AZ-900

Updated - Real Exam Questions & Answers

Latest Exam Questions
All Topics Covered
Added New Que's-2022

Microsoft CERTIFIED
AZURE FUNDAMENTALS

PASS 100% GUARANTEE

Subscribe

Question 241   CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

▼
Azure Arc
Azure IoT Central
Azure IoT Hub
Azure Sphere

is a highly secure IoT solution that includes a microcontroller unit (MCU) and a customized Linux operating system.

Answer Area

Correct Answer: [▼] is a highly secure IoT solution that includes a microcontroller unit (MCU) and a customized Linux operating system.

- Azure Arc
- Azure IoT Central
- Azure IoT Hub
- **Azure Sphere** *(selected)*

Explanation:

Microsoft's Azure Sphere hardware and service designed to better secure Internet of Things (IoT) devices.
Azure Sphere consists of Microsoft-certified microcontrollers ג€" single-chip computers with processors, storage, memory and IoT capabilities ג€" plus the Azure
Sphere Linux-based OS and the Azure Sphere cloud security service.

Reference:
https://www.zdnet.com/article/microsofts-azure-sphere-its-linux-based-microcontroller-plus-cloud-service-hits-general-availability/

Question 242 CertyIQ

You plan to deploy a service to Azure virtual machines.
You need to ensure that the service will be available if a datacenter fails.
What should you use as part of the virtual machine deployment?

A. availability sets

B. proximity placement groups

C. host groups

D. availability zones

Explanation:

Correct Answer: *D*
Azure availability zones are physically separate locations within each Azure region that are tolerant to local failures.
Failures can range from software and hardware failures to events such as earthquakes, floods, and fires. Tolerance to failures is achieved because of redundancy and logical isolation of Azure services. To ensure resiliency, a minimum of three separate availability zones are present in all availability zone-enabled regions.
Reference:
https://docs.microsoft.com/en-us/azure/availability-zones/az-overview

Question 243 CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

An Azure region ▼

contains one or more data centers that are connected by using a low-latency network.
is found in each country where Microsoft has a subsidiary office.
can be found in every country in Europe and the Americas only.
contains one or more data centers that are connected by using a high-latency network.

Answer Area

Correct Answer: An Azure region ▼

contains one or more data centers that are connected by using a low-latency network.
is found in each country where Microsoft has a subsidiary office.
can be found in every country in Europe and the Americas only.
contains one or more data centers that are connected by using a high-latency network.

Explanation:

Box: contains one or more data centers that are connected by using a low-latency network.
Each Azure region features datacenters deployed within a latency-defined perimeter. They're connected through a dedicated regional low-latency network. This design ensures that Azure services within any region offer the best possible performance and security.
Reference:
https://docs.microsoft.com/en-us/azure/availability-zones/az-overview

Question 244

CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

You can use the Azure File Sync agent to sync on-premises data to an Azure ▼

blob container.
Data Lake Storage container.
file share.
queue.

Correct Answer:

Answer Area

You can use the Azure File Sync agent to sync on-premises data to an Azure [▼]

blob container.
Data Lake Storage container.
file share.
queue.

Explanation:

The Azure File Sync agent enables data on a Windows Server to be synchronized with an Azure File share.
Reference:
https://www.microsoft.com/en-us/download/details.aspx?id=57159

Question 245   CertyIQ

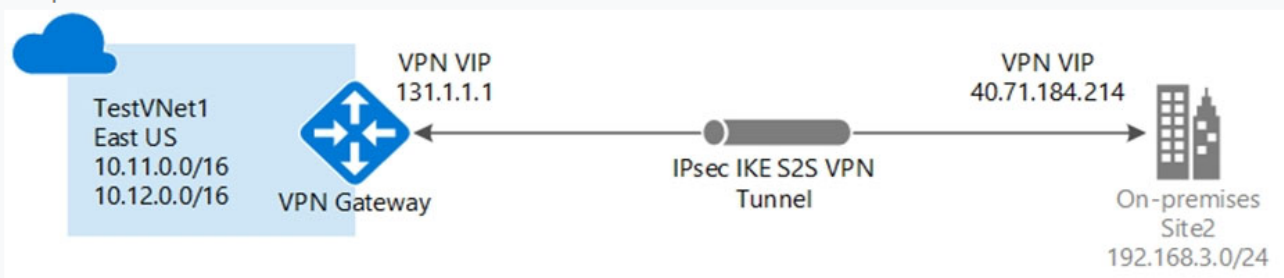What is the function of a Site-to-Site VPN?

A. provides a secure connection between a computer on a public network and the corporate network

B. provides a dedicated private connection to Azure that does NOT travel over the internet

C. provides a connection from an on-premises VPN device to an Azure VPN gateway

Explanation:

A Site-to-Site VPN gateway connection is 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 located on-premises that has an externally facing public IP address assigned to it.
Example:

TestVNet1
East US
10.11.0.0/16
10.12.0.0/16
VPN Gateway

VPN VIP
131.1.1.1

IPsec IKE S2S VPN
Tunnel

VPN VIP
40.71.184.214

On-premises
Site2
192.168.3.0/24

Reference:
https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-howto-site-to-site-classic-portal

Question 246   CertyIQ

DRAG DROP -
Match the cloud service models to the appropriate offerings.
To answer, drag the appropriate model from the column on the left to its offering on the right. Each model may be used once, more than once, or not at all.

NOTE: Each correct match is worth one point.
Select and Place:

Models

| Infrastructure as a service (IaaS) |

| Platform as a service (PaaS) |

| Software as a service (SaaS) |

Answer Area

| | Azure App Service |

| | Azure virtual machines |

| | Microsoft Dynamics 365 |

Correct Answer:

Models

| Infrastructure as a service (IaaS) |

| Platform as a service (PaaS) |

| Software as a service (SaaS) |

Answer Area

| Platform as a service (PaaS) | Azure App Service |

| Infrastructure as a service (IaaS) | Azure virtual machines |

| Software as a service (SaaS) | Microsoft Dynamics 365 |

Explanation:

Box 1: Platform as a service (PaaS)
Azure App Service is a fully managed platform for building web applications.
Platform as a service (PaaS) is a complete development and deployment environment in the cloud, with resources that enable you to deliver everything from simple cloud-based apps to sophisticated, cloud-enabled enterprise applications.
Box 2: Infrastructure as a service (IaaS)
Windows Azure Virtual Machines, an Infrastructure-as-a-Service (IaaS) offering in Windows Azure, was released back in 2012.
Box 3: Software as a service (SaaS)
Dynamics 365 is a set of interconnected, modular Software-as-a-Service (SaaS) applications and services designed to both transform and enable your core customers, employees, and business activities.
Reference:
https://azure.microsoft.com/en-us/overview/what-is-paas/
https://azure.microsoft.com/en-us/blog/infrastructure-as-a-service-series-virtual-machines-and-windows/
https://pipol.com/what-is-microsoft-dynamics-365

Question 247	CertyIQ

DRAG DROP -
Match the cloud service models to the appropriate solutions.
To answer, drag the appropriate cloud service model from the column on the left to its solution on the right
Each cloud service model may be used once, more than once, or not at all.
NOTE: Each correct match is worth one point.
Select and Place:

Answer Area

Infrastructure-as-a-Service (IaaS)	
Platform-as-a-Service (PaaS)	
Software-as-a-Service (SaaS)	

	A cloud-based file server
	A cloud-based accounting system
	A cloud-based service for custom apps

Correct Answer:

Answer Area

Infrastructure-as-a-Service (IaaS)	
Platform-as-a-Service (PaaS)	
Software-as-a-Service (SaaS)	

Infrastructure-as-a-Service (IaaS)	A cloud-based file server
Software-as-a-Service (SaaS)	A cloud-based accounting system
Platform-as-a-Service (PaaS)	A cloud-based service for custom apps

Explanation:

Box 1: Infrastructure as a service (IaaS)
Azure Files is a simple, secure, and serverless enterprise-grade cloud file shares.
Infrastructure as a service (IaaS) is a type of cloud computing service that offers essential compute, storage, and networking resources on demand, on a pay-as- you-go basis.
Box 2: Software as a service (SaaS)
Dynamics 365 is a set of interconnected, modular Software-as-a-Service (SaaS) applications and services designed to both transform and enable your core customers, employees, and business activities. It includes Dynamics 365 Finance: use the guided, rules-based chart of accounts and no-code configuration service to simplify regulatory reporting, electronic invoicing, and global payments.
Box 3: Platform as a service (PaaS)
Platform as a service (PaaS) is a complete development and deployment environment in the cloud, with resources that enable you to deliver everything from simple cloud-based apps to sophisticated, cloud-enabled enterprise applications.
Reference:
https://azure.microsoft.com/en-us/overview/what-is-iaas
https://azure.microsoft.com/en-us/overview/what-is-paas/

Question 248 CertyIQ

You need to manage containers.
Which two services can you use? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. Azure Virtual Desktop

B. Azure virtual machines

C. Azure Functions

D. Azure Container Instances

Explanation:

Run Docker containers on-demand in a managed, serverless Azure environment. Azure Container Instances is a solution for any scenario that can operate in isolated containers, without orchestration. Run event-driven applications, quickly deploy from your container development pipelines, and run data processing and build jobs.
You can manage containers at scale with a fully managed Kubernetes container management and orchestration service that integrates with Azure Active
Directory.
Azure Kubernetes Service is a robust and cost-effective container orchestration service that helps you to deploy and manage containerized applications in seconds where additional resources are assigned automatically without the headache of managing additional servers.
Reference:
https://docs.microsoft.com/en-us/azure/container-instances/
https://cloudacademy.com/blog/azure-kubernetes-service-aks-what-is-it-and-why-do-we-use-it

Question 249	CertyIQ

 HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

An Azure container instance is an example of an Azure [dropdown ▼]

| compute service. |
| identity service. |
| networking service. |
| storage service. |

Correct Answer:

An Azure container instance is an example of an Azure [dropdown ▼]

| **compute service.** |
| identity service. |
| networking service. |
| storage service. |

Explanation:

The term compute refers to the hosting model for the computing resources that your application runs on. For Azure this include:
Azure Container Instances. The fastest and simplest way to run a container in Azure, without having to provision any virtual machines and without having to adopt a higher-level service.
Note, and also the following:
Azure App Service. A managed service for hosting web apps, mobile app back ends, RESTful APIs, or automated business processes.

Azure Spring Cloud. A managed service designed and optimized for hosting Spring Boot apps.
Azure Kubernetes Service (AKS). A managed Kubernetes service for running containerized applications.
Azure Batch. A managed service for running large-scale parallel and high-performance computing (HPC) applications
Azure Functions. A managed FaaS service.
Azure Service Fabric. A distributed systems platform that can run in many environments, including Azure or on premises.
Azure Virtual machines. Deploy and manage VMs inside an Azure virtual network.
Azure Container Apps. Deploy and manage VMs inside an Azure virtual network.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/compute-decision-tree

Question 250 CertyIQ

At which OSI layer does ExpressRoute operate?

A. Layer 2

B. Layer 3

C. Layer 5

D. Layer 7

Explanation:

https://docs.microsoft.com/en-us/azure/expressroute/expressroute-introduction in second paragraph, titled 'Key benefits', says: "Layer 3 connectivity between your on-premises network and the Microsoft Cloud through a connectivity provider."

Question 251 CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Application Insights is a feature of ▼

| |
| Azure Advisor. |
| Azure Application Gateway. |
| Azure Arc. |
| Azure Monitor. |

Application Insights is a feature of [▼]

	Azure Advisor.
	Azure Application Gateway.
	Azure Arc.
	Azure Monitor.

Correct Answer:

Explanation:

Application Insights is a feature of Azure Monitor that provides extensible application performance management (APM) and monitoring for live web apps.
Reference:
https://docs.microsoft.com/en-us/azure/azure-monitor/app/app-insights-overview

Question 252

 DRAG DROP -
Arrange the storage account redundancy options from the least redundant to the most redundant. To answer, move all options from the list of options to the answer area and arrange them in the correct order.
Select and Place:

Redundancy options   **Answer Area**

Zone-redundant storage (ZRS)
Geo-redundant storage (GRS)
Locally-redundant storage (LRS)

Correct Answer: -

Correct Answer:

Redundancy options   **Answer Area**

Zone-redundant storage (ZRS)   Locally-redundant storage (LRS)
Geo-redundant storage (GRS)   Zone-redundant storage (ZRS)
Locally-redundant storage (LRS)   Geo-redundant storage (GRS)

Question 253

CertyIQ

HOTSPOT -
Select the answer that correctly completes the sentence.
Hot Area:

Answer Area

Azure Blob Storage is a

data store for queuing and reliably delivering messages between applications.
file share that can be mapped as a network drive.
key/attribute store for non-relational, structured data.
storage service optimized for very large objects, such as video files and bitmaps.

Correct Answer:

Answer Area

Azure Blob Storage is a

data store for queuing and reliably delivering messages between applications.
file share that can be mapped as a network drive.
key/attribute store for non-relational, structured data.
storage service optimized for very large objects, such as video files and bitmaps.

Question 254

CertyIQ

A team of developers at your company plans to deploy, and then remove, 50 virtual machines each week. All the virtual machines are configured by using Azure
Resource Manager templates.
You need to recommend which Azure service will minimize the administrative effort required to deploy and remove the virtual machines.
What should you recommend?

A. Azure Reserved Virtual Machine (VM) Instances

B. Azure DevTest Labs

C. Azure virtual machine scale sets

D. Azure Virtual Desktop

Explanation:

Azure Dev Test Labs used to quickly create Windows and Linux environments by using reusable templates and artifacts.

DevTest Labs creates labs consisting of pre-configured bases or Azure Resource Manager templates.
By using DevTest Labs, you can test the latest versions of your applications by doing the following tasks:
☞ Quickly provision Windows and Linux environments by using reusable templates and artifacts.
☞ Easily integrate your deployment pipeline with DevTest Labs to provision on-demand environments.
☞ Scale up your load testing by provisioning multiple test agents and create pre-provisioned environments for training and demos.

Reference:
https://docs.microsoft.com/en-us/azure/lab-services/devtest-lab-overview

Question 255   CertyIQ

How can Azure lower capital expenditure (CapEx) costs?

Choose the correct answer

A. Azure allows you to pay annually to reduce overall costs that are associated with its platform as-a-service (PaaS) offerings.

B. Azure allows you to reduce the level of IT staffing that is required to maintain on-premises applications and services.

C. Azure reduces the amount of maintenance that is associated with the configuration of firewalls, which reduces costs.

D. Azure allows you to pay monthly based on usage rather than pay upfront for physical hardware.

Explanation:

Azure allows you to pay for servers monthly based on usage, rather than pay upfront for physical hardware. CapEx refers to money that is spent up front on infrastructure hardware such as routers, switches, and servers. With a public cloud deployment in Azure, you only need to pay for the usage of these devices. This eliminates CapEx costs. With a hybrid cloud deployment in Azure, you can lower CapEx costs because you only need to pay for devices that are on-premises.

Azure does not necessarily allow you to reduce the level of IT staffing that is required to maintain on premises applications and services. Although there is no need for hardware IT support in a public cloud deployment, the company still needs IT personnel to maintain its on-premises applications and services

Azure does not allow you to pay annually to reduce the overall costs that are associated with its platform as-a-service (PaaS) offerings. It allows you to pay annually for some infrastructure-as-a-service (IaaS) offerings, such as virtual machines (VMs), through reserved VM instances.

Azure does not reduce the amount of maintenance that is associated with configuring firewalls, which would reduce costs. Although Azure eliminates the need to perform physical cabling of networks, it still requires you to configure software.

Question 256   CertyIQ

Which two infrastructures are valid hybrid cloud infrastructures? Each correct answer presents part of the

solution

Choose the correct answers.

    A. Multiple private clouds

    B. On-premises infrastructure and public cloud

    C. Private and public cloud

    D. Multiple public clouds

    E. On-premises infrastructure and private cloud

Explanation:

A hybrid cloud is based on an on-premises architecture and a public cloud or a private cloud and a public cloud. This cloud model is most commonly used when leveraging benefits of running applications from a public cloud while providing additional security by storing data in a private cloud or an on-premises datacenter.

Multiple public clouds and multiple private clouds do not represent hybrid clouds. In each case, it is simply multiple instances of that cloud model.

While it is possible to have a federated configuration that includes an on-premises infrastructure and private cloud, this is not considered a hybrid cloud. This configuration might be used, for example, when transitioning from an on-premises to a cloud-based datacenter.

Question 257   CertyIQ

You work for a cloud solution provider. One of your company's clients considers moving its on-premises infrastructure to the cloud. However, the client wants a better understanding of the different models before it makes a decision. A third-party will not be involved.

You need to describe the advantages of the different cloud models.

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

Answer Area

Statements	Yes	No
The public cloud allows you to deploy resources without managing the underlying hardware.	○	○
The hybrid cloud allows you to deploy resources with no capital expenditure and minimal IT expertise.	○	○
The private cloud allows you to deploy resources by having minimal IT expertise.	○	○

Answer Area

Correct Answer:

Statements	Yes	No
The public cloud allows you to deploy resources without managing the underlying hardware.	◉	○
The hybrid cloud allows you to deploy resources with no capital expenditure and minimal IT expertise.	○	◉
The private cloud allows you to deploy resources by having minimal IT expertise.	○	◉

Explanation:

The public cloud allows you to deploy resources without managing the underlying hardware. The servers, storage devices, and networking devices exist in Azure datacenters. You are only required to manage the configuration of those devices.

The hybrid cloud typically allows you to deploy resources with some capital expenditure. Capital expenditure (CapEx) involves spending money on physical resources up front. With the hybrid cloud, some resources exist in the cloud, while other resources usually exist on-premises. The CapEx costs come from the on-premises resources. Some hybrid deployments can also involve a combination of public and private clouds, which requires IT expertise.

The private cloud requires you to have IT expertise in order to deploy resources, unless you are using a third-party company as the private cloud provider. This is because on a private cloud that is not third-party hosted, you are responsible for managing the hardware, such as servers, storage devices, and networking devices, as well as for the configuration of these resources.

Question 258   CertyIQ

Which setup represents a hybrid cloud model?

Choose the correct answer

A. An Azure web Application Program Interface (API) that connects to an on-premises SQL Server database at an on-premises private datacenter

B. An Azure Webjob that makes calls to the Azure Representational State Transfer (REST) Application Program Interface (API)

C. An Azure web application that connects to an Azure SQL Database

D. An Azure Function that crawls the web for trending news

Explanation:

An Azure web API that connects to an on-premises SQL Server database represents a hybrid deployment model A hybrid deployment model exists when Azure hosts some resources while your company hosts others. Hybrid deployments combine public and private cloud deployments, and the private cloud can be an on-premises private datacenter

An Azure web application that connects to an Azure SQL Database does not represent a hybrid cloud deployment model. This represents a public cloud deployment model. No on-premises resources are used in this scenario. A public cloud deployment model occurs when resources are only deployed to the public cloud, such as Azure

An Azure Function that crawls the web for trending news does not represent a hybrid deployment model. This represents a public deployment model. No on-premises resources are used in this scenario. In a public deployment model, only Azure resources are used.

An Azure WebJob that makes calls to the Azure REST API does not represent a hybrid deployment model. It represents a public cloud deployment model. A public cloud deployment model occurs when resources are only deployed to the public cloud, such as Azure

Question 259   CertyIQ

Your organization hosts its e-commerce solution on a computing infrastructure that is provided by a third-party service provider and shared with other organizations. You only pay for the compute power, storage. and networking resources you use

What type of cloud computing is this an example of?

Choose the correct answer

A. On-premises datacenter

B. Hybrid cloud

C. Private cloud

D. Public cloud

Explanation:

This is an example of a public cloud computing. With a public cloud, the cloud resources (compute power. storage, networking) are owned and operated by the relevant cloud service provider and delivered over the Internet. You pay only for what you use. The underlying physical infrastructure of the public cloud is shared with other organizations, the so called cloud tenants

This is not an example of hybrid cloud computing With hybrid computing, you combine a private cloud with a public cloud Private cloud infrastructure is not shared with other organizations and is used to host certain workloads, like highly sensitive data that cannot be stored on the shared infrastructure because of the regulatory requirements. Public cloud infrastructure can be used to host less sensitive solutions to enable flexible and cost-effective methods of running your workload.

This is not an example of a private cloud computing. In a private cloud, computing resources are used exclusively by one business or organization. Computing infrastructure may belong to your organization or a third-party service provider. However, the underlying infrastructure is not shared with other organizations, but dedicated solely to yours

This is not an example of on-premises datacenter computing. An on-premises datacenter is typically used to build a private cloud because the hardware and software are located at your organization's own on-site datacenter and dedicated to your organization's workload only

---

Question 260   CertyIQ

For each of the following statements regarding consumption and fixed cost price models, select Yes if the statement is true. Otherwise, select No.

Answer Area

Statements	Yes	No
For organizations with consistent, high utilization, the consumption-based pricing model is the most efficient one.	O	O
There are no upfront costs when using the consumption-based model.	O	O
In the fixed price model, you pay for resources even if you do not use them.	O	O

Answer Area

Correct Answer:

Statements	Yes	No
For organizations with consistent, high utilization, the consumption-based pricing model is the most efficient one.	O	O
There are no upfront costs when using the consumption-based model.	O	O
In the fixed price model, you pay for resources even if you do not use them.	O	O

Explanation:

For organizations with consistent, high utilization, the consumption-based pricing model is not the most efficient one. When you have a consistent need for compute, storage, and network resources, it is more cost-efficient to reserve resources using the fixed price model. When you enter a one-year or three-year commitment, Azure passes on significant discounts of up to 72%. Consumption-based pricing is better for periodic or one-off needs

There are no upfront costs when using the consumption-based model. You create or launch the resources you need, and you are only charged for the usage amount. You know exactly what you will pay per unit of time or usage when you activate the resource.

In the fixed price model, you pay for resources even if you do not use them. This means that if you enter a one-year commitment for a server virtual machine, you will pay the same amount if the server is on for one hour a day or 24 hours a day

Question 261 **Certy****IQ**

Your company plans to migrate applications and services to the cloud. You recommend for a hybrid cloud to be deployed Why would you make this recommendation?

Choose the correct answer

   A. To ensure that charges are only incurred when cloud resources are utilized

   B. To consolidate all cloud resources in a single data center

   C. <mark>To augment on-premises resources by providing overflow capacity</mark>

   D. To eliminate the need for company-managed compute resources

Explanation:

By Implementing a hybrid cloud, your company can augment on-premises resources by providing overflow capacity. A hybrid cloud is the combination of two or more cloud models, such as public and private, and provides benefits from both models. It can give businesses the flexibility to use public cloud resources when they need them, while also keeping sensitive data and applications on-premises in a private cloud. A hybrid cloud can also help organizations manage peaks and valleys in traffic more efficiently. By using a hybrid cloud model, businesses do not have to overprovision computing resources in anticipation of high demand, they can simply bring in extra resources from the public cloud when they need them

Implementing a hybrid cloud will not allow your company to consolidate all cloud resources in a single data center. This describes a public or a private cloud, either of which could support this requirement.

Implementing a hybrid cloud will not allow your company to ensure that charges are only incurred when cloud resources are utilized. This more accurately describes a public cloud, where resource elasticity allows storage and compute to be allocated on demand. This allows you to pay only for the resources you need when you need them.

Implementing a hybrid cloud will not allow your company to eliminate the need for company-managed compute resources. All cloud models will require your company to manage some aspect of compute

Your company deploys resources in Azure According to the shared responsibility model, which task will you be required to perform?

Choose the correct answer

    A. Manage access to data center resources.

    B. Install critical updates on virtual machines.

    C. Upgrade RAM on virtualization systems.

    D. Configure connectivity between regions.

Explanation:

According to the shared responsibility model, you will install critical updates on virtual machines. The cloud shared responsibility model is a framework that delineates the roles and responsibilities of a cloud service provider (CSP) and its customers in managing data, applications, and infrastructure components stored in, or running on, the cloud. In the public cloud model, installing critical updates on a virtual machine would be managed by the customer

According to the shared responsibility model, you will not manage access to data center resources. Data center access is typically tightly controlled, and all requests must be approved by the CSP While on premises, visitors have restricted access to only the required resources. This is done to ensure the security and availability of cloud resources

According to the shared responsibility model, you will not configure connectivity between regions. Depending on the CSP, a region is a geographically constrained area where one or more data centers is located The CSP is responsible for managing network connectivity between regions

According to the shared responsibility model, you will not upgrade RAM on virtualization systems. The CSP always maintains responsibility for the physical compute, storage, and networking hardware it uses to offer its cloud services In the event Random Access Memory (RAM) needs to be replaced or upgraded, the CSP performs this duty

You have completed the migration of your organization's core servers and processes to cloud-based virtual machines Your final project involves migrating a weekly batch-processing task that relies on operating system drivers to print PDF reports

You need to meet this requirement while minimizing costs.

What should you do?

Choose the correct answer

    A. Execute the batch task on a dedicated virtual machine as needed.

B. Migrate the batch processing to serverless compute.

C. Configure virtual machine clusters to scale for batch processing.

D. Run the batch processing task using spot instances.

Explanation:

You should run the batch processing task using spot instances Spot virtual machines or instances can help reduce costs by taking advantage of unutilized compute capacity Most cloud service providers (CSPs) offer this unused capacity at a significant discount, as it allows the provider to recover some of the costs associated with operating their infrastructure. Unlike a normal virtual machine, spot virtual machines do not offer guaranteed compute resources at a specified time. They are perfect for batch or other asynchronous processing that can occur on a flexible schedule Microsoft offers this feature as Azure Spot Virtual Machines

You should not migrate the batch processing to serverless compute. In serverless computing, the customer simply submits their application code, and the CSP maintains the servers and infrastructure required to run an application Serverless computing does not provide access to a full operating system for printing

You should not configure virtual machine clusters to scale for batch processing Scaling allows resources to be consumed on an as-needed basis, based on workload. Though less expensive than operating a virtual machine full time, as scaling requires on-demand processing, it is often one of the most expensive cloud compute resources

You should not execute the batch task on a dedicated virtual machine as needed. Powering on a dedicated batch virtual machine as needed is the second-best option in this scenario as compute charges are only calculated when the virtual machine is running. However, storage charges will be incurred regardless of whether or not a virtual machine is operational

---

Question 264   CertyIQ

You work for a small company that hosts its own web server running Microsoft Internet Information Services (IIS) and email server running Microsoft Exchange As demand on the web server increases, you want to add a secondary web server to spread out the traffic. As demand decreases, you want to decommission the web server to save energy and maintenance. You consider moving the current infrastructure to the cloud.

You need to determine the benefits of moving the infrastructure to the cloud. For each of the following statements, select Yes if the statement is true. Otherwise, select No

Answer Area

Statements	Yes	No
You can use horizontal scaling for the web server.	O	O
You can resize the disk on demand on mail server if e-mail messages increase.	O	O
You eliminate the cost of having IT staff.	O	O

Answer Area

Statements	Yes	No
Correct Answer: You can use horizontal scaling for the web server.	⬤	◯
You can resize the disk on demand on mail server if e-mail messages increase.	⬤	◯
You eliminate the cost of having IT staff.	◯	⬤

Explanation:

You can use horizontal scaling for the web server. With auto-scale, you can configure rules that monitor metrics such as requests, memory usage, and central processing unit (CPU) percentage to determine when Azure should automatically add and remove virtual machine (VM) instances

You can resize the disk on demand on mail server if e-mail messages increase. Azure is elastic It allows you to add more resources on demand, as needed.

You do not eliminate the cost of having IT staff by moving the infrastructure to the cloud. However, you can reduce IT costs associated with having expert IT staff. You still need IT staff to handle Infrastructure-as-a Service (IaaS) tasks

---

Question 265   CertyIQ

You are a cloud engineer for a retail company. You need to decide whether to use a public or a private cloud

What is an advantage of using a public cloud over a private cloud?

Choose the correct answer

A. Costs are lower and spread among multiple tenants.

B. The environment supports a higher level of customization for each tenant.

C. Greater security is provided for tenant data..

D. On-demand scalability allows business requirements to be met more efficiently.

Explanation:

An advantage of a public cloud over a private cloud is that costs are lower and spread among multiple tenants. This is possible because subscribing tenants share resources and the provider can take advantage of economies of scale. A public cloud also usually has a higher level of reliability because it is based on a larger network of servers

A private cloud provides greater security than a public cloud for tenant data. A private cloud is based on a private network, including storage resources, and this means that access is limited to subscribing tenants Tenants share storage resources on a public cloud and data is partitioned among t them.

The public cloud environment does not support a higher level of customization for each tenant. There is a level of customization available, but this is somewhat limited by the shared environment. A high level of customization is a feature of private clouds because of the tenant's exclusive access.

On-demand scalability is a feature of both public and private clouds and is not an advantage of either over the other

Question 266   CertyIQ

What is the advantage of moving your company's infrastructure to Azure by using a public cloud deployment model?

Choose the correct answer

    A. There are no operational expenditure (OpEx) costs.

    B. <mark>The company is able to scale up as needed with no capital expenditure (CapEx) required.</mark>

    C. Legacy applications are easier to support.

    D. The company has complete control of the resources that are used by the operating system.

Explanation:

The company is able to scale up as needed with no CapEx required CapEx refers to money that is spent on Infrastructure hardware, such as routers, switches, and servers. With a public cloud deployment in Azure, you only need to pay for the usage of these devices. This eliminates CapEx costs

There are OpEx costs. OpEx refers to money that is spent regularly and that is necessary for a company to operate. With a public cloud deployment model, OpEx costs are the monthly subscription fees.

Legacy applications are not easier to support with a public deployment model Legacy applications sometimes require specific versions of hardware and operating systems. With Azure, you cannot control the version of the operating system or the hardware that hosts it. To support legacy applications, you might need to use a hybrid or private deployment model.

You do not have complete control of resources that are used by the operating system. The engineers at the Microsoft datacenter have complete control of the resources. To have complete control yourself, you should use a private deployment model that is not third-party hosted

Question 267   CertyIQ

Your company migrates virtual machines (VMs) from an on-premises datacenter to Azure As a part of the migration, all existing physical servers in your data center are decommissioned. The migrated workload runs on Azure VMS

Which are the two possible benefits of this cloud migration? Each correct answer presents part of the

solution

Choose the correct answers

A.   <mark>Pay-as-you-Go model</mark>

B.   Reduced Service Level Agreement (SLA)

C.   Ownership of physical infrastructure

D.   <mark>Absence of upfront costs for physical infrastructure</mark>

E.   Fixed recurrent costs

Explanation:

The absence of upfront costs for physical infrastructure and the Pay-as-you-Go model are two possible benefits of this cloud migration. With cloud infrastructure, there are no upfront costs for cloud customers because the cost of hardware provisioning and ownership is taken care of by the cloud provider. As a client, you pay for the actual consumption of the selected cloud services and resources using a Pay-as-you-Go charging model

The ownership of physical infrastructure, fixed recurrent costs, and a reduced Service Level Agreement (SLA) are not benefits of this cloud migration. As a cloud customer, you only lease cloud computing resources Ownership of underlying physical hardware belongs to the actual cloud service provider. There are no fixed recurrent costs because you pay for the actual usage of cloud resources, which may vary depending on your solution's workload demand. As a part of this cloud migration, you are also very likely to get not a lower, but a higher SLA. Most Azure services and resources offer an SLA of 99.9% and above, which is much higher uptime than what is achievable at an on-premises datacenter

---

Question 268   **CertyIQ**

 For each of the following statements regarding consumption and fixed cost price models, select Yes if the statement is true. Otherwise, select No.

Answer Area

Statements	Yes	No
Azure Active Directory (Azure AD) is used to manage API cryptographic keys.	O	O
Azure Storage encryption is enabled by default and cannot be disabled.	O	O
Azure ExpressRoute is used to secure traffic between virtual networks.	O	O

Answer Area

Statements	Yes	No
Azure Active Directory (Azure AD) is used to manage API cryptographic keys.	O	**O**
Azure Storage encryption is enabled by default and cannot be disabled.	**O**	O
Azure ExpressRoute is used to secure traffic between virtual networks.	O	**O**

(Correct Answer:)

Explanation:

Azure Active Directory (Azure AD) is not used to manage Application Programming Interface (API) cryptographic keys. Azure AD is a Microsoft's cloud-based identity and an access management service it combines core directory services and helps you manage users, groups, and access to applications in your Azure subscription Azure Key Vault would be the best choice for managing cryptographic keys and secrets

Azure Storage encryption is enabled by default and cannot be disabled. Azure Storage encryption is a feature that encrypts your data using 256-bit Advanced Encryption Standard (AES) encryption before storing It in Azure Storage Data is encrypted with a key that is unique to each storage account. You control who has access to the data and how it is used. Data remains encrypted while in transit between the customer's computer and Azure, and between Azure data centers.

Azure ExpressRoute is not used to secure traffic between virtual networks. Azure Express Route is a private network connection between your organization and Microsoft Cloud services It provides a more secure, reliable, and predictable way to connect to Microsoft Cloud services than connecting over the Internet With ExpressRoute, you can establish connections to Azure services from your data center, office or on premises environment

---

Question 269   CertyIQ

To improve performance of a mission-critical application, your organization has implemented cloud bursting Which statement describes the benefit cloud bursting provides?

Choose the correct answer

A. Compute resources are distributed geographically to reduce the impact of power or connectivity

   failures.

B. Cloud-based resources are provisioned when on-premises servers reach 100% resource capacity.

C. Compute, memory, and storage resources are added to cloud-based servers to increase capacity.

D. Additional virtual machines are added to, and removed from, a compute cluster based on workload.

Explanation:

When cloud bursting is configured, cloud-based resources are provisioned when on-premises servers reach 100% resource capacity Cloud bursting is used in hybrid cloud models consisting of on-premises and cloud-based resources In a cloud bursting scenario, when the on-premises compute infrastructure is saturated, cloud-based resources come online to address the increased workload.

Vertical scalability describes an environment where compute, memory, and storage resources are added to cloud-based servers to increase capacity. In this scenario, the number of compute nodes is minimized but the performance of each node is enhanced.

Horizontal scalability describes an environment where additional virtual machines are added to, and removed from, a compute cluster based on workload. This allows an application or service the ability to maintain performance during peak usage times, without requiring dedicated resources

Cloud service providers (CSPs) use zones to distribute compute, storage, and networking resources geographically This approach helps to reduce the impact of power or connectivity failures Zones are also often referred to as availability zones

Question 270   Certy**IQ**

 Which Azure feature enhances manageability and reliability by provisioning virtual machine instances based on workload?

Choose the correct answer

    A. Serverless compute

    B. Availability zones

    C. Autoscale

    D. Site Recovery

Explanation:

Azure autoscale enhances manageability and reliability by provisioning virtual machine instances based on workload Azure autoscale is a feature of Microsoft Azure that creates and manages a pool of virtual machines to handle increased demand. When demand spikes, autoscale creates new virtual machines in the pool and, when demand subsides, it removes them. This ensures that you only pay for the compute resources you need

Serverless compute does not enhance manageability and reliability by provisioning virtual machine instances based on workload. In serverless computing, the customer simply submits their application code. and the cloud service provider (CSP) provisions and maintains the servers and infrastructure required to run an application Azure Functions is an example of a serverless compute platform.

Availability zones do not enhance manageability and reliability by provisioning virtual machine instances based on workload. An Azure availability zone is a physically separate zone within an Azure region. Each zone is made up of one or more datacenters equipped with independent power, cooling, and networking This allows Azure to offer zone-redundant services, meaning that if one zone becomes unavailable, your application can failover to another availability zone without interruption.

Site Recovery does not enhance manageability and reliability by provisioning virtual machine instances based on workload Azure Site Recovery is a service that helps protect your on-premises workloads in the event of a disaster It

orchestrates replication of your data and applications to Azure, and then fails over to Azure when needed. You can use Site Recovery to recover from disasters like server or network outages, power outages, or even human error

Question 271
CertyIQ

In the Infrastructure-as-a-Service (IaaS) cloud service model, the subscriber is responsible for the management of which two components? Each correct answer presents part of the solution

Choose the correct answers

A.   Applications

B.   Physical Networking

C.   Virtualization

D.   Storage

E.   Operating system (OS)

Explanation:

In the Iaas model, subscribers are responsible for management of

• **Applications**

• Data

• Runtime

• Middleware

• **OS**

The service provider is responsible for:

• Virtualization

• Servers

• Storage

Physical Networking

In the Platform-as-a-Service (PaaS) model, the subscriber is responsible for applications and data only. The service provider is responsible for all of these components in the Software-as-a-Service model

2022 Latest AZ-104/DP-900/SC-900/AZ-900 Exam Real Que's and other exam series on **CertyIQ** (YouTube Channel)

Which Azure resource can be deployed as Infrastructure-as-a-Service (IaaS)?

Choose the correct answer

    A. API Management

    B. Azure SQL Database

    C. Office 365

    D. Virtual machine (VM)

Explanation:

A VM is an example of IaaS because it simulates hardware. With IaaS, the user has full control over the operating system

Azure SQL Database represents Platform-as-a-Service (PaaS). With PaaS, the user does not have full control over the operating system. The user has control of the PaaS application.

Office 365 represents Software-as-a-Service (SaaS). With SaaS, the user does not have full control over the operating system or an application. The user simply uses the application as a subscription service

API Management represents PaaS. With PaaS, the user does not have full control over the operating system. The user has control of the PaaS application. An API is a set of operations exposed by an application or service API Management allows you to provide a level of control to an API

Which Azure resource can be managed as Software-as-a-Service (SaaS)?

Choose the correct answer

    A. API Management

    B. Virtual machine (VM)

    C. Azure SQL Database

    D. Azure Internet-of-Things (IoT) Central

Explanation:

Azure IoT Central can be managed as SaaS With SaaS, the user does not have full control over the operating system or an application. The user simply uses the application as a subscription service IoT Central is Microsoft's IoT service that makes it easy for users to manage and monitor IoT devices at scale

VM cannot be managed as SaaS. VM represents Infrastructure-as-a-Service (IaaS) because it simulates hardware With IaaS, the user has full control over the operating system.

Azure SQL Database cannot be managed as SaaS. Azure SQL Database represents Platform-as-a-Service (PaaS) With PaaS, the user does not have full control over the operating system. The user has control of the PaaS application.

API Management cannot be managed as SaaS. This represents PaaS. With PaaS, the user does not have full control over the operating system. The user has control of the PaaS application. An API is a set of operations exposed by an application or service. API Management allows you to provide a level of control to an API

Question 274 CertyIQ

You need to deploy a serverless solution that meets the following requirements.

- Execution is triggered through an HTTP request
- You pay only for the time that your code runs.
- You do not have to manage the application infrastructure

Which Azure service should you use?

Choose the correct answer

A. Azure SQL Database

B. Azure Virtual Machine

C. Azure Database for PostgreSQL

D. Azure Functions

Explanation:

You should use Azure Functions. This is a serverless platform that lets you execute your code when needed and pay for the actual runtime only, without worrying about configuration or management of the underlying physical and application infrastructure. Azure Functions can be triggered by various event types, including HTTP requests

You should not use Azure Database for PostgreSQL. This is a relational DB based on the PostgreSQL Community Edition DB engine and offered as a Platform-as-a-Service (PaaS). It cannot be used to host and execute your code on-demand by HTTP requests. With Azure DB for PostgreSQL, you are billed hourly at a fixed rate based on the service tier and compute size selected.

You should not use Azure SQL Database. This is a relational database based on the Microsoft SQL server DB engine and provided as a PaaS. While Azure SQL DB offers the serverless pricing tier, it is intended for the automatic pausing of the database during inactive times, and you are still charged for the database storage Azure SQL DB is not intended for running your custom code on demand and triggering its execution through HTTP requests.

You should not use Azure Virtual Machine (VM). This is an Infrastructure-as-a-Service (IaaS) offered in Azure, where Microsoft manages the underlying physical infrastructure, while you as a customer are responsible for the rest of the solution from the operating system and application to data and access You are billed for the computing resources allocated to the VM and cannot use it as a hosting platform for serverless applications

For each of the following statements about infrastructure as a service (IaaS) on Azure, select Yes if the statement is true. Otherwise, select No.

Answer Area

Statements	Yes	No
Azure IaaS provides and manages container orchestrators.	O	O
Resources can be allocated on a pay-as-you-go basis, whenever needed.	O	O
You are responsible for managing applications and middleware while Azure manages operating systems.	O	O

Correct Answer:

Answer Area

Statements	Yes	No
Azure IaaS provides and manages container orchestrators.	O	O
Resources can be allocated on a pay-as-you-go basis, whenever needed	O	O
You are responsible for managing applications and middleware while Azure manages operating systems.	O	O

Explanation:

Azure infrastructure as a service (IaaS) does not provide and manage container orchestrators This level of service is offered by Azure platform as a service (PaaS) Container orchestrators are tools that help manage and automate the deployment, scaling, and management of containerized applications. One of the most popular container orchestrators is Kubernetes Kubernetes helps you manage your containerized applications by providing features like auto-scaling, self-healing, rolling updates, and more.

Azure IaaS allows resources to be allocated on a pay-as-you-go basis, whenever needed Pay-as-you-go cloud services are those where you only pay for the resources that you consume. This can be a massive benefit for businesses of all sizes, as it enables them to control and predict their costs more accurately Perhaps more importantly, it also allows businesses to scale their usage up or down as needed, without having to worry about overusing (and thus wasting) resources.

In Azure IaaS, you are responsible for managing applications, middleware, and operating systems. In Iaas, network, compute, and storage resources are offered by a cloud provider. However, an IaaS solution will require the subscriber to manage the underlying operating system and services.

Your company suffers a catastrophic web outage due to a misconfigured driver on a database server

You need to find a cloud solution that allows the highly customized web application to run without requiring management of operating system settings or services. However, the company's web developers must be able to maintain customizations.

What should you do to meet these requirements?

Choose the correct answer

    A. Migrate the web app to serverless compute.

    B. Move the web app to a software as a service (SaaS) provider.

    C. Deploy the web app functionality using platform as a service (PaaS).

    D. Relocate the web app to an infrastructure as a service (IaaS) provider.

Explanation:

You should deploy the web app functionality using platform as a service (PaaS) Paas is a type of cloud computing that provides a platform for developers to build, run, and manage applications without the need for infrastructure management "PaaS includes all the tools and services required to develop, test, deploy, and scale applications Typically, PaaS providers offer a wide variety of services, including databases, analytics, workflow engines, and more

You should not move the web app to a software as a service (SaaS) provider SaaS is software that is hosted on the cloud and available to customers over the Internet Microsoft Office 365 is an example of SaaS

You should not migrate the web app to serverless compute. In serverless computing, the customer simply submits their application code, and the cloud service provider (CSP) provisions and maintains the servers and infrastructure required to run an application Azure Functions is an example of a serverless compute platform.

You should not relocate the web app to an infrastructure as a service (IaaS) provider An IaaS solution will require the organization to manage the underlying OS and services In Iaas, network, compute, and storage resources are offered by a cloud provider

---

Question 277   **CertyIQ**

A company is deploying a critical business application on two virtual machines (VMs) The deployment needs to support.

- Highly available access
- Separate fault and update zones
- Minimal latency between instances

Most users who need to access the application are in the Azure East US 2 region.

Which configuration should the company use to deploy the solution?

Choose the correct answer

A. Separate availability zones

B. Separate resource groups in the same region

C. Separate regions in a regional pair

D. Separate availability sets

Explanation:

The company should use separate availability zones. Regions that support availability zones, including East US 2. provide for three availability zones. Availability zones are deployed in separate datacenters, 50 interruptions in one availability zone, such as a storage device failure, do not impact the other availability zones Each availability zone is a separate fault and update zone and has very low latency with other availability zones in the region

The company should not use separate availability sets. Availability sets are separate deployments in the same datacenter, so they do not provide geographically separated fault or update zones. They do provide separate fault and update zones within a datacenter, but all resources are part of the same datacenter

The company should not use separate resource groups. This does nothing to meet the scenario requirements Resource groups are used to define logical resource groups for management purposes Because both VMS are supporting the same application, it is recommended that both would be part of the same resource group

The company should not use separate regions in a regional pair. This provides separate fault and update zones but does not minimize latency as required by the scenario.

A common solution would be to deploy the application across two or three availability zones and also configure replication with a regional pair. This provides high-availability and a higher level of support for disaster recovery

---

Question 278   CertyIQ

A company wants to expand its cloud presence by deploying additional resources to Azure. The company plans to use templates based on existing resources to automate the deployment process. Ensuring consistent deployment is critical

What should the company use?

Choose the correct answer

A. Azure Resource Manager

B. Azure Resource Groups

C. Microsoft Defender for Cloud

D. Azure Monitor

Explanation:

The company should use Azure Resource Manager to automate resource deployments using templates Azure Resource Manager integrates with Azure portal, PowerShell, CLI, and REST API to perform deployment and management tasks. It gives you an easy way to deploy multiple resource instances or reliably redeploy resources. Using templates helps to ensure consistency.

The company should not use Azure Resource Groups Resource groups provide a way to manage resources as a set. You can use Resource Manager to deploy resources as part of a group, but that functionality is not built into resource groups directly

The company should not use Microsoft Defender for Cloud. Defender for Cloud does not provide the functionality to automate resource deployment. Microsoft Defender for Cloud is designed to help prevent attacks against resources. If an attack or intrusion does occur, Microsoft Defender for Cloud has tools to detect and respond to the event.

The company should not use Azure Monitor Azure Monitor is designed to collect, analyze, and act on telemetry data from both Azure and on-premises environments. It does not provide deployment tools.

Question 279   CertyIQ

What is the purpose of a resource group?

Choose the correct answer

    A. It defines initiatives that allow you to control the type of resources that can be deployed.

    B. It serves as a container for Azure resources like virtual machines (VMs) and web apps.

    C. It specifies the subscriptions that are allowed to create Azure resources.

    D. It is a collection of user and group accounts.

Explanation:

A resource group serves as a container for Azure resources like VMs and web apps. You can then assign role-based access security (RBAC) permissions to a resource group to determine which users can access the Azure services.

A resource group does not define initiatives that allow you to control the type of resources that can be deployed. Azure Policy performs this function.

A resource group is not a collection of user and group accounts. Collections of users and groups are normally defined in Active Directory or a directory service.

A resource group does not specify the subscriptions that are allowed to create Azure resources A subscription is essentially a billing unit

Question 280   CertyIQ

You deploy two Azure virtual machines (VMS) running Windows Server 2016 and one VM running Ubuntu Linux. All three VMs and their resources are added to the same resource group The VMs and the resource group are located in the same Azure region

The test plan directs that you need to delete the resource group once the initial test cycle is completed

What is the result of this action?

Choose the correct answer

    A. Only resource metadata is deleted with no impact on the VMs.

    B. All of the VMs contained in the resource group are deleted.

    C. Only resource metadata is deleted and the VMs are shut down.

    D. Only resource metadata is deleted and access to the VMS is disabled.

Explanation:

When a resource group is deleted, all of the resources contained in that resource group are also deleted, including VMs. Resource groups are used to group related resources for easier and more efficient management. Typically, resource groups are used to create a logical group of related resources with a similar lifecycle. The resource group stores metadata about the resources it contains, which can include resources from different Azure regions.

Deleting a resource group deletes the metadata of all contained resources, so that the VMS are not left in place in any state

Connect with us @ <u>LinkedIn</u> <u>Telegram</u>

Contact us for other dumps: -

contact.certyiqofficial@gmail.com

For any other enquiry, please drop us a mail at

<u>enquiry.certyiqofficial@gmail.com</u>