**Questions:**

Question 1 You host a service with two Azure virtual machines. You discover that occasional outages cause your service to fail. What two actions can you do to minimize the impact of the outages?

 Add a load balancer.

 Put the virtual machines in an availability set.

 Put the virtual machines in a scale set.

 Add a network gateway.

 Add a third instance of the virtual machine.

Question 2 You are researching Microsoft Azure for your company. The company is considering deploying Windows-based VMs in Azure. However, before moving forward, the management team has asked you to research the costs associated with Azure VMs. You need to document the configuration options that are likely to save the company money on their Azure VMs. Which options should you document? (Each answer presents part of the solution. Choose four.)

 Use HDD instead of SSD for VM storage.

 Use unmanaged premium storage instead of managed standard storage.

 Bring your own Windows custom images.

 Use different Azure regions.

 Use the least powerful VMs that meet your requirements.

 Place all VMs in the same resource group.

 Bring your own Windows license for each VM.

Question 3 You are planning to deploy several Linux VMs in Azure. The security team issues a policy that Linux VMs must use an authentication system other than passwords. You need to deploy an authentication method for the Linux VMs to meet the requirement. Which authentication method should you use? Select one.

 SSH key pair

 Azure multi-factor authentication

 Access keys

 Shared access signature

 Security vault certificate

Question 4 You deploy a new VM with default settings to a resource group named RG1. You validate that you can connect to it by using Remote Desktop Connection. However, when you attempt to connect to it through PowerShell remoting, the connection fails. You need to ensure that you can manage the VM by using PowerShell remoting. What should you do? Select one.

 Create an inbound security rule to allow TCP port 80 and TCP port 443.

 Create an inbound security rule to allow TCP port 5985 and TCP port 5986.

 Create an inbound security rule to allow TCP port 3389.

 Create an inbound security rule to allow TCP port 20 and TCP port 21.

Question 5 Your company has Windows Server 2012 R2 VMs and Ubuntu Linux VMs in Microsoft Azure. The company has a new project to standardize the configuration of servers across the Azure environment. The company opts to use Desired State Configuration (DSC) across all VMs. You need to ensure that DSC can be used across all the VMs. What two things should you do?

 Replace the Ubuntu VMs with Red Hat Enterprise Linux VMs.

 Deploy the DSC extension for Windows Server VMs.

 Deploy the DSC extension for Linux VMs.

 Replace the Windows Server 2012 R2 VMs with Windows Server 2016 VMs.

Question 6 Another IT administrator creates an Azure virtual machine scale set with 5 VMs. Later, you notice that the VMs are all running at max capacity with the CPU being fully consumed. However, additional VMs are not deploying in the scale set. You need to ensure that additional VMs are deployed when the CPU is 75% consumed. What should you do? Select one.

 Enable the autoscale option.

 Increase the instance count.

 Add the scale set automation script to the library.

 Deploy the scale set automation script.

Question 7 Your company is preparing to deploy an application to Microsoft Azure. The app is a self-contained unit that runs independently on several servers. The company is moving the app to the cloud to provide better performance. To get better performance, the team has the following requirements:

● If the CPU across the servers goes above 85%, a new VM should be deployed to provide additional resources.

● If the CPU across the servers drops below 15%, an Azure VM running the app should be decommissioned to reduce costs.

You need to deploy a solution to meet the requirements while minimizing the administrative overhead to implement and manage the solution. What should you do? Select one.

 Deploy the app in a virtual machine scale set.

 Deploy the app in a virtual machine availability set.

 Deploy the app by using a resource manager template.

 Deploy the app and use PowerShell Desired State Configuration (DSC).

Question 8 Your company is deploying a critical business application to Microsoft Azure. The uptime of the application is of utmost importance. The application has the following components:

● 2 web servers

● 2 application servers

● 2 database servers

You need to design the layout of the VMs to meet the following requirements:

● Each VM in a tier must run on different hardware

● Uptime for the application must be maximized

You need to deploy the VMs to meet the requirements. What should you do? Select one.

 Deploy 1 VM from each tier into one availability set and the remaining VMs into a separate availability set.

 Deploy the VMs from each tier into a dedicated availability set for the tier.

 Deploy the application and database VMs in one availability set and the web VMs into a separate availability set.

 Deploy a load balancer for the web VMs and an availability set to hold the application and database VMs.

Question 9 You deploy an Azure VM into an availability set. The VM is the only VM in the availability set. The VM runs an application named App1. The VM has the following characteristics:

● The VM uses Azure standard storage.

● The VM does not have any data disks.

● The VM was built with a custom image.

During an Azure planned maintenance event, the VM experiences downtime. The company issues a new requirement for App1: ● App1 must remain available during Azure planned maintenance events

You need to reconfigure your environment to meet the new requirements. What should you do? (Each answer presents a complete solution. Choose two.)

 Deploy a second Azure VM and add it to the same availability set.

 Deploy a second Azure VM and add it to the same update domain.

 Deploy a second Azure VM and add it to the same fault domain.

 Convert the VM storage to premium storage.

 Convert the VM to a Standard size or higher.

 Convert the VM storage to use zone redundant storage.

Question 10 You begin a new job at a company. You are exploring the existing Microsoft Azure implementation with a plan to document it. First, you are documenting the virtual machine details. You need to go gather the details of the VM data disks. Which type of storage should you review for the data disks? Select one.

 Azure CDN

 Blob storage

 Table storage

 Queue storage

**Links:**

1. **PowerShell DSC**

<https://docs.microsoft.com/en-us/powershell/dsc/overview/overview>

1. if you guys wants to understand the template and its flow, I would recommend to check below link.

<https://github.com/PowerShell/DscResource.Tests>

1. Best Practices for Autoscale –

<https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/insights-autoscale-best-practices>

1. Virtual machine extensions and features for Windows –

<https://docs.microsoft.com/en-us/azure/virtual-machines/extensions/features-windows?toc=%2Fazure%2Fvirtual-machines%2Fwindows%2Ftoc.json>

1. Virtual machine extensions and features for Linux –

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

Built-In Windows PowerShell Desired State Configuration Resources - <https://docs.microsoft.com/en-us/powershell/dsc/resources/resources#built-in-resources>

Linux virtual machines (Documentation) –

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

<https://azure.microsoft.com/en-in/pricing/calculator/>

<https://azprice.info/>

GET https://management.azure.com/{scope}/providers/Microsoft.Consumption/usageDetails?api-version=2019-01-01