to create several network security groups (NSGs) in the subscription.

You need to ensure that when an NSG is created, it automatically blocks TCP port 8080 between the virtual networks.

Solution: From the Resource providers blade, you unregister the Microsoft.ClassicNetwork provider.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

You should use a policy definition.

Resource policy definition used by Azure Policy enables you to establish conventions for resources in your organization by describing when the policy is enforced and what effect to take. By defining conventions, you can control costs and more easily manage your resources.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-policy/policy-definition>

QUESTION 2

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription that contains 10 virtual networks. The virtual networks are hosted in separate resource groups.

Another administrator plans to create several network security groups (NSGs) in the subscription.

You need to ensure that when an NSG is created, it automatically blocks TCP port 8080 between the virtual networks.

Solution: You assign a built-in policy definition to the subscription.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Resource policy definition used by Azure Policy enables you to establish conventions for resources in your organization by describing when the policy is enforced and what effect to take. By defining conventions, you can control costs and more easily manage your resources.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-policy/policy-definition>

QUESTION 3

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription that contains 10 virtual networks. The virtual networks are hosted in separate resource groups.

Another administrator plans to create several network security groups (NSGs) in the subscription.

You need to ensure that when an NSG is created, it automatically blocks TCP port 8080 between the virtual networks.

Solution: You configure a custom policy definition, and then you assign the policy to the subscription.

Does this meet the goal?

- A. Yes
- B. No

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Resource policy definition used by Azure Policy enables you to establish conventions for resources in your organization by describing when the policy is enforced and what effect to take. By defining conventions, you can control costs and more easily manage your resources.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-policy/policy-definition>

QUESTION 4

You have two Azure virtual networks named VNet1 and VNet2. VNet1 contains an Azure virtual machine named VM1. VNet2 contains an Azure virtual machine named VM2.

VM1 hosts a frontend application that connects to VM2 to retrieve data.

Users report that the frontend application is slower than usual.

You need to view the average round-trip time (RTT) of the packets from VM1 to VM2.

Which Azure Network Watcher feature should you use?

- A. IP flow verify
- B. Connection troubleshoot
- C. Connection monitor
- D. NSG flow logs

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:**Explanation:**

The connection monitor capability monitors communication at a regular interval and informs you of reachability, latency, and network topology changes between the VM and the endpoint

Incorrect Answers:

A: The IP flow verify capability enables you to specify a source and destination IPv4 address, port, protocol (TCP or UDP), and traffic direction (inbound or outbound). IP flow verify then tests the communication and informs you if the connection succeeds or fails. If the connection fails, IP flow verify tells you which security rule allowed or denied the communication, so that you can resolve the problem.

B: The connection troubleshoot capability enables you to test a connection between a VM and another VM, an FQDN, a URI, or an IPv4 address. The test returns similar information returned when using the connection monitor capability, but tests the connection at a point in time, rather than monitoring it over time, as connection monitor does.

D: The NSG flow log capability allows you to log the source and destination IP address, port, protocol, and whether traffic was allowed or denied by an NSG.

Reference:

<https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-monitoring-overview>

QUESTION 5

You have an Azure subscription that contains a policy-based virtual network gateway named GW1 and a virtual network named VNet1.

You need to ensure that you can configure a point-to-site connection from an on-premises computer to VNet1.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Add a service endpoint to VNet1
- B. Reset GW1
- C. Create a route-based virtual network gateway
- D. Add a connection to GW1
- E. Delete GW1
- F. Add a public IP address space to VNet1

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

C: A VPN gateway is used when creating a VPN connection to your on-premises network.

Route-based VPN devices use any-to-any (wildcard) traffic selectors, and let routing/forwarding tables direct traffic to different IPsec tunnels. It is typically built on router platforms where each IPsec tunnel is modeled as a network interface or VTI (virtual tunnel interface).

E: Policy-based VPN devices use the combinations of prefixes from both networks to define how traffic is encrypted/decrypted through IPsec tunnels. It is typically built on firewall devices that perform packet filtering. IPsec tunnel encryption and decryption are added to the packet filtering and processing engine.

Incorrect Answers:

F: Point-to-Site connections do not require a VPN device or a public-facing IP address.

Reference:

<https://docs.microsoft.com/en-us/azure/vpn-gateway/create-routebased-vpn-gateway-portal>

<https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-connect-multiple-policybased-rm-ps>

QUESTION 6

HOTSPOT

You have an Azure subscription that contains the resources in the following table:

Name	Type
VMRG	Resource group
VNet1	Virtual network
VNet2	Virtual network
VM5	Virtual machine connected to VNet1
VM6	Virtual machine connected to VNet2

In Azure, you create a private DNS zone named adatum.com. You set the registration virtual network to VNet2. The adatum.com zone is configured as shown in the following exhibit:

Resource group ([change](#))
vmrg

Subscription ([change](#))
Azure Pass

Subscription ID
a4fde29b-d56a-4f6c-8298-6c53cd0b720c

Tags ([change](#))
[Click here to add tags](#)

Name server 1
-

Name server 2
-

Name server 3
-

Name server 4
-

 [Search record sets](#)

Name	Type	TTL	VALUE
@	SOA	3600	Email: azuredns-hostmaster.microsoft.com Host: internal.cloudapp.net Refresh: 3600 Retry: 300 Expire: 2419200 Minimum TTL: 300 Serial number: 1
vm1	A	3600	10.1.0.4
vm9	A	3600	10.1.0.12

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
The A record for VM5 will be registered automatically in the adatum.com zone.	<input type="radio"/>	<input type="radio"/>
VM5 can resolve VM9.adatum.com.	<input type="radio"/>	<input type="radio"/>
VM6 can resolve VM9.adatum.com.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
The A record for VM5 will be registered automatically in the adatum.com zone.	<input type="radio"/>	<input checked="" type="radio"/>
VM5 can resolve VM9.adatum.com.	<input type="radio"/>	<input checked="" type="radio"/>
VM6 can resolve VM9.adatum.com.	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: No

Azure DNS provides automatic registration of virtual machines from a single virtual network that's linked to a private zone as a registration virtual network. VM5 does not belong to the registration virtual network though.

Box 2: No

Forward DNS resolution is supported across virtual networks that are linked to the private zone as resolution virtual networks. VM5 does belong to a resolution virtual network.

Box 3: Yes

VM6 belongs to registration virtual network, and an A (Host) record exists for VM9 in the DNS zone.

By default, registration virtual networks also act as resolution virtual networks, in the sense that DNS resolution against the zone works from any of the virtual machines within the registration virtual network.

Reference:

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

QUESTION 7

HOTSPOT

You have an Azure subscription that contains a virtual network named VNet1. VNet1 uses an IP address space of 10.0.0.0/16 and contains the subnets in the following table:

Name	IP address range
Subnet0	10.0.0.0/24
Subnet1	10.0.1.0/24
Subnet2	10.0.2.0/24
GatewaySubnet	10.0.254.0/24

Subnet1 contains a virtual appliance named VM1 that operates as a router.

You create a routing table named RT1.

You need to route all inbound traffic from the VPN gateway to VNet1 through VM1.

How should you configure RT1? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Address prefix

▼
10.0.0.0/16
10.0.1.0/24
10.0.254.0/24

Next hop type

▼
Virtual appliance
Virtual network
Virtual network gateway

Assigned to

▼
GatewaySubnet
Subnet0
Subnet1 and Subnet2

Correct Answer:

Answer Area

Address prefix	<div style="border: 1px solid black; padding: 2px; display: inline-block;"><table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="background-color: #e0f2e0; width: 100%;">10.0.0.0/16</td></tr><tr><td>10.0.1.0/24</td></tr><tr><td>10.0.254.0/24</td></tr></table></div>	10.0.0.0/16	10.0.1.0/24	10.0.254.0/24
10.0.0.0/16				
10.0.1.0/24				
10.0.254.0/24				
Next hop type	<div style="border: 1px solid black; padding: 2px; display: inline-block;"><table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="background-color: #e0f2e0; width: 100%;">Virtual appliance</td></tr><tr><td>Virtual network</td></tr><tr><td>Virtual network gateway</td></tr></table></div>	Virtual appliance	Virtual network	Virtual network gateway
Virtual appliance				
Virtual network				
Virtual network gateway				
Assigned to	<div style="border: 1px solid black; padding: 2px; display: inline-block;"><table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="background-color: #e0f2e0; width: 100%;">GatewaySubnet</td></tr><tr><td>Subnet0</td></tr><tr><td>Subnet1 and Subnet2</td></tr></table></div>	GatewaySubnet	Subnet0	Subnet1 and Subnet2
GatewaySubnet				
Subnet0				
Subnet1 and Subnet2				

Section: (none)

Explanation

Explanation/Reference:

QUESTION 8

You have five Azure virtual machines that run Windows Server 2016. The virtual machines are configured as web servers.

You have an Azure load balancer named LB1 that provides load balancing services for the virtual machines.

You need to ensure that visitors are serviced by the same web server for each request.

What should you configure?

- A. Floating IP (direct server return) to **Enabled**
- B. Idle Time-out (minutes) to **20**
- C. Protocol to **UDP**
- D. Session persistence to **Client IP and Protocol**

Correct Answer: D

Section: (none)

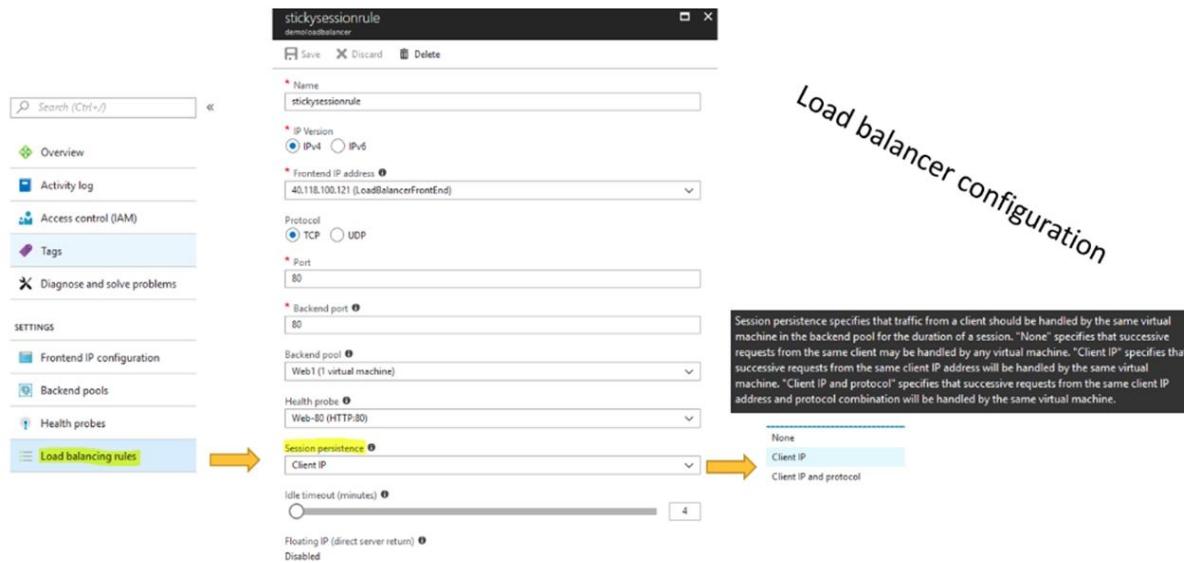
Explanation

Explanation/Reference:

Explanation:

With Sticky Sessions when a client starts a session on one of your web servers, session stays on that specific server. To configure An Azure Load-Balancer For Sticky Sessions set Session persistence to Client IP.

On the following image you can see sticky session configuration:



Reference:

<https://cloudopszone.com/configure-azure-load-balancer-for-sticky-sessions/>

QUESTION 9

HOTSPOT

You have an Azure subscription that contains the virtual machines shown in the following table:

Name	Operating system	Connects to
VM1	Windows Server 2019	Subnet1
VM2	Windows Server 2019	Subnet2

VM1 and VM2 use public IP addresses. From Windows Server 2019 on VM1 and VM2, you allow inbound Remote Desktop connections.

Subnet1 and Subnet2 are in a virtual network named VNET1.

The subscription contains two network security groups (NSGs) named NSG1 and NSG2. NSG1 uses only the default rules.

NSG2 uses the default rules and the following custom incoming rule:

- Priority: 100
- Name: Rule1
- Port: 3389
- Protocol: TCP
- Source: Any
- Destination: Any
- Action: Allow

NSG1 is associated to Subnet1. NSG2 is associated to the network interface of VM2.

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
From the Internet, you can connect to VM1 by using Remote Desktop.	<input type="radio"/>	<input type="radio"/>
From the Internet, you can connect to VM2 by using Remote Desktop.	<input type="radio"/>	<input type="radio"/>
From VM1, you can connect to VM2 by using Remote Desktop	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
From the Internet, you can connect to VM1 by using Remote Desktop.	<input type="radio"/>	<input checked="" type="radio"/>
From the Internet, you can connect to VM2 by using Remote Desktop.	<input checked="" type="radio"/>	<input type="radio"/>
From VM1, you can connect to VM2 by using Remote Desktop	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

QUESTION 10

HOTSPOT

You have a virtual network named VNET1 that contains the subnets shown in the following table:

Name	Subnet	Network security group (NSG)
Subnet1	10.10.1.0/24	NSG1
Subnet2	10.10.2.0/24	<i>None</i>

You have two Azure virtual machines that have the network configurations shown in the following table:

Name	Subnet	IP address	NSG
VM1	Subnet1	10.10.1.5	NSG2
VM2	Subnet2	10.10.2.5	<i>None</i>
VM3	Subnet2	10.10.2.6	<i>None</i>

For NSG1, you create the inbound security rule shown in the following table:

Priority	Source	Destination	Destination port	Action
101	10.10.2.0/24	10.10.1.0/24	TCP/1433	Allow

For NSG2, you create the inbound security rule shown in the following table:

Priority	Source	Destination	Destination port	Action
125	10.10.2.5	10.10.1.5	TCP/1433	Block

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
VM2 can connect to the TCP port 1433 services on VM1.	<input type="radio"/>	<input type="radio"/>
VM1 can connect to the TCP port 1433 services on VM2.	<input type="radio"/>	<input type="radio"/>
VM2 can connect to the TCP port 1433 services on VM3.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
VM2 can connect to the TCP port 1433 services on VM1.	<input checked="" type="radio"/>	<input type="radio"/>
VM1 can connect to the TCP port 1433 services on VM2.	<input checked="" type="radio"/>	<input type="radio"/>
VM2 can connect to the TCP port 1433 services on VM3.	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: Yes

The inbound security rule for NSG1 allows TCP port 1433 from 10.10.2.0/24 (or Subnet2 where VM2 and VM3 are located) to 10.10.1.0/24 (or Subnet1 where VM1 is located) while the inbound security rule for NSG2 blocks TCP port 1433 from 10.10.2.5 (or VM2) to 10.10.1.5 (or VM1). However, the NSG1 rule has a higher priority (or lower value) than the NSG2 rule.

Box 2: Yes

No rule explicitly blocks communication from VM1. The default rules, which allow communication, are thus applied.

Box 3: Yes

No rule explicitly blocks communication between VM2 and VM3 which are both on Subnet2. The default rules, which allow communication, are thus applied.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-network/security-overview>

QUESTION 11

HOTSPOT

You have an Azure subscription named Subscription1.

Subscription1 contains the virtual machines in the following table:

Name	IP address
VM1	10.0.1.4
VM2	10.0.2.4
VM3	10.0.3.4

Subscription1 contains a virtual network named VNet1 that has the subnets in the following table:

Name	Address space	Connected virtual machine
Subnet1	10.0.1.0/24	VM1
Subnet2	10.0.2.0/24	VM2
Subnet3	10.0.3.0/24	VM3

VM3 has multiple network adapters, including a network adapter named NIC3. IP forwarding is enabled on NIC3. Routing is enabled on VM3.

You create a route table named RT1 that contains the routes in the following table:

Address prefix	Next hop type	Next hop address
10.0.1.0/24	Virtual appliance	10.0.3.4
10.0.2.0/24	Virtual appliance	10.0.3.4

You apply RT1 to Subnet1 and Subnet2.

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
VM3 can establish a network connection to VM1.	<input type="radio"/>	<input type="radio"/>
If VM3 is turned off, VM2 can establish a network connection to VM1.	<input type="radio"/>	<input type="radio"/>
VM1 can establish a network connection to VM2.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
VM3 can establish a network connection to VM1.	<input checked="" type="radio"/>	<input type="radio"/>
If VM3 is turned off, VM2 can establish a network connection to VM1.	<input type="radio"/>	<input checked="" type="radio"/>
VM1 can establish a network connection to VM2.	<input checked="" type="radio"/>	<input type="radio"/>

Section: (none)
Explanation:

Explanation/Reference:

Explanation:

IP forwarding enables the virtual machine a network interface is attached to:

- Receive network traffic not destined for one of the IP addresses assigned to any of the IP configurations assigned to the network interface.
- Send network traffic with a different source IP address than the one assigned to one of a network interface's IP configurations.

The setting must be enabled for every network interface that is attached to the virtual machine that receives traffic that the virtual machine needs to forward. A virtual machine can forward traffic whether it has multiple network interfaces or a single network interface attached to it.

Box 1: Yes

The routing table allows connections from VM3 to VM1 and VM2. And as IP forwarding is enabled on VM3, VM3 can connect to VM1.

Box 2: No

VM3, which has IP forwarding, must be turned on, in order for VM2 to connect to VM1.

Box 3: Yes

The routing table allows connections from VM1 and VM2 to VM3. IP forwarding on VM3 allows VM1 to connect to VM2 via VM3.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-udr-overview>

<https://www.quora.com/What-is-IP-forwarding>

QUESTION 12

Your on-premises network contains an SMB share named Share1.

You have an Azure subscription that contains the following resources:

- A web app named webapp1
- A virtual network named VNET1

You need to ensure that webapp1 can connect to Share1.

What should you deploy?

- A. an Azure Application Gateway
- B. an Azure Active Directory (Azure AD) Application Proxy
- C. an Azure Virtual Network Gateway

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A Site-to-Site VPN gateway connection can be used to connect your on-premises network to an Azure virtual network over an IPsec/IKE (IKEv1 or IKEv2) VPN tunnel.

This type of connection requires a VPN device, a VPN gateway, located on-premises that has an externally facing public IP address assigned to it.

Incorrect Answers:

B: Application Proxy is a feature of Azure AD that enables users to access on-premises web applications from a remote client.

Reference:

<https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-howto-site-to-site-resource-manager-portal>

QUESTION 13

You plan to deploy several Azure virtual machines that will run Windows Server 2019 in a virtual machine scale set by using an Azure Resource Manager template.

You need to ensure that NGINX is available on all the virtual machines after they are deployed.

What should you use?

- A. Azure Active Directory (Azure AD) Application Proxy
- B. Azure Application Insights
- C. Azure Custom Script Extension
- D. the New-AzConfigurationAssignment cmdlet

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 14

HOTSPOT

You have an Azure subscription named Sub1.

You plan to deploy a multi-tiered application that will contain the tiers shown in the following table.

Tier	Accessible from the Internet	Number of virtual machines
Front-end web server	Yes	10
Business logic	No	100
Microsoft SQL Server database	No	5

You need to recommend a networking solution to meet the following requirements:

- Ensure that communication between the web servers and the business logic tier spreads equally across the virtual machines.
- Protect the web servers from SQL injection attacks.

Which Azure resource should you recommend for each requirement? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Ensure that communication between the web servers and the business logic tier spreads equally across the virtual machines:

- an application gateway that uses the Standard tier
- an application gateway that uses the WAF tier
- an internal load balancer**
- a network security group (NSG)
- a public load balancer

Protect the web servers from SQL injection attacks:

- an application gateway that uses the Standard tier
- an application gateway that uses the WAF tier
- an internal load balancer**
- a network security group (NSG)
- a public load balancer

Correct Answer:

Answer Area

Ensure that communication between the web servers and the business logic tier spreads equally across the virtual machines:

- an application gateway that uses the Standard tier
- an application gateway that uses the WAF tier
- an internal load balancer**
- a network security group (NSG)
- a public load balancer

Protect the web servers from SQL injection attacks:

- an application gateway that uses the Standard tier
- an application gateway that uses the WAF tier**
- an internal load balancer
- a network security group (NSG)
- a public load balancer

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: an internal load balancer

Azure Internal Load Balancer (ILB) provides network load balancing between virtual machines that reside inside a cloud service or a virtual network with a regional scope.

Box 2: an application gateway that uses the WAF tier

Azure Web Application Firewall (WAF) on Azure Application Gateway provides centralized protection of your web applications from common exploits and vulnerabilities. Web applications are increasingly targeted by malicious attacks that exploit commonly known vulnerabilities.

Reference:

<https://docs.microsoft.com/en-us/azure/web-application-firewall/ag/ag-overview>

QUESTION 15

Your company has three offices. The offices are located in Miami, Los Angeles, and New York. Each office contains datacenter.

You have an Azure subscription that contains resources in the East US and West US Azure regions. Each region contains a virtual network. The virtual networks are peered.

You need to connect the datacenters to the subscription. The solution must minimize network latency between the datacenters.

What should you create?

- A. three Azure Application Gateways and one On-premises data gateway
- B. three virtual hubs and one virtual WAN
- C. three virtual WANs and one virtual hub
- D. three On-premises data gateways and one Azure Application Gateway

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about>

QUESTION 16

HOTSPOT

You plan to deploy five virtual machines to a virtual network subnet.

Each virtual machine will have a public IP address and a private IP address.

Each virtual machine requires the same inbound and outbound security rules.

What is the minimum number of network interfaces and network security groups that you require? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Minimum number of network interfaces:

5	▼
10	
15	
20	

Minimum number of network security groups:

1	▼
2	
5	
10	

Correct Answer:

Answer Area

Minimum number of network interfaces:

5
10
15
20

Minimum number of network security groups:

1
2
5
10

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: 5

A public and a private IP address can be assigned to a single network interface.

Box 2: 1

You can associate zero, or one, network security group to each virtual network subnet and network interface in a virtual machine. The same network security group can be associated to as many subnets and network interfaces as you choose.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-network-interface-addresses>

QUESTION 17

HOTSPOT

You have Azure virtual machines that run Windows Server 2019 and are configured as shown in the following table.

Name	Private IP address	Public IP address	Virtual network name	DNS suffix configured in Windows Server
VM1	10.1.0.4	52.186.85.63	VNET1	Adatum.com
VM2	10.1.0.5	13.92.168.13	VNET1	Contoso.com

You create a private Azure DNS zone named adatum.com. You configure the adatum.com zone to allow auto registration from VNET1.

Which A records will be added to the adatum.com zone for each virtual machine? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

A records for VM1:

- None
- Private IP address only
- Public IP address only
- Private IP address and public IP address

A records for VM2:

- None
- Private IP address only
- Public IP address only
- Private IP address and public IP address

Correct Answer:

Answer Area

A records for VM1:

None
Private IP address only
Public IP address only
Private IP address and public IP address

A records for VM2:

None
Private IP address only
Public IP address only
Private IP address and public IP address

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The virtual machines are registered (added) to the private zone as A records pointing to their private IP addresses.

Reference:

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

<https://docs.microsoft.com/en-us/azure/dns/private-dns-scenarios>

QUESTION 18

HOTSPOT

You have an Azure virtual network named VNet1 that connects to your on-premises network by using a site-to-site VPN. VNet1 contains one subnet named Sunet1.

Subnet1 is associated to a network security group (NSG) named NSG1. Subnet1 contains a basic internal load balancer named ILB1. ILB1 has three Azure virtual machines in the backend pool.

You need to collect data about the IP addresses that connects to ILB1. You must be able to run interactive queries from the Azure portal against the collected data.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Resource to create:

An Azure Event Grid
An Azure Log Analytics workspace
An Azure Storage account

Resource on which to enable diagnostics:

ILB1
NSG1
The Azure virtual machines

Correct Answer:

Answer Area

Resource to create:

An Azure Event Grid
An Azure Log Analytics workspace
An Azure Storage account

Resource on which to enable diagnostics:

ILB1
NSG1
The Azure virtual machines

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: An Azure Log Analytics workspace

In the Azure portal you can set up a Log Analytics workspace, which is a unique Log Analytics environment with its own data repository, data sources, and solutions

Box 2: ILB1

Reference:

<https://docs.microsoft.com/en-us/azure/log-analytics/log-analytics-quick-create-workspace>

<https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-standard-diagnostics>

QUESTION 19

You have the Azure virtual networks shown in the following table.

Name	Address space	Subnet	Resource group Azure region
VNet1	10.11.0.0/16	10.11.0.0/17	West US
VNet2	10.11.0.0/17	10.11.0.0/25	West US
VNet3	10.10.0.0/22	10.10.1.0/24	East US
VNet4	192.168.16.0/22	192.168.16.0/24	North Europe

To which virtual networks can you establish a peering connection from VNet1?

- A. VNet2 and VNet3 only
- B. VNet2 only
- C. VNet3 and VNet4 only
- D. VNet2, VNet3, and VNet4

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-network/tutorial-connect-virtual-networks-portal>

QUESTION 20

You have an Azure subscription that contains a virtual network named VNet1. VNet1 contains four subnets named Gateway, Perimeter, NVA, and Production.

The NVA subnet contains two network virtual appliances (NVAs) that will perform network traffic inspection between the Perimeter subnet and the Production subnet.

You need to implement an Azure load balancer for the NVAs. The solution must meet the following requirements:

- The NVAs must run in an active-active configuration that uses automatic failover.
- The NVA must load balance traffic to two services on the Production subnet. The services have different IP addresses.

Which three actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Deploy a basic load balancer

- B. Deploy a standard load balancer
- C. Add two load balancing rules that have HA Ports and Floating IP enabled
- D. Add two load balancing rules that have HA Ports enabled and Floating IP disabled
- E. Add a frontend IP configuration, a backend pool, and a health probe
- F. Add a frontend IP configuration, two backend pools, and a health probe

Correct Answer: BCF

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A standard load balancer is required for the HA ports.

Two backend pools are needed as there are two services with different IP addresses.

Floating IP rule is used where backend ports are reused.

Incorrect Answers:

E: HA Ports are not available for the basic load balancer.

Reference:

<https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-standard-overview>

<https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-multivip-overview>

QUESTION 21

You have an Azure subscription named Subscription1 that contains two Azure virtual networks named VNet1 and VNet2. VNet1 contains a VPN gateway named VPNGW1 that uses static routing. There is a site-to-site VPN connection between your on-premises network and VNet1.

On a computer named Client1 that runs Windows 10, you configure a point-to-site VPN connection to VNet1.

You configure virtual network peering between VNet1 and VNet2. You verify that you can connect to VNet2 from the on-premises network. Client1 is unable to connect to VNet2.

You need to ensure that you can connect Client1 to VNet2.

What should you do?

- A. Download and re-install the VPN client configuration package on Client1.
- B. Select **Allow gateway transit** on VNet1.

- C. Select **Allow gateway transit** on VNet2.
- D. Enable BGP on VPNGW1

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-about-point-to-site-routing>

QUESTION 22

HOTSPOT

You have an Azure subscription. The subscription contains virtual machines that run Windows Server 2016 and are configured as shown in the following table.

Name	Virtual network	DNS suffix configured in Windows Server
VM1	VNET2	Contoso.com
VM2	VNET2	None
VM3	VNET2	Adatum.com

You create a public Azure DNS zone named adatum.com and a private Azure DNS zone named contoso.com.

You create a virtual network link for contoso.com as shown in the following exhibit.

link1
contoso.com

□ X

Save Discard Delete Access Control (IAM) Tags

Link name
link1

Link state
Completed

Provisioning state
Succeeded

Virtual network details

Virtual network id

/subscriptions/8372f433-2dcd-4361-b5ef-5b188fed87d0/resourceGroups/RG2/provi...

Virtual network
[VNET2](#)

Configuration
 Enable auto registration

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
When VM1 starts, a record for VM1 is added to the contoso.com DNS zone.	<input type="radio"/>	<input type="radio"/>
When VM2 starts, a record for VM2 is added to the contoso.com DNS zone.	<input type="radio"/>	<input type="radio"/>
When VM3 starts, a record for VM3 is added to the adatum.com DNS zone.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
When VM1 starts, a record for VM1 is added to the contoso.com DNS zone.	<input checked="" type="radio"/>	<input type="radio"/>
When VM2 starts, a record for VM2 is added to the contoso.com DNS zone.	<input checked="" type="radio"/>	<input type="radio"/>
When VM3 starts, a record for VM3 is added to the adatum.com DNS zone.	<input type="radio"/>	<input checked="" type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-name-resolution-for-vms-and-role-instances>

<https://docs.microsoft.com/en-us/azure/dns/private-dns-autoregistration>

QUESTION 23

You have an Azure subscription that contains the resources in the following table.

Name	Type	Azure region	Resource group
VNet1	Virtual network	West US	RG2
VNet2	Virtual network	West US	RG1
VNet3	Virtual network	East US	RG1
NSG1	Network security group (NSG)	East US	RG2

To which subnets can you apply NSG1?

- A. the subnets on VNet1 only
- B. the subnets on VNet2 and VNet3 only
- C. the subnets on VNet2 only
- D. the subnets on VNet3 only
- E. the subnets on VNet1, VNet2, and VNet3

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

All Azure resources are created in an Azure region and subscription. A resource can only be created in a virtual network that exists in the same region and subscription as the resource.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-vnet-plan-design-arm>

QUESTION 24

DRAG DROP

You have an Azure subscription that contains two virtual networks named VNet1 and VNet2. Virtual machines connect to the virtual networks.

The virtual networks have the address spaces and the subnets configured as shown in the following table.

Virtual network	Address space	Subnet	Peering
VNet1	10.1.0.0/16	10.1.0.0/24 10.1.1.0/26	VNet2
VNet2	10.2.0.0/16	10.2.0.0/24	VNet1

You need to add the address space of 10.33.0.0/16 to VNet1. The solution must ensure that the hosts on VNet1 and VNet2 can communicate.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Select and Place:

Actions	Answer Area
Remove VNet1.	
Add the 10.33.0.0/16 address space to VNet1.	
Create a new virtual network named VNet1.	
On the peering connection in VNet2, allow gateway transit.	
Recreate peering between VNet1 and VNet2.	
On the peering connection in VNet1, allow gateway transit.	 
Remove peering between VNet1 and VNet2.	

Correct Answer:

Actions	Answer Area
Remove VNet1.	Remove peering between VNet1 and VNet2.
Add the 10.33.0.0/16 address space to VNet1.	Add the 10.33.0.0/16 address space to VNet1.
Create a new virtual network named VNet1.	Recreate peering between VNet1 and VNet2.
On the peering connection in VNet2, allow gateway transit.	 
Recreate peering between VNet1 and VNet2.	
On the peering connection in VNet1, allow gateway transit.	
Remove peering between VNet1 and VNet2.	

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Step 1: Remove peering between Vnet1 and VNet2.

You can't add address ranges to, or delete address ranges from a virtual network's address space once a virtual network is peered with another virtual network. To add or remove address ranges, delete the peering, add or remove the address ranges, then re-create the peering.

Step 2: Add the 10.44.0.0/16 address space to VNet1.

Step 3: Recreate peering between VNet1 and VNet2

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-manage-peering>

QUESTION 25**HOTSPOT**

You have an Azure subscription that contains the resource groups shown in the following table.

Name	Location
RG1	West US
RG2	East US

RG1 contains the resources shown in the following table.

Name	Type	Location
storage1	Storage account	West US
VNet1	Virtual network	West US
NIC1	Network interface	West US
Disk1	Disk	West US
VM1	Virtual machine	West US

VM1 is running and connects to NIC1 and Disk1. NIC1 connects to VNET1.

RG2 contains a public IP address named IP2 that is in the East US location. IP2 is not assigned to a virtual machine.

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements	Yes	No
You can move storage1 to RG2.	<input type="radio"/>	<input type="radio"/>
You can move NIC1 to RG2.	<input type="radio"/>	<input type="radio"/>
If you move IP2 to RG1, the location of IP2 will change.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Answer Area

Statements	Yes	No
You can move storage1 to RG2.	<input checked="" type="radio"/>	<input type="radio"/>
You can move NIC1 to RG2.	<input type="radio"/>	<input checked="" type="radio"/>
If you move IP2 to RG1, the location of IP2 will change.	<input type="radio"/>	<input checked="" type="radio"/>

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Box 1: Yes

You can move storage

Box 2: No

You can't move to a new resource group a NIC that is attached to a virtual machine.

Box 3: No

Azure Public IPs are region specific and can't be moved from one region to another.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/move-support-resources>

<https://docs.microsoft.com/en-us/azure/virtual-network/move-across-regions-publicip-powershell>

Configure and manage virtual networking

Testlet 2

Case study

This is a case study. **Case studies are not timed separately. You can use as much exam time as you would like to complete each case.** However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study

To display the first question in this case study, click the **Next** button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an **All Information** tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the **Question** button to return to the question.

Overview

Contoso, Ltd. is a manufacturing company that has offices worldwide. Contoso works with partner organizations to bring products to market.

Contoso products are manufactured by using blueprint files that the company authors and maintains.

Existing Environment

Currently, Contoso uses multiple types of servers for business operations, including the following:

- File servers
- Domain controllers
- Microsoft SQL Server servers

Your network contains an Active Directory forest named contoso.com. All servers and client computers are joined to Active Directory.

You have a public-facing application named App1. App1 is comprised of the following three tiers:

- A SQL database
- A web front end
- A processing middle tier

Each tier is comprised of five virtual machines. Users access the web front end by using HTTPS only.

Requirements

Planned Changes

Contoso plans to implement the following changes to the infrastructure:

- Move all the tiers of App1 to Azure.
- Move the existing product blueprint files to Azure Blob storage.
- Create a hybrid directory to support an upcoming Microsoft Office 365 migration project.

Technical Requirements

Contoso must meet the following technical requirements:

- Move all the virtual machines for App1 to Azure.
- Minimize the number of open ports between the App1 tiers.
- Ensure that all the virtual machines for App1 are protected by backups.
- Copy the blueprint files to Azure over the Internet.
- Ensure that the blueprint files are stored in the archive storage tier.
- Ensure that partner access to the blueprint files is secured and temporary.
- Prevent user passwords or hashes of passwords from being stored in Azure.
- Use unmanaged standard storage for the hard disks of the virtual machines.
- Ensure that when users join devices to Azure Active Directory (Azure AD), the users use a mobile phone to verify their identity.
- Minimize administrative effort whenever possible.

User Requirements

Contoso identifies the following requirements for users:

- Ensure that only users who are part of a group named Pilot can join devices to Azure AD.
- Designate a new user named Admin1 as the service admin for the Azure subscription.
- Admin1 must receive email alerts regarding service outages.
- Ensure that a new user named User3 can create network objects for the Azure subscription.

QUESTION 1**HOTSPOT**

You need to recommend a solution for App1. The solution must meet the technical requirements.

What should you include in the recommendation? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Number of virtual networks:

1
2
3

Number of subnets per virtual network:

1
2
3

Correct Answer:

Answer Area

Number of virtual networks:

1
2
3

Number of subnets per virtual network:

1
2
3

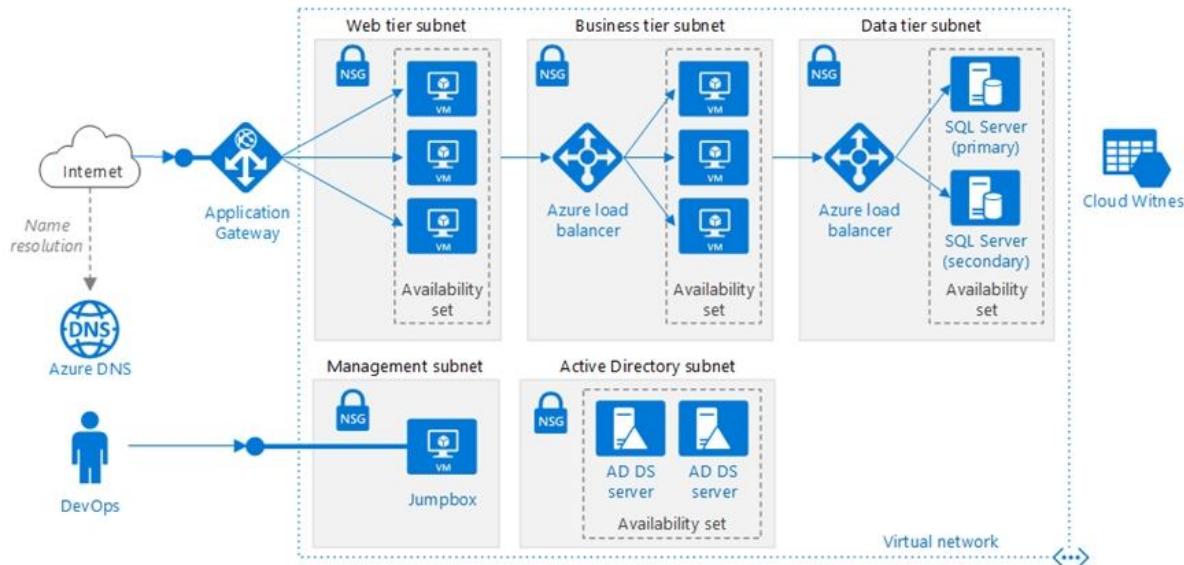
Section: (none)

Explanation

Explanation/Reference:

Explanation:

This reference architecture shows how to deploy VMs and a virtual network configured for an N-tier application, using SQL Server on Windows for the data tier.



Scenario: You have a public-facing application named App1. App1 is comprised of the following three tiers:

- A SQL database
- A web front end
- A processing middle tier

Each tier is comprised of five virtual machines. Users access the web front end by using HTTPS only.

Technical requirements include:

- Move all the virtual machines for App1 to Azure.
- Minimize the number of open ports between the App1 tiers.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/n-tier/n-tier-sql-server>

Monitor and back up Azure resources

Question Set 1

QUESTION 1

You have an Azure web app named webapp1.

Users report that they often experience HTTP 500 errors when they connect to webapp1.

You need to provide the developers of webapp1 with real-time access to the connection errors. The solution must provide all the connection error details.

What should you do first?

- A. From webapp1, enable Web server logging
- B. From Azure Monitor, create a workbook
- C. From Azure Monitor, create a Service Health alert
- D. From webapp1, turn on Application Logging

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

You have an Azure subscription that has a Recovery Services vault named Vault1. The subscription contains the virtual machines shown in the following table:

Name	Operating system	Auto-shutdown
VM1	Windows Server 2012 R2	Off
VM2	Windows Server 2016	19:00
VM3	Ubuntu Server 18.04 LTS	Off
VM4	Windows 10	19:00

You plan to schedule backups to occur every night at 23:00.

Which virtual machines can you back up by using Azure Backup?

- A. VM1 and VM3 only
- B. VM1, VM2, VM3 and VM4
- C. VM1 and VM2 only
- D. VM1 only

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Azure Backup supports backup of 64-bit Windows server operating system from Windows Server 2008.

Azure Backup supports backup of 64-bit Windows 10 operating system.

Azure Backup supports backup of 64-bit Ubuntu Server operating system from Ubuntu 12.04.

Azure Backup supports backup of VM that are shutdown or offline.

Reference:

<https://docs.microsoft.com/en-us/azure/backup/backup-support-matrix-iaas>

<https://docs.microsoft.com/en-us/azure/virtual-machines/linux/endorsed-distros>

QUESTION 3

HOTSPOT

You create a Recovery Services vault backup policy named Policy1 as shown in the following exhibit:

Policy1

Associated items Delete Save Discard

Backup schedule

- * Frequency
- * Time
- * Timezone

Daily 11:00 PM (UTC) Coordinated Universal Time

Retention range

Retention of daily backup point

* At For
11:00 PM 30 Day(s)

Retention of weekly backup point

* On * At For
Sunday 11:00 PM 10 Week(s)

Retention of monthly backup point

* On * At For
1 11:00 PM 36 Month(s)

Retention of yearly backup point

* In * On * At For
March 1 11:00 PM 10 Year(s)

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

The backup that occurs on Sunday, March 1, will
be retained for [answer choice].

▼
30 days
10 weeks
36 months
10 years

The backup that occurs on Sunday, November 1,
will be retained for [answer choice].

▼
30 days
10 weeks
36 months
10 years

Correct Answer:

Answer Area

The backup that occurs on Sunday, March 1, will be retained for [answer choice].

▼
30 days
10 weeks
36 months
10 years

The backup that occurs on Sunday, November 1, will be retained for [answer choice].

▼
30 days
10 weeks
36 months
10 years

Section: (none)

Explanation:

Explanation/Reference:

Explanation:

Box 1: 10 years

The yearly backup point occurs to 1 March and its retention period is 10 years.

Box 2: 36 months

The monthly backup point occurs on the 1st of every month and its retention period is 36 months.

QUESTION 4

You have the Azure virtual machines shown in the following table:

Name	Azure region
VM1	West Europe
VM2	West Europe
VM3	North Europe
VM4	North Europe

You have a Recovery Services vault that protects VM1 and VM2.

You need to protect VM3 and VM4 by using Recovery Services.

What should you do first?

- A. Create a new Recovery Services vault
- B. Create a storage account
- C. Configure the extensions for VM3 and VM4
- D. Create a new backup policy

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A Recovery Services vault is a storage entity in Azure that houses data. The data is typically copies of data, or configuration information for virtual machines (VMs), workloads, servers, or workstations. You can use Recovery Services vaults to hold backup data for various Azure services

Reference:

<https://docs.microsoft.com/en-us/azure/site-recovery/azure-to-azure-tutorial-enable-replicatio>

QUESTION 5

HOTSPOT

You have an Azure subscription that contains an Azure Storage account named storage1 and the users shown in the following table.

Name	Member of
User1	Group1
User2	Group2
User3	Group1

You plan to monitor storage1 and to configure email notifications for the signals shown in the following table.

Name	Type	Users to notify
Ingress	Metric	User1 and User3 only
Egress	Metric	User1 only
Delete storage account	Activity log	User1, User2, and User3
Restore blob ranges	Activity log	User1 and User3 only

You need to identify the minimum number of alert rules and action groups required for the planned monitoring.

How many alert rules and action groups should you identify? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Alert rules:

	▼
1	
2	
3	
4	

Action groups:

	▼
1	
2	
3	
4	

Correct Answer:

Answer Area

Alert rules:

	▼
1	
2	
3	
4	

Action groups:

	▼
1	
2	
3	
4	

Section: (none)

Explanation

Explanation/Reference: