Question 1: Correct

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

By default, Azure Virtual Machines that run Windows Server 2016 can encrypt the network traffic sent from the Virtual machines to a host on the internet.

- No (Correct)
- Yes

Explanation

VM can encrypt data **at rest** by default. They **cannot** encrypt data in transit by default. So, the answer will be NO.

Question 2: Incorrect

Your company implements **Azure policies** to automatically add a watermark to Microsoft Word documents that contain credit card information.

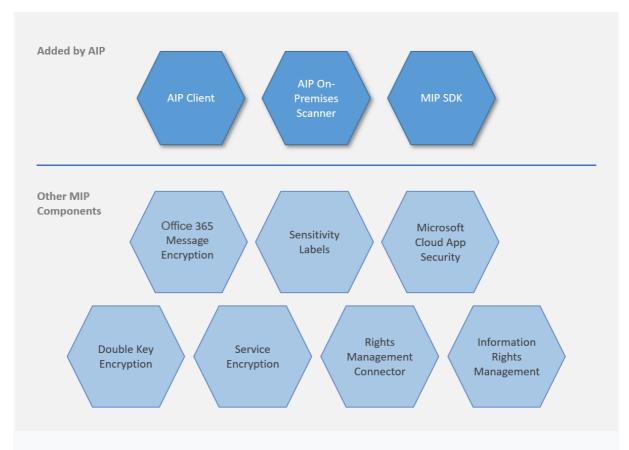
Instructions: Review the bolded text. If the statement is already correct, select "No change is needed". If the statement is incorrect, select the answer choice that makes the statement correct.

- Azure Information Protection (Correct)
- Azure Active Directory (Azure AD) Identity Protection (Incorrect)
- No change is needed.
- DDoS protection

Explanation

Azure Information Protection (AIP) is a cloud-based solution that enables organizations to discover, classify, and protect documents and emails by applying labels to content.

AIP is part of the Microsoft Information Protection (MIP) solution, and extends the labeling and classification functionality provided by Microsoft 365.



Reference: https://docs.microsoft.com/en-us/azure/information-protection/what-is-information-protection

Question 3:

Skipped

Your company plans to migrate all its network resources to Azure.

You need to start the planning process by exploring Azure.

What should you create first?

- A resource group
- A resource lock
- A virtual network
- A subscription (Correct)

Explanation

A subscription needs to be created first and foremost.

The Azure account is what lets you access Azure services and Azure subscriptions. It is possible to create multiple subscriptions in our Azure account to create separation <u>for billing or management purposes</u>. In your subscription(s) you can manage resources <u>in resources groups</u>.

The Azure hierarchy looks like:

Tenancy -> Subscription -> Resource Group -> Resource.

Reference: https://techcommunity.microsoft.com/t5/azure/understanding-azure-account-subscription-and-directory/m-p/34800

Question 4: Incorrect

Which Azure service should you use to correlate events from multiple resources into a centralized repository?

- Azure Log Analytics
- Azure Blueprint
- Azure Event Hubs (Correct)
- Azure Cosmos DB (Incorrect)

Explanation

Event Hubs is a fully managed, real-time data ingestion service that's simple, trusted and scalable. Stream millions of events per second from any source to build dynamic data pipelines and immediately respond to business challenges. Keep processing data during emergencies using the geo-disaster recovery and geo-replication features.

Integrate seamlessly with other Azure services to unlock valuable insights. Allow existing Apache Kafka clients and applications to talk to Event Hubs without any code changes — you get a managed Kafka experience without having to manage your own clusters. Experience real-time data ingestion and microbatching on the same stream.

Reference: https://azure.microsoft.com/en-ca/services/event-hubs/

Question 5: Correct

Which of the following is guaranteed for Active Directory in the Azure Service Level Agreement (SLA)?

- scalability
- disaster recovery
- reliability
- availability (Correct)

Explanation

Almost all service SLAs are from an uptime / availability perspective.

Azure Active Directory

We guarantee 99.99% availability of the Azure Active Directory Basic and Premium services. The services are considered available in the following scenarios:

- Users are able to login to the Azure Active Directory service.
- Azure Active Directory successfully emits the authentication and authorization tokens required for users to log into applications connected to the service.

No SLA is offered for the Free edition of Azure Active Directory.

Note that the FREE edition of Azure Active Directory doesn't have any SLA guarantee!

Reference: https://azure.microsoft.com/en-ca/support/legal/sla/summary/

Question 6: Incorrect

Authorization is the process of verifying a user's credentials.

Instructions: Review the bolded text. If the statement is already correct, select "No change is needed". If the statement is incorrect, select the answer choice that makes

the statement correct.

- Federation
- No change is needed (Incorrect)
- Ticketing
- Authentication (Correct)

Explanation

Authentication is the process of establishing the identity of a person or service looking to access a resource. It involves the act of challenging a party for legitimate credentials and provides the basis for creating a security principal for identity and access control use. It establishes if they are who they say they are.

Authorization is the process of establishing what level of access an authenticated person or service has. It specifies what data they're allowed to access and what they can do with it.

Question 7:

Skipped

Your company plans to deploy an Artificial Intelligence (AI) solution in Azure.

What should the company use to build, test, and deploy predictive analytics solutions?

- Azure Machine Learning Studio (Correct)
- Azure App Service
- Azure Batch
- Azure Logic Apps

Explanation

Microsoft Azure Machine Learning Studio (classic) is a collaborative, drag-and-drop tool you can use to build, test, and deploy predictive analytics solutions on your data. Azure Machine Learning Studio (classic) publishes models as web services that can easily be consumed by custom apps or BI tools such as Excel.

Reference: https://docs.microsoft.com/en-us/azure/machine-learning/studio/what-is-ml-studio

Question 8:

Skipped

Which Azure service should you use to store certificates?

- An Azure Storage account
- Azure Security Center
- Azure Key Vault (Correct)
- Azure Information Protection

Explanation

Azure Key Vault helps solve the following problems:

- **1) Secrets Management** Azure Key Vault can be used to Securely store and tightly control access to tokens, passwords, certificates, API keys, and other secrets
- **2) Key Management** Azure Key Vault can also be used as a Key Management solution. Azure Key Vault makes it easy to create and control the encryption keys used to encrypt your data.
- **3) Certificate Management** Azure Key Vault is also a service that lets you easily provision, manage, and deploy public and private Transport Layer Security/Secure Sockets Layer (TLS/SSL) certificates for use with Azure and your internal connected resources.

Azure Key Vault has two service tiers: Standard, which encrypts with a software key, and a Premium tier, which includes hardware security module(HSM)-protected keys

Reference: https://docs.microsoft.com/en-us/azure/key-vault/key-vault-overview

Question 9:

Skipped

Each Azure region is paired with another region in the same geography approximately how many miles apart?

- 400
- 500
- 200
- 300 (Correct)

Explanation

When possible, Azure prefers at least 300 miles of separation between datacenters in a regional pair, although this isn't practical or possible in all geographies. Physical datacenter separation reduces the likelihood of natural disasters, civil unrest, power outages, or physical network outages affecting both regions at once. Isolation is subject to the constraints within the geography (geography size, power/network infrastructure availability, regulations, etc.).

Reference: https://docs.microsoft.com/en-us/azure/best-practices-availability-paired-regions

Question 10:

Skipped

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

To maintain Microsoft support, you must implement the security recommendations provided by Azure Advisor within a period of 30 days.

- No (Correct)
- Yes

Explanation

No, Microsoft Support is not dependant on recommendations being implemented.

Advisor provides relevant best practices to help you improve <u>reliability</u>, <u>security</u> and <u>performance</u>, achieve <u>operational excellence</u> and <u>reduce costs</u>

Implementing these solutions / recommendations is completely upto you.

Reference: https://azure.microsoft.com/en-ca/services/advisor/#features

Question 11:

Skipped

[Optional] What is the maximum number of virtual network rules and IP network rules allowed per storage account in Azure?

- 150
- 500
- 200 (Correct)

• 300

Explanation

The current maximum number of virtual networks per storage account are 200!

Resource	Limit
Number of storage accounts per region per subscription, including standard, and premium storage accounts.	250
Maximum storage account capacity	5 PiB ¹
Maximum number of blob containers, blobs, file shares, tables, queues, entities, or messages per storage account	No limit
Maximum request rate ¹ per storage account	20,000 requests per second
Maximum ingress ¹ per storage account (US, Europe regions)	10 Gbps
Maximum ingress ¹ per storage account (regions other than US and Europe)	5 Gbps if RA-GRS/GRS is enabled, 10 Gbps for LRS/ZRS ²
Maximum egress for general-purpose v2 and Blob storage accounts (all regions)	50 Gbps
Maximum egress for general-purpose v1 storage accounts (US regions)	20 Gbps if RA-GRS/GRS is enabled, 30 Gbps for LRS/ZRS ²
Maximum egress for general-purpose v1 storage accounts (non-US regions)	10 Gbps if RA-GRS/GRS is enabled, 15 Gbps for LRS/ZRS ²
Maximum number of virtual network rules per storage account	200
Maximum number of IP address rules per storage account	200

 $\label{lem:reconstruction} \textbf{Reference:} \underline{\text{https://docs.microsoft.com/en-us/azure/storage/common/scalability-targets-standard-} \underline{\text{account}}$

Question 12:

Skipped

You create a resource group named RG1 in Azure Resource Manager.

You need to prevent the deletion of the resources in RG1.

What should you use?

- Web Application Firewall
- CanNotDelete Lock (Correct)
- Network Security Group
- Donotmodify Tag

Explanation

Applying a delete lock to the resource group will prevent the resources inside it from being deleted.

As an administrator, you can lock a subscription, resource group, or resource to prevent other users in your organization from accidentally deleting or modifying critical resources. The lock overrides any permissions the user might have.

You can set the lock level to **CanNotDelete** or **ReadOnly**. In the portal, the locks are called **Delete** and **Read-only** respectively:

- **1)** CanNotDelete means authorized users can still read and modify a resource, but they can't delete the resource.
- **2) ReadOnly** means authorized users can read a resource, but they can't delete or update the resource. Applying this lock is similar to restricting all authorized users to the permissions granted by the **Reader** role.

Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources

Question 13:

Skipped

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

From Azure Service Health, an administrator can prevent a service failure from affecting a specific virtual machine

- Yes
- No (Correct)

Explanation

You can monitor the status of all the services. Although you can see when a maintenance is planned and act accordingly to migrate a VM if needed, **you can't prevent service failures.**

Question 14:

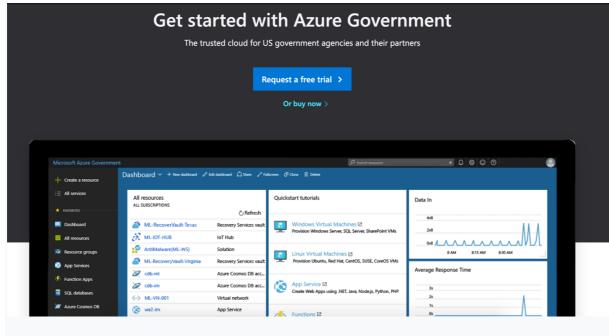
Skipped

Which of the following is: A dedicated public cloud for federal/state agencies in the US

- GDPR
- ISO
- Azure Government (Correct)
- Azure Federal

Explanation

Azure Government is the mission-critical cloud, delivering breakthrough innovation to **US government customers and their partners.** Only US federal, state, local and tribal governments and their partners have access to this dedicated instance, operated by screened US citizens. Azure Government offers the broadest level of certifications of any cloud provider to simplify even the most critical government compliance requirements.



Reference: https://azure.microsoft.com/en-in/global-infrastructure/government/get-started/

Question 15:

Skipped

For the following statement, select Yes if the statement is true. Otherwise, select

No.

A Network Security Group (NSG) will encrypt all the traffic sent from Azure to the internet.

- No (Correct)
- Yes

Explanation

No, a Network Security Group (NSG) **DOES NOT** encrypt traffic from Azure to the internet.

You can use an Azure network security group to filter network traffic to and from Azure resources in an Azure virtual network. A network security group contains <u>security rules</u> that allow or deny inbound network traffic to, or outbound network traffic from, several types of Azure resources. For each rule, you can specify source and destination, port, and protocol.

Reference: https://docs.microsoft.com/en-us/azure/virtual-network/network-security-groups-overview

Question 16:

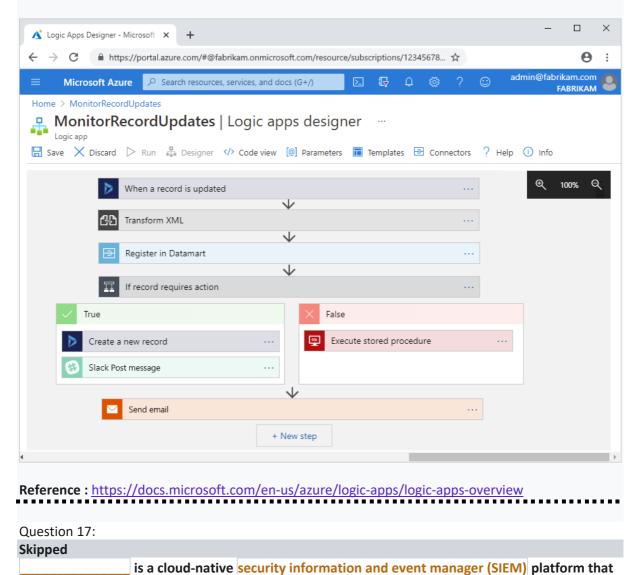
Skipped

Which of the following is a cloud service that helps you schedule, automate, and orchestrate tasks, business processes, and workflows when you need to integrate apps, data, systems, and services across enterprises or organizations?

- Azure Logic Apps (Correct)
- Azure Events Hub
- Azure App Service
- Azure DevOps

Explanation

Azure Logic Apps is a cloud service that helps you schedule, automate, and orchestrate tasks, business processes, and workflows when you need to integrate **apps**, data, systems, and services across enterprises or organizations.



uses built-in AI to help analyse large volumes of data across an enterprise

 Azure Sentinel (Correct)

- Azure Advisor
- Azure Firewall
- Azure Security Center

Explanation

Azure Sentinel is a cloud-native security information and event manager (SIEM) platform that uses built-in AI to help analyse large volumes of data across an enterprise – fast.

Azure Sentinel aggregates data from all sources, including users, applications, servers and devices running on-premises or in any cloud, letting you reason over millions of records in a few seconds. It includes built-in connectors for easy onboarding of popular security solutions. You can collect data from any source with support for open standard formats such as CEF and Syslog.



Collect data at cloud scale – across all users, devices, applications and infrastructure, both on-premises and in multiple clouds



Detect previously uncovered threats and minimise false positives using analytics and unparalleled threat intelligence from Microsoft



Investigate threats with AI and hunt suspicious activities at scale, tapping into decades of cybersecurity work at Microsoft



Respond to incidents rapidly with built-in orchestration and automation of common tasks

Limitless cloud speed and scale

Invest in security, not infrastructure setup and maintenance, with the first cloudnative SIEM from a major cloud service provider. Never let a storage limit or a query limit prevent you from protecting your enterprise. Start using Azure Sentinel immediately, automatically scale to meet your organisational needs and only pay for the resources you need. As a cloudnative SIEM, Azure Sentinel is 48 per cent less expensive and 67 per cent faster to deploy than legacy on-premises SIEMs.

Read the Total Economic Impact™ of Microsoft Azure Sentinel study by Forrester Consulting >



Reference: https://azure.microsoft.com/en-ca/services/azure-sentinel/#product-overview

Question 18:

Skipped

Your Azure account contains several policies and you wish to group/organize them. Which of the following can help you achieve this?

- Resource Groups
- Initiatives (Correct)
- Azure Active Directory
- Network Security Groups

Explanation

An initiative definition is a collection of policy definitions that are tailored towards achieving a singular overarching goal. Initiative definitions simplify managing and assigning policy definitions. They simplify by grouping a set of policies as one single item. For example, you could create an initiative titled Enable Monitoring in Azure Security Center, with a goal to monitor all the available security recommendations in your Azure Security Center.

Reference: https://docs.microsoft.com/en-us/azure/governance/policy/overview#initiative-definition

Question 19:

Skipped

You are the Sr. Project Manager of your organisation and want to make sure that version control is implemented for your upcoming cloud-based project.

Which of the following services can you use on Azure?

- Azure Repos (Correct)
- Azure DevTest Labs

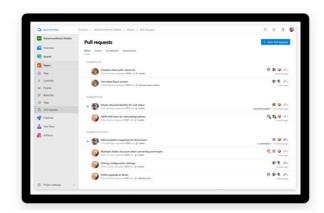
- Azure Databricks
- Azure Quantum

Explanation

You can collaborate on code development using free Git public and private repositories, pull requests, and code review - all included with Azure Repos.

Free private Git repositories, pull requests and code search

Get unlimited private Git repository hosting and support for TFVC that scales from a hobby project to the world's largest repository.



Z

Support for any Git client

Securely connect with and push code into your Git repos from any IDE, editor or Git client.



Web hooks and API integration

Add validations and extensions from the marketplace or build your own using web hooks and REST APIs.



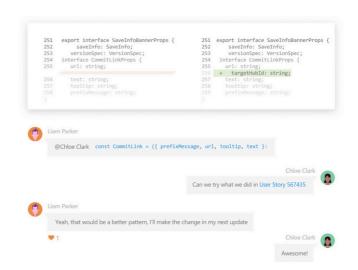
Semantic code search

Quickly find what you're looking for with code-aware search that understands classes and variables.

Kick off your next build from a Repos pull request

Collaborate to build better code

Perform more effective Git code reviews with threaded discussion and continuous integration for each change. Use forks to promote collaboration with inner source workflows.



Reference: https://azure.microsoft.com/en-ca/services/devops/repos/

Question 20:

Skipped

You plan to implement several security services for an Azure environment. You need to identify which Azure services must be used to meet the following security requirements:

1) Monitor threats by using sensors

2) Enforce azure Multi-Factor Authentication (MFA) based on a condition Which Azure service should you identify for each requirement? To answer, select the appropriate option in the answer area. Answer Area Monitor threats by using sensors: Azure Monitor Azure Security Center Azure Active Directory (Azure AD) Identity Protection Azure Advanced Threat Protection (ATP) Enforce Azure MFA based on a condition:

- Azure Advanced Threat Protection, Azure Security Center
- Azure Advanced Threat Protection, Azure Active Directory (Azure AD) Identity Protection (Correct)

Azure Security Center

Azure Active Directory (Azure AD) Identity Protection

Azure Advanced Threat Protection (ATP)

- Azure Monitor, Azure Advanced Threat Protection (ATP)
- Azure Active Directory (Azure AD) Identity Protection, Azure Monitor

Explanation

Azure Advanced Threat Protection can monitor threats using sensors, and Azure Active Directory (Azure AD) Identity Protection can enforce Azure MFA based on conditions!

Microsoft Defender for Identity (formerly Azure Advanced Threat Protection, also known as Azure ATP) is a cloud-based security solution that leverages your on-premises Active Directory signals to identify, detect, and investigate advanced threats, compromised identities, and malicious insider actions directed at your organization.

Defender for Identity enables SecOp analysts and security professionals struggling to detect advanced attacks in hybrid environments to:

- 1) Monitor users, entity behavior, and activities with learning-based analytics
- 2) Protect user identities and credentials stored in Active Directory
- 3) Identify and investigate suspicious user activities and advanced attacks throughout the kill chain
- 4) Provide clear incident information on a simple timeline for fast triage

To secure user sign-in events in **Azure AD**, you can require multi-factor authentication (MFA). Enabling Azure AD Multi-Factor Authentication using Conditional Access policies is the recommended approach to protect users. Conditional Access is an Azure AD Premium P1 or P2 feature that lets you apply rules to require MFA as needed in certain scenarios. To get started using Conditional Access, see <u>Tutorial: Secure user sign-in events with Azure AD Multi-Factor</u> Authentication.

References:

 $\frac{https://docs.microsoft.com/en-us/azure-advanced-threat-protection/atp-architecture}{https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/overview-identity-protection}$

https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-mfa-userstates

Question 21:

Skipped

What should you use to evaluate whether your company's Azure environment meets regulatory requirements?

- Compliance Manager from the Service Trust Portal (Correct)
- The Advisor blade from the Azure portal
- The Knowledge Center website
- The alpha blade from the Azure portal

Explanation

Compliance Manager in the Service Trust Portal is a workflow-based risk assessment tool that helps you track, assign, and verify your organization's regulatory compliance activities related to Microsoft Cloud services, such as Microsoft 365, Dynamics 365, and Azure.

There is nothing called alpha blade in Azure.

References: https://servicetrust.microsoft.com/

Question 22:

Skipped

For the following statement, select Yes if the statement is True, otherwise select No.

It is possible for a company to extend its on-premise compute/storage using the public cloud?

- No
- Yes (Correct)

Explanation

When organizations move workloads and data to the cloud, their on-premises datacenters often continue to play an important role. The term *hybrid cloud* refers to a combination of public cloud and on-premises datacenters, to create an integrated IT environment that spans both. Some organizations use hybrid cloud as a path to migrate their entire datacenter to the cloud over time. Other organizations use cloud services to extend their existing on-premises infrastructure.

 $\textbf{Reference:} \underline{https://docs.microsoft.com/en-us/azure/architecture/data-guide/scenarios/hybrid-on-premises-and-cloud}$

Question 23:

Skipped

Your company plans to move several servers to Azure.

The company's compliance policy states that a server named IronManServer must be on a separate network segment.

You are evaluating which Azure services can be used to meet the compliance policy requirements.

Which Azure solution should you recommend?

- A Virtual network for IronManServer and another virtual network for all the other servers (Correct)
- One resource group for all the servers and a resource lock for IronManServer
- A VPN for IronManServer and a Virtual Network Gateway for each other server
- A resource group for IronManServer and another resource group for all the other servers

Explanation

Networks in Azure are known as virtual networks. A virtual network can have multiple IP address spaces and multiple subnets. Azure automatically routes traffic between different subnets within a virtual network.

The question states that IronManServer must be on a separate network segment. The best way to separate IronManServer from the other servers in networking terms is to place the server in a different virtual network than the other servers.

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

Question 24:

Skipped

You need to configure an Azure solution that meets the following requirements:

- 1) Secures websites from attacks
- 2) Generates reports that contain details of attempted attacks

What should you include in the solution?

- Azure Information Protection
- A network security group (NSG)
- Azure Policies
- DDoS protection (Correct)

Explanation

Distributed denial of service (DDoS) attacks are some of the largest availability and security concerns facing customers that are moving their applications to the cloud. A DDoS attack attempts to exhaust an application's resources, making the application unavailable to legitimate users. DDoS attacks can be targeted at any endpoint that is publicly reachable through the internet.

Every property in Azure is protected by Azure's infrastructure DDoS (Basic) Protection at no additional cost. The scale and capacity of the globally deployed Azure network provides defense against common network-layer attacks through always-on traffic monitoring and real-time mitigation. DDoS Protection Basic requires no user configuration or application changes. DDoS Protection Basic helps protect all Azure services, including PaaS services like Azure DNS.

Azure DDoS Protection Standard, combined with application design best practices, provides enhanced DDoS mitigation features to defend against DDoS attacks. It is automatically tuned to help protect your specific Azure resources in a virtual network. Protection is simple to enable on any new or existing virtual network, and it requires no application or resource changes. It has several advantages over the basic service, including logging, alerting, and telemetry.

Feature	DDoS Protection Basic	DDoS Protection Standard
active traffic monitoring & always on detection	•	•
Automatic attack mitigations	•	•
Availability guarantee		•
Cost Protection		•
Mitigation policies tuned to customers application		•
Metrics & alerts		•
Mitigation reports		•
Mitigation flow logs		•
DDoS rapid response support		•

Reference:

 $\underline{https://docs.microsoft.com/en-us/azure/virtual-network/ddos-protection-overview\#types-of-ddos-attacks-that-ddos-protection-standard-mitigates}$

https://docs.microsoft.com/en-us/azure/ddos-protection/ddos-protection-overview

Question 25:

Skipped

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

From Azure Service Health, an administrator can view the health of all services deployed to an Azure environment and all the other services available in Azure.

- Yes (Correct)
- No

Explanation

Azure Service Health is composed of the following views:

Azure Status provides a global view of the health state of Azure services. With Azure Status, you can get up-to-the-minute information on service availability. Everyone has access to Azure Status and can view all services that report their health state.

Service Health provides you with a customizable dashboard that tracks the state of your Azure services in the regions where you use them. In this dashboard, you can track active events such as ongoing service issues, upcoming planned maintenance, or relevant Health advisories. When events become inactive, they are placed in your Health history for up to 90 days.

Finally, you can use the **Service Health dashboard** to create and manage service Health alerts, which notify you whenever there are service issues that affect you.

Reference: https://docs.microsoft.com/en-us/learn/modules/intro-to-governance/7-monitoring

Question 26:

Skipped

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

Azure Firewall will encrypt the network traffic sent from Azure to the internet.

- No (Correct)
- Yes

Explanation

NO, this is not true! Azure Firewall will **NOT** encrypt the network traffic sent from Azure to the internet.

It's used to mainly filter the traffic.

Azure Firewall is a managed, cloud-based network security service that protects your Azure Virtual Network resources. It's a fully stateful firewall as a service with built-in high availability and unrestricted cloud scalability.

You can centrally create, enforce, and log application and network connectivity policies across subscriptions and virtual networks. Azure Firewall uses a static public IP address for your virtual network resources allowing outside firewalls to identify traffic originating from your virtual network. The service is fully integrated with Azure Monitor for logging and analytics.

To learn about Azure Firewall features, see <u>Azure Firewall features</u>.

 $\textbf{Reference:} \ \underline{https://docs.microsoft.com/en-us/azure/security/azure-security-data-encryption-best-practices\#protect-data-in-transit}$

https://docs.microsoft.com/en-us/azure/firewall/overview

Question 27:

Skipped

What can Azure Information Protection encrypt?

- Network traffic
- An Azure SQL database
- An Azure Storage account
- Documents and email messages (Correct)

Explanation

Azure Information Protection (sometimes referred to as **AIP**) is a cloud-based solution that helps an organization to classify and optionally, protect its documents and emails by applying labels. Labels can be applied automatically by administrators who define rules and conditions, manually by users, or a combination where users are given recommendations.

Reference: https://docs.microsoft.com/en-us/azure/information-protection/what-is-information-protection

Question 28:

Skipped

Which of the following is: An organization that defines all international standards across all industries

- GDPR
- ISO

(Correct)

- SEC
- NIST

Explanation

ISO - The International Organization for Standardization is an international standard-setting body composed of representatives from various national standards organizations. Founded on 23 February 1947, the organization promotes worldwide proprietary, industrial, and commercial standards.

Reference: https://en.wikipedia.org/wiki/International Organization for Standardization

Other Options:

The General Data Protection Regulation (GDPR) is a regulation in EU law on data protection and privacy in the European Union and the European Economic Area. It also addresses the transfer of personal data outside the EU and EEA areas

Reference: https://gdpr-info.eu/

The National Institute of Standards and Technology is a physical sciences laboratory and a non-regulatory agency of the United States Department of Commerce. Its mission is to promote innovation and industrial competitiveness.

Reference: https://www.nist.gov/

SEC - The U.S. Securities and Exchange Commission is a large independent agency of the United States federal government that was created following the stock market crash in the 1930s to protect investors and the national banking system. The primary purpose of the SEC is to enforce the law against market manipulation.

Reference: https://en.wikipedia.org/wiki/U.S. Securities and Exchange Commission

Question 29:

Skipped

Your company makes use of several SQL databases. However, you want increase their efficiency because of varying and unpredictable workloads. Which of the following can help you with this?

- Elastic Pools (Correct)
- Scale Sets
- Resource Tags
- Region Pairs

Explanation

Just like Azure VM Scale Sets are used with VMs, you can use Elastic Pools with Azure SQL Databases!

SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single Azure SQL Database server and share a set number of resources at a set price. Elastic pools in Azure SQL Database enable SaaS developers to optimize the price performance for a group of databases within a prescribed budget while delivering performance elasticity for each database.

Reference: https://docs.microsoft.com/en-us/azure/sql-database/sql-database-elastic-pool

Question 30:

Skipped

Which of the following is: An organization that defines the standards used by the US govt

- GDPR
- Azure Government
- ISC
- NIST (Correct)

Explanation

The National Institute of Standards and Technology (NIST) is a physical sciences laboratory and a non-regulatory agency of the United States Department of Commerce. Its mission is to promote innovation and industrial competitiveness.

Other Options:

ISO - The International Organization for Standardization is an international standard-setting body composed of representatives from various national standards organizations. Founded on 23 February 1947, the organization promotes worldwide proprietary, industrial, and commercial standards.

Reference: https://en.wikipedia.org/wiki/International Organization for Standardization

The General Data Protection Regulation (GDPR) is a regulation in EU law on data protection and privacy in the European Union and the European Economic Area. It also addresses the transfer of personal data outside the EU and EEA areas

Reference: https://gdpr-info.eu/

Azure Government - Azure Government is the mission-critical cloud, delivering breakthrough innovation to US government customers and their partners. Only US federal, state, local and tribal governments and their partners have access to this dedicated instance, operated by screened US citizens. Azure Government offers the broadest level of certifications of any cloud provider to simplify even the most critical government compliance requirements.

Reference: https://azure.microsoft.com/en-in/global-infrastructure/government/get-started/

Reference: https://www.nist.gov/

Question 31:

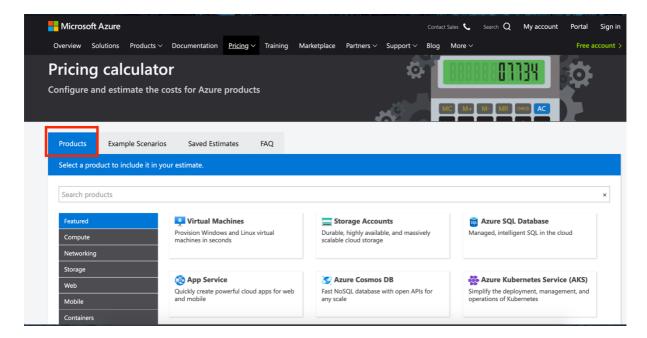
Skipped

Which tab of the Azure pricing calculator would you use to calculate your estimate?

- Estimate
- Machines
- Storage
- Products (Correct)

Explanation

The Products tab allows us to choose certain services, and configure a solution. We then get an estimated cost for deploying our solution.



Reference: https://azure.microsoft.com/en-us/pricing/calculator/

Question 32:

Skipped

For the following statement, select Yes if the statement is True, otherwise select No.

ExpressRoute connections don't go over the public Internet, and they offer more reliability, faster speeds, and lower latencies than typical Internet connections.

- Yes (Correct)
- No

Explanation

Yes, it is true that ExpressRoute connections don't go over the public Internet, and they offer more reliability, faster speeds, and lower latencies than typical Internet connections..

Also, all incoming data into Azure using ExpressRoute is free of charge (as with any other inbound data

transfer to Azure).

Make your connections fast, reliable, and private

Use Azure ExpressRoute to create private connections between Azure datacenters and infrastructure on your premises or in a colocation environment. ExpressRoute connections don't go over the public Internet, and they offer more reliability, faster speeds, and lower latencies than typical Internet connections. In some cases, using ExpressRoute connections to transfer data between onpremises systems and Azure can give you significant cost benefits.

With ExpressRoute, establish connections to Azure at an ExpressRoute location, such as an Exchange provider facility, or directly connect to Azure from your existing WAN network, such as a multiprotocol label switching (MPLS) VPN, provided by a network service provider.





Use a virtual private cloud for storage, backup, and recovery

ExpressRoute gives you a fast and reliable connection to Azure with bandwidths up to 100 Gbps, which makes it excellent for scenarios like periodic data migration, replication for business continuity, disaster recovery, and other high-availability strategies. It can be a cost-effective option for transferring large amounts of data, such as datasets for high-performance computing applications, or moving large virtual machines between your dev-test environment in an Azure virtual private cloud and your on-premises production environments.



Extend and connect your datacenters

Use ExpressRoute to both connect and add compute and storage capacity to your existing datacenters. With high throughput and fast latencies, Azure will feel like a natural extension to or between your datacenters, so you enjoy the scale and economics of the public cloud without having to compromise on network performance.



Build hybrid applications

With predictable, reliable, and high-throughput connections offered by ExpressRoute, build applications that span on-premises infrastructure and Azure without compromising privacy or performance. For example, run a corporate intranet application in Azure that authenticates your customers with an on-premises Active Directory service, and serve all of your corporate customers without traffic ever routing through the public Internet.

Reference: https://azure.microsoft.com/en-us/services/expressroute/#overview

Question 33:

Skipped

Which of the following is: A European policy that defines data privacy & protection

- GDPR (Correct)
- NIST
- ISO
- Azure Goverment

Explanation

The General Data Protection Regulation (GDPR) is a regulation in EU law on data protection and privacy in the European Union and the European Economic Area. It also addresses the transfer of personal data outside the EU and EEA areas

Reference: https://gdpr-info.eu/

Other options:

ISO - The International Organization for Standardization is an international standard-setting body composed of representatives from various national standards organizations. Founded on 23 February 1947, the organization promotes worldwide proprietary, industrial, and commercial standards.

Reference: https://en.wikipedia.org/wiki/International Organization for Standardization

NIST - The National Institute of Standards and Technology is a physical sciences laboratory and a non-regulatory agency of the United States Department of Commerce. Its mission is to promote innovation and industrial competitiveness.

Reference: https://en.wikipedia.org/wiki/National Institute of Standards and Technology

Azure Government - Azure Government is the mission-critical cloud, delivering breakthrough innovation to US government customers and their partners. Only US federal, state, local and tribal governments and their partners have access to this dedicated instance, operated by screened US citizens. Azure Government offers the broadest level of certifications of any cloud provider to simplify even the most critical government compliance requirements.

Reference: https://azure.microsoft.com/en-in/global-infrastructure/government/get-started/

Question 34:

Skipped

You have an existing Azure virtual network named VNET1 in a resource group named RG1 since a long time.

You now assign an Azure policy specifying that virtual networks are not an allowed resource type in RG1.

VNET1 is deleted automatically.

Instructions: Review the bolded text. If the statement is already correct, select "No change is needed". If the statement is incorrect, select the answer choice that makes the statement correct.

- continues to function normally (Correct)
- is now a read-only object
- is moved automatically to another resource group
- No change is needed

Explanation

VNET1 will continue to work normally. But you cannot create more networks.

Always remember that NOTHING EVER GETS DELETED BEFORE ASKING YOU FIRST.

Reference: https://docs.microsoft.com/en-us/azure/governance/policy/concepts/effects

Question 35:

Skipped

Which of the following services allows you to easily run popular open source frameworks including Apache Hadoop, Spark, and Kafka for open source analytics?

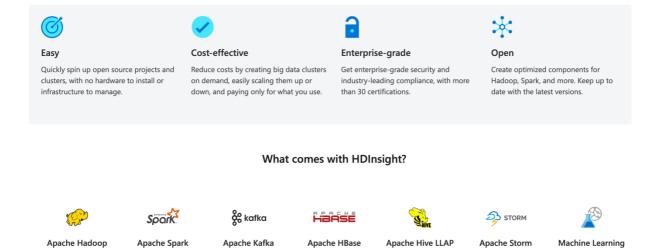
{Important question please read the answer for this after the test}

- Azure Cognitive Services
- Azure Data Lake Analytics
- Azure Cosmos DB
- Azure HDInsight (Correct)

Explanation

VERY IMPORTANT!

We can easily run popular open source frameworks—including Apache Hadoop, Spark, and Kafka—using Azure HDInsight, a cost-effective, enterprise-grade service for open source analytics. Effortlessly process massive amounts of data and get all the benefits of the broad open source ecosystem with the global scale of Azure.



Many people get confused between Azure HDInsight and Azure Databricks -

- 1) Azure HDInsight brings both Hadoop and Spark under the same umbrella and enables enterprises to manage both using the same set of tools e.g. using Ambari, Apache Ranger etc. It also offers industry standard notebook experience with support for both Jupyter and Zeppelin notebooks. Enterprises that want this ease of manageability across all their big data workloads can choose to use HDInsight.
- 2) Azure Databricks is a premium Spark offering that is ideal for customers who want their data scientists to collaborate easily and run their Spark based workloads efficiently and at industry leading performance.

Azure Databricks is an Apache Spark-based analytics platform optimized for the Microsoft Azure cloud services platform. For more details, refer to <u>Azure Databricks Documentation</u>.

Reference: https://docs.microsoft.com/en-us/answers/questions/26097/can-anyone-please-post-the-differences-between-azu.html

Question 36:

Skipped

For the following statement, select Yes if the statement is True, otherwise select No.

All the data copied to an Azure Storage account is automatically backed up to another Azure Data Center

- No (Correct)
- Yes

Explanation

Automatically is the key word in this question that many people miss.

Data is **not** backed up **automatically** to another Azure Data Center, although it can be depending on the replication option configured for the account. Locally Redundant Storage (**LRS**) is the default which maintains three copies of the data in the data center.

Geo-redundant storage (**GRS**) has cross-regional replication to protect against regional outages. Data is replicated synchronously three times in the primary region, then replicated asynchronously to the secondary region.

Reference: https://docs.microsoft.com/en-us/azure/storage/common/storage-account-overview

Question 37:

Skipped

You have an Azure environment. You need to create a new Azure virtual machine from an Android laptop.

Solution: You use the PowerApps portal.

Does this meet the goal?

- Yes
- No (Correct)

Explanation

Tricky question, no? Powershell is different from PowerApps!

PowerApps isn't a part of Azure!

Hence, this statement is automatically False. You can use the Azure portal to provision Virtual Machines, or even the CLI.

Reference: https://docs.microsoft.com/en-us/azure/virtual-machines/windows/quick-create-portal

Question 38:

Skipped

For the following statement, select Yes if the statement is True, otherwise select No.

The knowledge center is a paid service.

- Yes
- No (Correct)

Explanation

The knowledge center is a free service offered by Azure. There is no cost associated with it. You can get answers to common questions, and even filter by product to limit the results!

Reference: https://azure.microsoft.com/en-ca/resources/knowledge-center/

Question 39:

Skipped

Your company plans to migrate all its data and resources to Azure.

The company's migration plan states that only **Platform as a Service (PaaS)** solutions must be used in Azure.

You need to deploy an Azure environment that supports the planned migration.

Solution: You create an Azure App Service and Azure Storage accounts.

Does this meet the goal?

- Yes
- No (Correct)

Explanation

Azure Storage Accounts are laaS. Hence, this solution is unacceptable.

PaaS as Microsoft says 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/

Question 40:

Skipped

From **Azure Active Directory**, you can view which user turned off a specific virtual machine during the last 14 days.

Instructions: Review the bolded text. If the statement is already correct, select "No change is needed". If the statement is incorrect, select the answer choice that makes the statement correct.

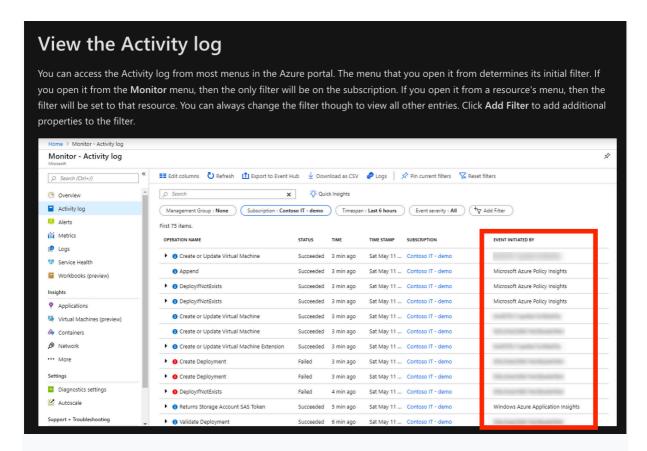
- Azure Service Health
- Azure Event Hubs
- Azure Activity Log (Correct)
- No change is needed

Explanation

The Activity log is a <u>platform log</u> in Azure that provides insight into subscription-level events. This includes such information as when a resource is modified or when a virtual machine is started. You can view the Activity log in the Azure portal or retrieve entries with PowerShell and CLI. For additional functionality, you should create a diagnostic setting to send the Activity log to <u>Azure Monitor Logs</u>, to Azure Event Hubs to forward outside of Azure, or to Azure Storage for archiving.

Through **Activity logs**, you can determine:

- 1) What operations were taken on the resources in your subscription
- 2) Who started the operation
- 3) When the operation occurred
- 4) The status of the operation
- 5) The values of other properties that might help you research the operation



Reference: https://docs.microsoft.com/en-us/azure/azure-monitor/essentials/activity-log

Question 41:

Skipped

Your new startup experiences very high volume of traffic during the last week of each month but low traffic during the first 3 weeks. Which benefit of using Azure would you have in this scenario over an on-premise setup?

- Load Balancing
- High Availibility
- Low Latency
- Elasticity (Correct)

Explanation

Elastic computing is the ability to quickly expand or decrease computer processing, memory, and storage resources to meet changing demands without worrying about capacity planning and engineering for peak usage. Typically controlled by system monitoring tools, elastic computing matches the amount of resources allocated to the amount of resources actually needed without disrupting operations.

With cloud elasticity, your company would avoid paying for unused capacity or idle resources and you don't have to worry about investing in the purchase or maintenance of additional resources and equipment.

References: https://azure.microsoft.com/en-us/overview/what-is-elastic-computing/

Question 42: Skipped and network continues we

is made up of one or more datacenters equipped with independent power, cooling, and networking. It is set up to be an *isolation boundary*. If one zone goes down, the other continues working.

- Availability Zone (Correct)
- Scale Set
- Region
- Database racks

Explanation

From the official Azure documentation:

What is an Azure region?

^

An Azure region is a set of datacenters, deployed within a latency-defined perimeter and connected through a dedicated regional low-latency network.

With more global regions than any other cloud provider, Azure gives customers the flexibility to deploy applications where they need. An Azure region has discrete pricing and service availability.

What is an Azure datacenter?



Azure datacenters are unique physical buildings—located all over the globe—that house a group of networked computer servers.

What are Azure Availability Zones?



Azure Availability Zones are unique physical locations within an Azure region and offer high availability to protect your applications and data from datacenter failures. Each zone is made up of one or more datacenters equipped with independent power, cooling, and networking.

The physical separation of availability zones within a region protects apps and data from facility-level issues. Zone-redundant services replicate your apps and data across Azure Availability Zones to protect from single points of failure.

Reference: https://docs.microsoft.com/en-us/azure/availability-zones/az-overview

Question 43:

Skipped

Which Azure service allows you to configure fine-grain management for Azure resources and grant users ONLY the rights they need to perform their job?

- Locks
- Azure Resource Groups

- Role Based Access Control (RBAC) (Correct)
- Azure Policies

Explanation

Access management for cloud resources is a critical function for any organization that is using the cloud. Azure role-based access control (Azure RBAC) helps you manage who has access to Azure resources, what they can do with those resources, and what areas they have access to.

Azure RBAC is an authorization system built on <u>Azure Resource Manager</u> that provides fine-grained access management of Azure resources.

What can I do with Azure RBAC?

Here are some examples of what you can do with Azure RBAC:

- 1) Allow one user to manage virtual machines in a subscription and another user to manage virtual networks
- 2) Allow a DBA group to manage SQL databases in a subscription
- 3) Allow a user to manage all resources in a resource group, such as virtual machines, websites, and subnets
- 4) Allow an application to access all resources in a resource group

How Azure RBAC works

The way you control access to resources using Azure RBAC is to assign Azure roles. This is a key concept to understand – it's how permissions are enforced. A role assignment consists of three elements: security principal, role definition, and scope.

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

Question 44:

Skipped

Your company policy states that administrators must only be allowed to create additional Azure resources in a region, in the country where their office is located.

You need to create the Azure resource that must be used to meet the policy requirement.

What should you create?

- An Azure policy (Correct)
- A management group
- A read-only lock
- A reservation

Explanation

Azure Policy is a service in Azure which allows you create polices which enforce and control the properties of a resource. When these policies are used they enforce different rules and effects over your resources, so those resources stay compliant with your IT governance standards.

Reference: https://docs.microsoft.com/en-us/azure/governance/policy/overview

Question 45:

Skipped

You plan to deploy several Azure virtual machines.

You need to ensure that the services running on the virtual machines are available if a single data center fails.

Solution: You deploy the virtual machines to two or more scale sets.

Does this meet the goal?

- No (Correct)
- Yes

Explanation

Azure virtual machine **scale sets** let you create and manage a group of identical, load balanced VMs. An **availability set** consists of a set of discrete VMs which have their own names and individual properties, but are spread across fault domains, which means when you have more than one VM in a set it reduces the chances of losing all your VMs in event of a hardware failure in the host or rack.

Question 46:

Skipped

Which of the following are valid Azure purchasing options?

- Microsoft representative
 - (Correct)
- Github website
- Azure website
 - (Correct)
- Microsoft Partner (Correct)

Explanation

You can choose the purchasing option that works best for your organisation. Or, use any of the options simultaneously.

Purchase Azure directly from Microsoft

Get the same Azure pricing whether you create an account through the Azure website or your Microsoft representative.

- Get a monthly bill from Microsoft for the Azure services you consume.
- Have the option to choose a Microsoft support plan for Azure.
- Be able to manage your Azure deployments and usage yourself or engage a partner to do this for you.

Use Azure as part of a managed service from a Microsoft partner

Microsoft Cloud Solution Provider (CSP) partners offer a range of complete managed cloud solutions for Azure.

- Get your bill from and pay for Azure usage through your CSP.
- Get support for Azure through your CSP.
- Work with your CSP for Azure provisioning, deployment and usage management.

Purchase through the Azure website

The fastest and easiest way for organisations of all sizes to pay for using Azure.

Learn more

Purchase through your Microsoft representative

Intended for large organisations or customers who already have a Microsoft representative.

Contact us

Reference: https://azure.microsoft.com/en-ca/pricing/purchase-options/

Question 47:

Skipped

China East and China North are regions wherein Microsoft doesn't directly maintain datacenters as a result of its partnership with

- Alibaba
- Morgan Stanley
- 21Vianet (Correct)
- Xiaomi

Explanation

Microsoft Azure operated by 21Vianet is the first international public cloud service that has been commercialized in China in compliance with Chinese laws and regulations.

Reference: https://docs.azure.cn/en-us/articles/azure-china-purchasing-guidance/

Question 48:

Skipped

Which of the following is a good usage of tags?

- Using tags to store department and environment association
- Using tags to associate costs with the resources
- Using tags with Azure automation to schedule maintenance windows
- All of these (Correct)

Explanation

All of the above can help leverage the power of tags in one way or the other.

You apply tags to your Azure resources, resource groups, and subscriptions to logically organize them into a taxonomy. Each tag consists of a name and a value pair. For example, you can apply the name "Environment" and the value "Production" to all the resources in production.

Tags and billing

You can use tags to group your billing data. For example, if you're running multiple VMs for different organizations, use the tags to group usage by cost center. You can also use tags to categorize costs by runtime environment, such as the billing usage for VMs running in the production environment.

You can retrieve information about tags by downloading the usage file, a comma-separated values (CSV) file available from the Azure portal. For more information, see Download or view your Azure billing invoice and daily usage data. When downloading the usage file from the Azure Account Center, select **Version 2**. For services that support tags with billing, the tags appear in the **Tags** column.

For REST API operations, see Azure Billing REST API Reference.

Limitations

The following limitations apply to tags:

- Not all resource types support tags. To determine if you can apply a tag to a resource type, see Tag support for Azure resources.
- Each resource, resource group, and subscription can have a maximum of 50 tag name/value pairs. If you need to apply more tags than the maximum allowed number, use a JSON string for the tag value. The JSON string can contain many values that are applied to a single tag name. A resource group or subscription can contain many resources that each have 50 tag name/value pairs.
- The tag name is limited to 512 characters, and the tag value is limited to 256 characters. For storage accounts, the tag name is limited to 128 characters, and the tag value is limited to 256 characters.
- Tags can't be applied to classic resources such as Cloud Services.
- Tag names can't contain these characters: <, >, %, &, \, ?, /

To learn even more about this: https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/decision-guides/resource-tagging/?toc=/azure/azure-resource-manager/management/toc.json

Question 49:

Skipped

For the following statement, select Yes if the statement is True, otherwise select No.

Azure resources can ONLY access other resources in the same resource group?

- True
- False (Correct)

Explanation

A resource CAN interact with resources in other resource groups. See last point below:

Resource groups

There are some important factors to consider when defining your resource group:

- All the resources in your group should share the same lifecycle. You deploy, update, and delete them together. If one resource, such as a database server, needs to exist on a different deployment cycle it should be in another resource group.
- Each resource can only exist in one resource group.
- Some resources can exist outside of a resource group. These resources are deployed to the <u>subscription</u>, <u>management group</u>, or <u>tenant</u>. Only specific resource types are supported at these scopes.
- You can add or remove a resource to a resource group at any time.
- You can move a resource from one resource group to another group. For more information, see Move resource group or subscription.
- A resource group can contain resources that are located in different regions.
- A resource group can be used to scope access control for administrative actions.
- A resource can interact with resources in other resource groups. This interaction is common when the two resources are related but don't share the same lifecycle (for example, web apps connecting to a database).

Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/overview#resource-groups

Question 50:

Skipped

Your on-premise network contains an Active Directory forest. The forest contains 5,000 user accounts.

Your company plans to migrate all network resources to Azure and to decommission the onpremise data center.

You need to recommend a solution to minimize the impact on users after the planned migration.

What should you recommend?

- Sync all the Active Directory user accounts to Azure Active Directory (Azure AD) (Correct)
- Create a guest user account in Azure Active Directory (Azure AD) for each user
- Implement Azure Multi-Factor Authentication (MFA)
- Instruct all users to change their password

Explanation

Azure Active Directory Domain Services (Azure AD DS) provides a sign-in experience for legacy, on-premises, line-of-business applications. Users, groups, and password hashes of on-premises and cloud users are synchronized to the Azure AD DS managed domain. These synchronized password hashes are what gives users a single set of credentials they can use for the on-premises AD DS, Microsoft 365, and Azure Active Directory.

Although secure and provides additional security benefits, some organizations can't synchronize those user passwords hashes to Azure AD or Azure AD DS. Users in an organization may not know their password because they only use smart card authentication. These limitations prevent some organizations from using Azure AD DS to lift and shift on-premises classic applications to Azure. To address these needs and restrictions, you can create a managed domain that uses a resource forest. This conceptual article explains what forests are, and how they trust other resources to provide a secure authentication method.

What are forests?

A *forest* is a logical construct used by Active Directory Domain Services (AD DS) to group one or more *domains*. The domains then store objects for user or groups, and provide authentication services.

In an Azure AD DS managed domain, the forest only contains one domain. On-premises AD DS forests often contain many domains. In large organizations, especially after mergers and acquisitions, you may end up with multiple on-premises forests that each then contain multiple domains.

MFA is to use your phone or a secondary phase of authentication. You need to move users to Azure not reset their passwords, so Instruct all users to change their password is invalid.

Create a guest user account in Azure Active Directory (Azure AD) for each user - If you do that, its like creating a new user for the existing user, so the identities will be different.

The answer is B. Sync all the Active Directory user accounts to Azure Active Directory (Azure AD)

Reference: https://docs.microsoft.com/en-us/azure/active-directory-domain-services/concepts-resource-forest

Question 51:

Skipped

For the following statement, select Yes if the statement is True, otherwise select No.

If you assign a tag to a resource group, all resources inside it inherit the tag

- Yes
- No (Correct)

Explanation

Important question!

Tags applied to the resource group or subscription aren't inherited by the resources. To apply tags from a subscription or resource group to the resources, see <u>Azure Policies - tags</u>.

Inherit tags

Tags applied to the resource group or subscription aren't inherited by the resources. To apply tags from a subscription or resource group to the resources, see Azure Policies - tags.

Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/tag-resources

Question 52:

Skipped

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

From Azure Service Health, an administrator can create a rule to be alerted if an Azure service fails.

- No
- Yes (Correct)

Explanation

Service Health provides you with a customizable dashboard that tracks the state of your Azure services in the regions where you use them. In this dashboard, you can track active events such as ongoing service issues, upcoming planned maintenance, or relevant Health advisories. When events become inactive, they are placed in your Health history for up to 90 days.

The best way to use Service Health is to set up Service Health alerts to notify you via your preferred communication channels when service issues, planned maintenance, or other changes may affect the Azure services and regions you use.

Reference: https://docs.microsoft.com/en-us/learn/modules/intro-to-governance/7-monitoring

Question 53:

Skipped

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

If you implement the security recommendations provided by Azure Advisor, your company's secure score will increase.

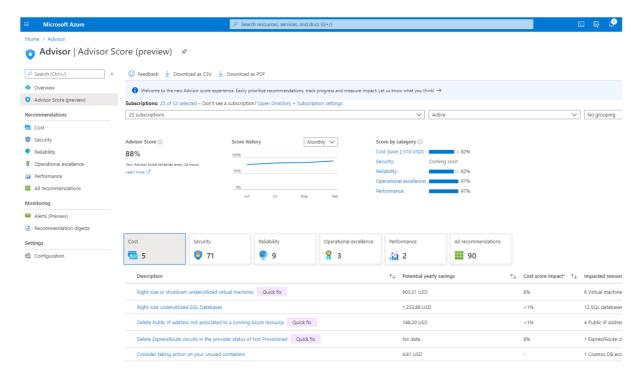
- Yes (Correct)
- No

Explanation

Azure Advisor provides relevant best practices to help you improve <u>reliability</u>, <u>security</u> and <u>performance</u>, achieve <u>operational excellence</u> and <u>reduce</u> <u>costs</u>. <u>Configure Advisor</u> to target specific subscriptions and resource groups, to focus on critical optimisations.

We are aiming for an overall secure score of 100%, and the secure score **INCREASES** when we implement the recommendations.

Hence, the answer is yes.



Reference: https://azure.microsoft.com/en-ca/services/advisor/#security

Question 54:

Skipped

Which of the following features/services can you use to to monitor your live applications and automatically detect performance anomalies?

- DevTest Labs
- Resource Groups
- Cognitive Services
- Application Insights (Correct)

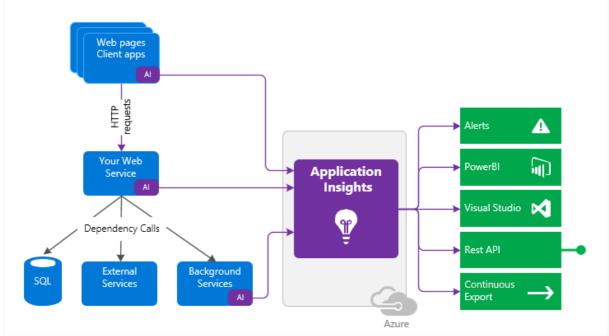
Explanation

Application Insights, a feature of <u>Azure Monitor</u>, is an extensible Application Performance Management (APM) service for developers and DevOps professionals. Use it to monitor your live applications. It will automatically detect performance anomalies, and includes powerful analytics tools to help you diagnose issues and to understand what users actually do with your app. It's designed to help you continuously improve performance and usability. It works for apps on a wide variety of platforms including .NET, Node.js, Java, and Python hosted on-premises, hybrid, or any public cloud. It integrates with your DevOps process, and has connection points to a variety of development tools. It can monitor and analyze telemetry from mobile apps by integrating with Visual Studio App Center.

How does Application Insights work?

You install a small instrumentation package (SDK) in your application or enable Application Insights using the Application Insights Agent when <u>supported</u>. The instrumentation monitors your app and directs the telemetry data to an Azure Application Insights Resource using a unique GUID that we refer to as an Instrumentation Key.

You can instrument not only the web service application, but also any background components, and the JavaScript in the web pages themselves. The application and its components can run anywhere it doesn't have to be hosted in Azure.



In addition, you can pull in telemetry from the host environments such as performance counters, Azure diagnostics, or Docker logs. You can also set up web tests that periodically send synthetic requests to your web service.

All these telemetry streams are integrated into Azure Monitor. In the Azure portal, you can apply powerful analytic and search tools to the raw data.

Reference: https://docs.microsoft.com/en-us/azure/azure-monitor/app/app-insights-overview

Question 55:

Skipped

For the following statement, select Yes if the statement is true. Otherwise, select

No.

Azure Advisor can generate a list of Azure Virtual Machines that are protected by Azure backup.

- Yes
- No (Correct)

Explanation

Azure Advisor can generate a list of VM's **NOT** protected by backup.

Reference: https://docs.microsoft.com/en-us/azure/advisor/advisor-overview

Question 56:

Skipped

Which of the following tools can be used to manage Azure resources on MacOS?

Note: Each correct selection is worth one point

- Azure Portal
 - (Correct)
- Azure Cloudshell
 - (Correct)
- Azure CLI
 - (Correct)
- Azure Powershell (Correct)

Explanation

All of the above can be used to manage Azure resources on a MacOS based system!

Azure Portal - Available for all Operating Systems

Azure CLI - Available for MacOS, Windows and Linux

Azure Powershell - Available to install on MacOS, Windows, Linux, Docker, and Arm (Subset of Azure Cloudshell)

Azure Cloudshell - Azure Cloud Shell is an interactive, authenticated, browser-accessible shell for managing Azure resources. It provides the flexibility of choosing the shell experience that best suits the way you work, either **Bash or PowerShell**.

Reference: https://docs.microsoft.com/en-us/powershell/scripting/install/installing-powershell-core-on-macos?view=powershell-7

https://docs.microsoft.com/en-us/azure/cloud-shell/overview

https://docs.microsoft.com/en-us/cli/azure/install-azure-cli-macos

Question 57:

Skipped

Which of the following is the strongest way to protect sensitive customer data?

- Don't store sensitive data at all.
- Encrypt the data in transit.
- Encrypt the data at rest.
- Encrypt the data both at rest and in transit. (Correct)

Explanation

To help protect data in the cloud, you need to account for the possible states in which your data can occur, and what controls are available for that state. Best practices for Azure data security and encryption relate to the following data states:

- **1) At rest:** This includes all information storage objects, containers, and types that exist statically on physical media, whether magnetic or optical disk.
- **2) In transit:** When data is being transferred between components, locations, or programs, it's in transit. Examples are transfer over the network, across a service bus (from on-premises to cloud and vice-versa, including hybrid connections such as ExpressRoute), or during an input/output process.

Reference: https://docs.microsoft.com/en-us/azure/security/fundamentals/data-encryption-best-practices

Question 58:

Skipped

What is network latency?

- The maximum amount of data that can travel over the network
- The cost incurred by the data travelling over the network
- The time it takes for data to travel over the network (Correct)
- The distance the data travel over the network

Explanation

Network latency is the time it takes for data or a request to go from the source to the destination. Latency in networks is measured in **milliseconds**.

You can run latency speed tests to Azure using this link: https://www.azurespeed.com/Azure/Latency

Question 59:

Skipped

You want to implement a solution involving basic Artificial Intelligence (AI) but don't have the necessary knowledge / background to implement this solution.

Which of the following offerings would be the *best* choice for you?

- Azure Active Directory
- Azure Machine Learning Studio
- Azure Cognitive Services (Correct)
- Azure DevOps

Explanation

What is Azure Cognitive Services?

Cognitive Services bring AI within reach of every developer— without requiring machine-learning expertise. All it takes is an API call to embed the ability to see, hear, speak, search, understand, and accelerate decision-making into your apps.

Reference: https://azure.microsoft.com/en-us/services/cognitive-services/

Question 60:

Skipped

Which of the following Azure Storage would you use to store different types of files such as videos, audios, text in a highly cost effective and scalable manner?

- Azure SQL Database
- Azure Cosmos DB
- Azure PostgreSQL
- Azure Blob Storage (Correct)

Explanation

A blob is a binary, large object and a storage option for any type of data that you want to store in a binary format. Learn about <u>blob types</u>.

Azure Blob storage is Microsoft's object storage solution for the cloud. Blob storage is optimized for storing massive amounts of unstructured data. Unstructured data is data that doesn't adhere to a particular data model or definition, such as text or binary data.

Blob storage is designed for:

- 1) Serving images or documents directly to a browser.
- 2) Storing files for distributed access.
- 3) Streaming video and audio.
- 4) Writing to log files.
- 5) Storing data for backup and restore, disaster recovery, and archiving.
- 6) Storing data for analysis by an on-premises or Azure-hosted service.

Reference: https://azure.microsoft.com/en-us/services/storage/blobs/#security