Question 1: **Correct**
What is the new data privacy and information protection regulation that took effect across Europe in May 2018?

Select the correct option.

- **GDPR**

  (Correct)

- **ISO**

- **FedRAMP**

- **PCI DSS**

Explanation
Keywords: *Europe, data privacy, information protection => GDPR*

Correct answer is option ***GDPR***

The General Data Protection Regulation (GDPR) introduces new rules for organizations that offer goods and services to people in the European Union (EU), or that collect and analyze data for EU residents no matter where you or your enterprise are located.
Reference: https://docs.microsoft.com/en-us/microsoft-365/compliance/gdpr

Other options are not correct.

Option ***ISO*** is incorrect - *The International Organization for Standardization (ISO)* is an independent non-governmental organization and the world's largest developer of voluntary international standards. ISO facilitates world trade by providing common standards among nations.
Reference: https://docs.microsoft.com/en-us/microsoft-365/compliance/offering-iso-27001

Option ***PCI DSS*** is incorrect - *The Payment Card Industry (PCI) Data Security Standards (DSS)* is a global information security standard designed to prevent fraud through increased control of credit card data. Organizations of all sizes must follow PCI DSS standards if they accept payment cards from the five major credit card brands — Visa, MasterCard, American Express, Discover, and the Japan Credit Bureau (JCB).
Reference: https://docs.microsoft.com/en-us/microsoft-365/compliance/offering-pci-dss

Option ***FedRAMP*** is incorrect - *The US Federal Risk and Authorization Management Program (FedRAMP)* was established to provide a standardized approach for assessing, monitoring, and authorizing cloud computing products and services under the Federal Information Security Management Act (FISMA), and to accelerate the adoption of secure cloud solutions by federal agencies.
Reference: https://docs.microsoft.com/en-us/microsoft-365/compliance/offering-fedramp

Question 2: **Correct**
You need to ensure that when Azure Active Directory (Azure AD) users connect to Azure AD from the Internet by using an anonymous IP address, the users are prompted automatically to change their password.

Which Azure service should you use?

- **Azure AD Privileged Identity Management**
- **Azure AD Connect Health**
- **Azure AD Identity Protection**

  (Correct)
- **Azure Advanced Threat Protection (ATP)**

Explanation
Correct answer is option ***Azure AD Identity Protection***

Azure Active Directory (Azure AD) Identity Protection allows you to detect potential vulnerabilities affecting your organization's **identities**, **configure automated responses, and** investigate incidents. The risk signals can trigger remediation efforts such as requiring users to perform Azure Multi-Factor Authentication, **reset their password** using the self-service password reset, or blocking until an administrator takes action.
Reference: https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/howto-identity-protection-configure-risk-policies

Other options are not correct.

Option ***Azure Advanced Threat Protection (ATP)*** is incorrect - *Azure Advanced Threat Protection (ATP)* is a security solution that identifies, detects, and helps you investigate advanced threats, compromised identities, and malicious insider actions directed at your organization.
Reference: https://docs.microsoft.com/en-us/azure-advanced-threat-protection/what-is

Option ***Azure AD Privileged Identity Management*** is incorrect - *Azure AD Privileged Identity Management (PIM)* is a service in Azure Active Directory (Azure AD) that enables you to manage, control, and monitor access to important resources in your organization.
Reference: https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-configure

Option ***Azure AD Connect Health*** is incorrect - *Azure Active Directory (Azure AD) Connect Health* provides robust monitoring of your on-premises identity infrastructure. It enables you to maintain a reliable connection to Microsoft 365 and Microsoft Online Services. This reliability is achieved by providing monitoring capabilities for your key identity components.
Reference:https://docs.microsoft.com/en-us/azure/active-directory/hybrid/whatis-azure-ad-connect

Question 3: **Correct**

```
1.      Exam notes:
2.      - This question requires you to evaluate the text inside [ ] to determine if it is
        correct
3.      - Select "No change needed" if the above statement is correct, otherwise select the
        correct answer.
```

In Azure, approved preview features are referred to as [*Public Available*]

- **No change needed**
- **Go-forward**
- **General Available (GA)**

  (Correct)
- **Licensed**

Explanation
Keywords: *approved preview => GA*

Correct answer is option ***General Available (GA)***

Once a feature is evaluated and tested successfully, it may release to customers as part of Azure. In other words, the feature may be made available for all Azure customers. A feature released to all Azure customers typically goes to ***General Availability or GA.***
Reference: https://azure.microsoft.com/en-in/support/legal/preview-supplemental-terms/

Other options are not correct as Public Available, Go-forward and Licensed are not valid phases.

Question 4: **Correct**

```
1.      Exam notes:
2.      - Drag the appropriate term from the row on the top to its description on the botto
        m.
3.      - Udemy does not support drag & drop, but in the actual exam, you will be allowed.
4.      - Each correct selection is worth one point in the main exam.
```

Economies of scale	Capital Expenditure (CapEx)	Operational Expenditure (OpEx)	Consumption-based model

	allows end-users only pay for the resources that they use
	there is no upfront cost, as you pay for a service or product as you use it
	is the upfront spending of money on physical infrastructure, and then deducting that upfront expense over time
	is the ability to reduce costs and gain efficiency when operating at a larger scale

- ○

Economies of scale **- allows end-users only pay for the resources that they use**
Capital Expenditure (CapEx) **- There is no upfront cost, as you pay for a service or product as you use it**
Operational Expenditure (OpEx) **- is the upfront spending of money on physical infrastructure, and then deducting that upfront expense over time**
Consumption-based model **- is the ability to reduce costs and gain efficiency when operating at a larger scale**

- ◉

Economies of scale **- is the ability to reduce costs and gain efficiency when operating at a larger scale**
Capital Expenditure (CapEx) **- is the upfront spending of money on physical infrastructure, and then deducting that upfront expense over time**
Operational Expenditure (OpEx) **- There is no upfront cost, as you pay for a service or product as you use it**
Consumption-based model **- allows end-users only pay for the resources that they use**

(Correct)

- ○

Economies of scale **- is the ability to reduce costs and gain efficiency when operating at a larger scale**
Capital Expenditure (CapEx) **- allows end-users only pay for the resources that they use**

Operational Expenditure (OpEx) **- is the upfront spending of money on physical infrastructure, and then deducting that upfront expense over time**
Consumption-based model **- There is no upfront cost, as you pay for a service or product as you use it**

- 

Economies of scale **- allows end-users only pay for the resources that they use**
Capital Expenditure (CapEx) **- is the upfront spending of money on physical infrastructure, and then deducting that upfront expense over time**
Operational Expenditure (OpEx) **- There is no upfront cost, as you pay for a service or product as you use it**
Consumption-based model **- is the ability to reduce costs and gain efficiency when operating at a larger scale**

Explanation
Correct answer is option
Economies of scale - is the ability to reduce costs and gain efficiency when operating at a larger scale
Capital Expenditure (CapEx) - is the upfront spending of money on physical infrastructure, and then deducting that upfront expense over time
Operational Expenditure (OpEx) - There is no upfront cost, as you pay for a service or product as you use it
Consumption-based model - allows end-users only pay for the resources that they use

Detailed explanation:

Economies of scale is the ability to reduce costs and gain efficiency when operating at a larger scale in comparison to operating at a smaller scale. Cloud providers such as Microsoft, Google, and Amazon are large businesses and are able to leverage the benefits of economies of scale, and then pass those benefits on to their customers.
Reference: https://www.microsoft.com/en-au/microsoft-365/business-insights-ideas/resources/how-economies-of-scale-affect-small-businesses

Capital Expenditure (CapEx) is the upfront spending of money on physical infrastructure and then deducting that upfront expense over time. The upfront cost from CapEx has a value that reduces over time.
Reference: https://docs.microsoft.com/en-us/azure/architecture/cloud-adoption/business-strategy/financial-models

Operational Expenditure (OpEx) is spending money on services or products now and being billed for them now. You can deduct this expense in the same year you spend it. There is no upfront cost, as you pay for a service or product as you use it.
Reference: https://docs.microsoft.com/en-us/azure/architecture/cloud-adoption/business-strategy/financial-models

Consumption-based model allows end-users only to pay for the resources that they use. Whatever they use is what they pay for.

Other options are not correct.

Question 5: **Incorrect**
Which of the following statements regarding Azure Government service is correct?

Select the correct option.

- **Only network connectivity through ExpressRoute is allowed.**
- **There are more reserved subnet IP addresses than with standard Azure subnets.**
- **Separate Data centers are used**

  (Correct)
- **Standard Azure data centers are used.**

  (Incorrect)

Explanation
Correct answer is option ***Separate Data centers are used***

Microsoft Azure Government provides world-class security, protection, and compliance services for US government agencies or their partners. ***Azure***

Government delivers a dedicated cloud (using separate data centers) enabling government agencies and their partners to transform mission-critical workloads to the cloud.
Reference: https://docs.microsoft.com/en-us/azure/azure-government/documentation-government-welcome

Other options are not correct.

Question 6: **Correct**
Which term in Azure is most closely related to "Serverless Computing"?

Select the correct option.

- **Operating System**
- **Hypervisor**
- **Virtual Machine**
- **Managed Service**

  (Correct)

Explanation
Correct answer is option ***Managed Service***

Serverless computing enables developers to build applications faster by eliminating the need for them to manage infrastructure. With serverless applications, the cloud service provider automatically provisions, scales and **manages the infrastructure** required to run the code.

Reference: https://azure.microsoft.com/en-us/overview/serverless-computing/

Other options are not correct.

Question 7: **Incorrect**
How can the IT department ensure that employees at the company's retail stores can access company applications only from approved tablet devices?

Select the correct option.

- **Multifactor authentication**

  (Incorrect)

- **SSO**

- **Azure Policy**

- **Conditional Access**

  (Correct)

Explanation
Correct answer is option ***Conditional Access***

Conditional Access enables you to require users to access your applications only from approved or managed, devices.

Other options are not correct.

Option ***SSO*** is incorrect - Although SSO enables a user to remember only one ID and one password to access multiple applications, it doesn't verify the device that's trying to access each application.

Option ***Multifactor authentication*** is incorrect - Multifactor authentication provides additional security for your identities, but it doesn't verify the device that's trying to access the resource or application.

Option ***Azure Policy*** is incorrect - Azure policy applies rules on Azure resources, and not on users.

Question 8: **Correct**
Which Azure service should you use to collect events from multiple resources into a centralized repository?

Select the correct option.

- **Azure Analysis Services**
- **Azure Key Vault**
- **Azure Monitor**

  (Correct)
- **Azure Stream Analytics**

Explanation
Keywords: *collect data, multiple resources, centralized repo => use Azure monitor*

Correct answer is option ***Azure Monitor***

Azure Monitor maximizes the availability and performance of your applications by collecting, analyzing, and acting on telemetry from your cloud and on-premises environments. It helps you understand how your applications are performing and proactively identifies issues affecting them and the resources they depend on.
Reference: https://docs.microsoft.com/en-us/azure/azure-monitor/overview

Other options are not correct.

Option ***Azure Key Vault*** is incorrect - *Azure Key Vault* is a centralized cloud service for storing your applications' passwords and secrets by keeping them in a single, central location and by providing secure access, permissions control, and access logging capabilities.
Reference: https://docs.microsoft.com/en-us/azure/key-vault/general/overview

Option ***Azure Synapse analysis*** is incorrect - *Azure Synapse* is a limitless analytics service that brings together enterprise data warehousing and big data analytics. It gives you the freedom to query data on your terms, using either serverless on-demand or provisioned resources - at scale. Synapse analytics is not used for event-based data collection.
Reference: https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-overview-what-is

Option ***Azure Stream Analytics*** is incorrect - Azure Stream Analytics is real-time analytics and complex event-processing engine that is designed to analyze and process high volumes of fast streaming data from multiple sources simultaneously. Stream analytics is not used for event-based data collection.
Reference: https://docs.microsoft.com/en-au/azure/stream-analytics/stream-analytics-introduction

Question 9: **Correct**

```
1.      Exam notes:
2.      - This question requires you to evaluate the text inside [ ] to determine if it is
        correct
3.      - Select "No change needed" if the above statement is correct, otherwise select the
        correct answer.
```

[*Rehost / Lift and Shift*] migration strategy moves the on-premises solution to Azure without modification.

- **Rebuild**
- **No change needed**

  (Correct)
- **Refactor / Repackage**
- **Rearchitect**

Explanation
Keywords: *migration, without modification => Lift & Shift*

Correct answer is option ***Rehost / Lift and Shift***

Moving applications from the on-premise environment to the cloud with no changes to the underlying application, ie. as-is state, is referred to Lift and shift. Azure cloud enables you to migrate your applications in the as-is state, with minimal impact and less cost.

Other options are not correct.

Option ***Refactor / Repackage*** is incorrect - Refactor/Repackage will require you to update the application, which is not required in this scenario.

Option ***Rearchitect*** is incorrect - Rearcitect will require you to redesign & create the application, which is not required in this scenario.

Option ***Rebuild*** is incorrect - Rebuild will require you to recreate the application, which is not required in this scenario.

Question 10: **Correct**
Why would someone prefer a Consumption-based pricing model as opposed to a Time-based pricing model?

Select the correct option.

- **You can easily predict the cost of the service into the future**
- **The pricing model is simpler and easier to understand**
- **You can save a lot of money if you don't use the resource often as opposed to having it available for use 24/7**

  (Correct)

It is always cheaper to pay for consumption than to pay by the hour

Explanation
Keywords: *Consumption-based pricing model => less frequently used resources, save money*

Correct answer is option ***You can save a lot of money if you don't use the resource often as opposed to having it available for use 24/7***

In *Consumption-Based Model*, you pay for something based on how much you used, as opposed to paying for something no matter if you use it or not. Azure function is a good example of Consumption-Based Model.
Reference: https://docs.microsoft.com/en-us/azure/azure-functions/functions-consumption-costs

Other options are not correct.

Option ***The pricing model is simpler and easier to understand*** is incorrect - The simplicity or complexity of a pricing model depends on your solution design, usage, storage, compute, data transfer, and other factors.

Option ***It is always cheaper to pay for consumption than to pay by the hour*** is incorrect - This is not always true, as for a heavy usage application, compute-heavy functions, or in other similar use-cases, it's better to reserve capacity to save cost.

Option ***You can easily predict the cost of the service into the future*** is incorrect - Cost can be predicted in any usage model from *Azure Pricing Calculator*.

Question 11: **Incorrect**
You plan to create an Azure virtual machine. You need to identify which storage service must be used to store the data disks of the virtual machine.

What should you identify?

- **Queues**
- **Files**

(Incorrect)

- **Blobs**

  (Correct)

- **Tables**

Explanation
Keywords: *virtual machine, storage, data-disk => use Page Blob*

Correct answer is option ***Blobs***

Azure Storage offers three types of *Blob storage*:
- ***Block Blobs:*** Block blobs are composed of blocks and are ideal for storing text or binary files, and for uploading large files efficiently.
- ***Append Blobs:*** Append blobs are also made up of blocks, but they are optimized for append operations, making them ideal for logging scenarios.
- ***Page Blobs:*** Page blobs are made up of 512-byte pages up to 8 TB in total size and are designed for frequent random read/write operations. ***Page blobs are the foundation of Azure IaaS Disks.***

Reference: https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-pageblob-overview

Other options are not correct.

Option ***Files*** is incorrect - *Azure Files* enables you to set up highly available network file shares that can be accessed by using the standard Server Message Block (SMB) protocol. That means that multiple VMs can share the same files with both read and write access.
Reference: https://azure.microsoft.com/en-in/services/storage/files/

Option ***Tables*** is incorrect - *Azure Table* storage stores large amounts of structured data. Azure tables are ideal for storing structured, non-relational data.
Reference: https://azure.microsoft.com/en-us/services/storage/tables/

Option ***Queues*** is incorrect - *Azure Queue* service is used to store and retrieve messages. Queues are generally used to store lists of messages to be processed asynchronously. Azure Queue is the simplest way to implement decoupled solutions.
Reference: https://docs.microsoft.com/en-us/azure/storage/queues/storage-queues-introduction

Question 12: **Correct**
Which of the following services is a distributed network of servers that can efficiently deliver web content to users?

Select the correct option.

- **Azure Cosmos DB**
- **Azure Traffic Manager**
- **Azure App Services**
- **Azure Content Delivery Network (CDN)**

  (Correct)

Explanation
Keywords: *distributed network, web content delivery => CDN*

Correct answer is option ***Azure Content Delivery Network (CDN)***

A Content Delivery Network (CDN) is a distributed network of servers that can efficiently deliver web content to users. It is a way to get content to users in their local region to minimize latency.
Reference: https://azure.microsoft.com/en-us/services/cdn/

Other options are not correct.

Option ***Azure App Services*** is incorrect - *Azure App Service* enables you to quickly build and host applications and should be fronted by CDN for distributed delivery for

end-users for faster performance and low latency.
Reference: https://docs.microsoft.com/en-us/azure/app-service/overview

Option ***Azure Cosmos DB*** is incorrect - *Azure Cosmos DB* is a **globally distributed database service** that enables you to elastically and independently scale throughput and storage across any number of Azure's geographic regions.
Reference: https://docs.microsoft.com/en-in/azure/cosmos-db/introduction

Option ***Azure Traffic Manager*** is incorrect - *Azure Traffic Manager* is a **DNS-based traffic load balancer** that enables you to distribute traffic optimally to services across global Azure regions while providing high availability and responsiveness.
Reference: https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview

Question 13: **Incorrect**

```
1.      Exam note:
2.      - Each correct selection is worth one point in the main exam.
```

You have an Azure environment that contains multiple Azure virtual machines. You plan to implement a solution that enables the client computers on your on-premises network to communicate to the Azure virtual machines. You need to recommend which Azure resources must be created for the planned solution.

Which two Azure resources should you include in the recommendation?

- ☑ **Load Balancer**

  (Incorrect)
- ☑ **Virtual Network**

  (Incorrect)
- ☐ **Application Gateway**
- ☐

Gateway Subnet

(Correct)

- **Virtual Private Network Gateway**

  (Correct)

Explanation
Keywords: *connect on-premises to Azure => VPN Gateway*

Correct answers are

Option ***Virtual Private Network Gateway*** - *Azure Virtual Private Network (VPN) gateway* is used to send encrypted traffic between an Azure Virtual Network and an on-premises location over the public internet. It provides a more secure connection from on-premises to Azure over the internet.

Option ***Gateway Subnet*** - The virtual network gateway uses a specific subnet called the gateway subnet, which is used for routing the traffic from one network to another network.
Reference: https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-about-vpngateways

Other options are not correct.

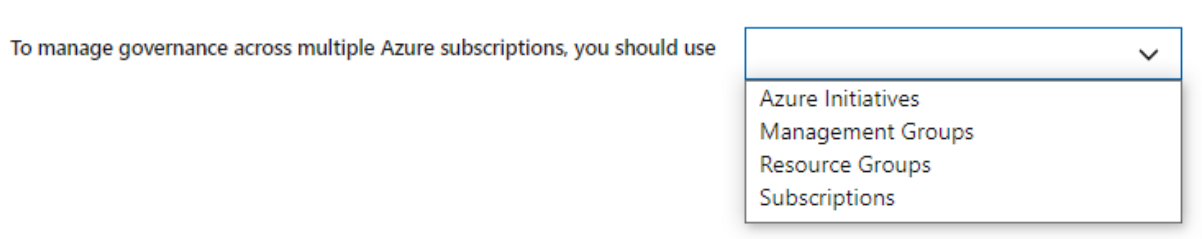
Option ***Virtual Network*** is incorrect - *Azure Virtual Network (VNet)* is the fundamental building block for your private network in Azure. VNet enables many types of Azure resources, such as Azure Virtual Machines (VM), to securely communicate with each other, the internet, and on-premises networks. To connect VNet with an on-premises network, you will need to create a VPN Gateway.
Reference: https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-overview

Option ***Application Gateway*** is incorrect - *Azure Application Gateway* is a web traffic load balancer that enables you to manage traffic to your web applications & also perform URL based routing. It is the connection through which users connect to your application.
Reference: https://docs.microsoft.com/en-us/azure/application-gateway/how-application-gateway-works

Option ***Load Balancer*** is incorrect - *Azure Load Balancer* provides high availability by distributing incoming traffic among healthy Virtual Machines. It can not be used to connect an on-prem network with Azure.
Reference: https://docs.microsoft.com/en-us/azure/virtual-machines/windows/tutorial-load-balancer

Question 14: **Correct**

```
1.      Exam notes:
2.      - This question requires you to select the correct option from the dropdown.
3.      - Udemy does not support dropdown selection, but in actual exam, you will be allowe
        d to use dropdown.
```



- **Management Groups**

  (Correct)

- **Subscriptions**

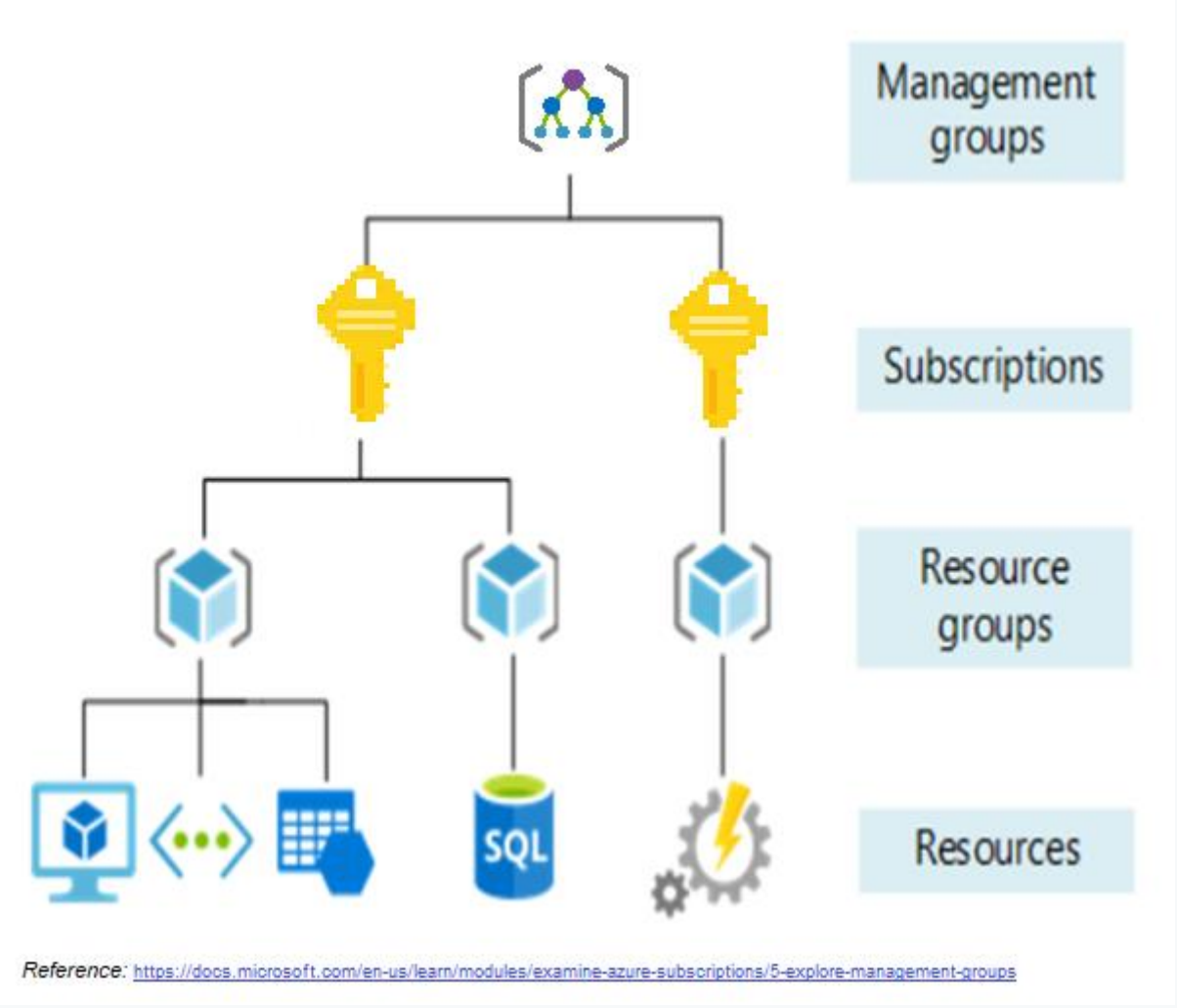
- **Azure Initiatives**

- **Resource Groups**

Explanation
Keywords: *multiple subscriptions, governance => Management groups*

Correct answer is option ***Management Groups***

Management groups are containers that help you manage access, policy, and compliance for multiple subscriptions. All subscriptions in a management group automatically inherit the conditions applied to the management group.
Reference:https://docs.microsoft.com/en-us/azure/governance/management-groups/overview



Reference: https://docs.microsoft.com/en-us/learn/modules/examine-azure-subscriptions/5-explore-management-groups

Other options are not correct.

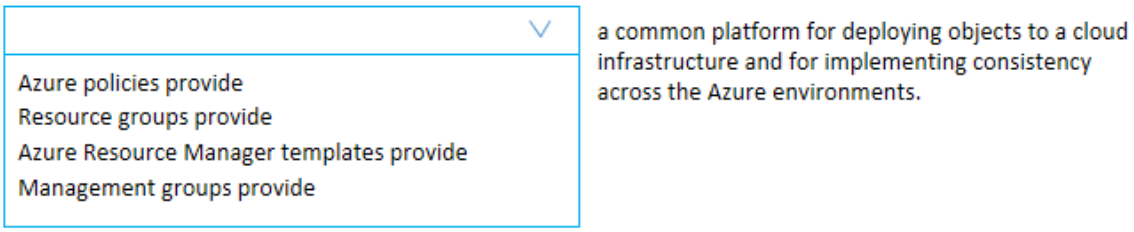
Option ***Resource Groups*** is incorrect - *Resource Groups* is a unit of management for resources in Azure, allows you to logically group Azure Resources together. This allows you to manage the application collectively over its lifecycle, rather than manage components individually.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/overview#resource-groups

Option ***Azure Initiatives*** is incorrect - *Initiative* is a collection of policy definitions that are tailored towards achieving a singular overarching goal. Initiative definitions simplify managing and assigning policy definitions.
Reference: https://docs.microsoft.com/en-us/azure/governance/policy/overview

Option ***Subscriptions*** is incorrect - *Azure subscriptions* provide you with authenticated and authorized access to Azure products and services and allows you to provision resources. An Azure subscription is a logical unit of Azure services that links to an Azure account, which is an identity in Azure Active Directory (Azure AD) or in a directory that an Azure AD trusts.
Reference: https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/decision-guides/subscriptions/

Question 15: **Incorrect**

```
1.      Exam notes:
2.      - This question requires you to select the correct option from the dropdown.
3.      - Udemy doesn't support dropdown selection, but in the actual exam, you will be all
        owed to use dropdown.
```



- **Azure Resource Manager templates provide**

  (Correct)

- **Management groups provide**

  (Incorrect)

- **Resource groups provide**

- **Azure policies provide**

Explanation
Keywords: *platform deploy with consistency => use ARM Templates*

Correct answer is option ***Azure Resource Manager templates provide***

Azure Resource Manager templates (ARM templates) are JSON files that define the infrastructure and configuration for your project. It's used to automate resource creation but does not help in resource management and cost-saving.

Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/overview

Other options are not correct.

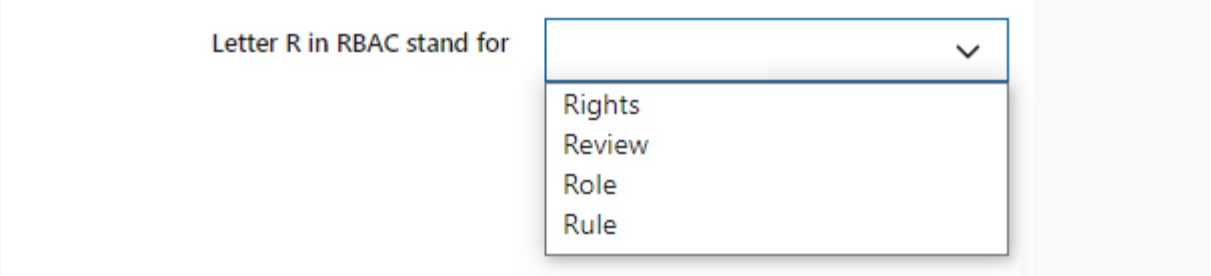
Option ***Azure policies provide*** is incorrect - *Azure policies* are used to define rules for what can be deployed and how it should be deployed. Whilst this can help in ensuring consistency, Azure policies do not provide the common platform for deploying objects to a cloud infrastructure.
Reference: https://docs.microsoft.com/en-us/azure/governance/policy/overview

Option ***Resource groups provide*** is incorrect - *Resource Groups* allows you to logically group Azure Resources together. This allows you to manage the application collectively over its lifecycle, rather than manage components individually.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/overview#resource-groups

Option ***Management groups provide*** is incorrect - *Management groups* are containers that help you manage access, policy, and compliance for multiple subscriptions. All subscriptions in a management group automatically inherit the conditions applied to the management group.
Reference:https://docs.microsoft.com/en-us/azure/governance/management-groups/overview

Question 16: **Correct**

```
1.      Exam notes:
2.      - This question requires you to select the correct option from the dropdown.
3.      - Udemy does not support dropdown selection, but in the actual exam, you will be al
        lowed to use dropdown.
```



- **Rights**

- **Rule**
- **Review**
- **Role**

  (Correct)

Explanation
Correct answer is option ***Role***

RABC *means* ***Role-based access control,*** which provides fine-grained access management for Azure resources, enabling you to grant users only the rights they need to perform their jobs.
Reference: https://docs.microsoft.com/en-us/azure/role-based-access-control/overview

Other options are not correct.

Question 17: **Correct**
You plan to migrate a web application to Azure. The web application is accessed by external users. You need to recommend a cloud deployment solution to minimize the amount of administrative effort used to manage the web application.

What should you include in the recommendation?

- **Function as a Service (FaaS)**
- **Platform as a Service (PaaS)**

  (Correct)
- **Software as a Service (SaaS)**

Infrastructure as a Service (IaaS)

Explanation

Keywords: *custom application, no hardware/software management => use PaaS*

Correct answer is option ***Platform as a Service (PaaS)***

Platform as a service (PaaS) allows you to avoid the complexity of buying and managing software licenses and the underlying application infrastructure. You manage the applications and services you develop, and the cloud service provider typically manages everything else.

Reference: https://azure.microsoft.com/en-us/overview/what-is-paas/

Other options are not correct.

Option ***Function as a Service (FaaS)*** is incorrect - *Function as a Service (FaaS)* is a serverless implementation, provides a runtime environment to execute code, written in any language the user is comfortable with. You can not create and host a custom application using FaaS, you can only execute some code written in a predefined list of languages.

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

Option ***Software as a Service (SaaS)*** is incorrect - *Software as a service (SaaS)* allows users to connect to and use cloud-based apps over the Internet. Common examples are email, calendaring, and office tools (such as Microsoft Office 365). You can not create and host a custom application using SaaS

Reference: https://azure.microsoft.com/en-us/overview/what-is-saas/

Option ***Infrastructure as a Service (IaaS)*** is incorrect - *Infrastructure as a service (IaaS)* is an instant computing infrastructure, provisioned, and managed over the internet. IaaS requires more effort as you will need to configure and manage Infrastructure also along with the application.

Reference: https://azure.microsoft.com/en-us/overview/what-is-iaas/

Question 18: **Incorrect**

Your company has an Azure environment that contains resources in several regions. A company policy states that administrators must only be allowed to create additional Azure resources in a region/country where their office is located.

Select the correct option to meet this requirement.

Azure policy

(Correct)

- **Reservation**

- **Management Group**

  (Incorrect)

- **Azure Lock on Resource Group**

Explanation
Keywords: *apply restriction on resources => Azure Policy*

Correct answer is option ***Azure policy***

Azure Policy helps to enforce organizational standards and to assess compliance at-scale. You can create an Azure policy to validate if the resource is created only in the desired region and apply this policy to subscription. Every time you will create a resource under subscription, this policy will be evaluated and only allow you to proceed if you created the resource in the correct region.
Reference: https://docs.microsoft.com/en-us/azure/governance/policy/overview

Other options are not correct.

Option ***Azure Lock on Resource Group*** is incorrect - *Azure Lock* allows us to lock Azure Resources like subscription, resource group, or other resources to prevent other users in your organization from *accidentally deleting or modifying critical resources*.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources

Option ***Management Group*** is incorrect - *Management groups* are containers that help you manage access, policy, and compliance for multiple subscriptions.
Reference: https://docs.microsoft.com/en-us/azure/governance/management-groups/overview

Option ***Reservation*** is incorrect - *Azure Reservations* help you save money by committing to one-year or three-year plans for multiple products. Committing allows you to get a discount on the resources you use.
Reference: https://docs.microsoft.com/en-us/azure/cost-management-billing/reservations/save-compute-costs-reservations

Question 19: **Correct**

```
1.      Exam notes:
2.      - For each of the following statements, check the checkbox if the statement is corr
        ect.
3.      - Each correct selection is worth one point in the main exam.
```

	Statements	Yes	No
1.	Billing is applied to each subscription separately.	○	○
2.	Subscription is dependent on a region.	○	○
3.	Multiple subscriptions can not be created within an Azure account.	○	○
4.	A single Microsoft account can be used to manage multiple Azure subscriptions.	○	○
5.	An Azure Resource group contains multiple Azure subscriptions.	○	○

- ☐

  An Azure Resource group contains Multiple Azure subscriptions.

- ☐

  Subscription is dependent on a region.

- ☑

  A single Microsoft account can be used to manage multiple Azure subscriptions.

  (Correct)

- ☐

  Multiple subscriptions can not be created within an Azure account.

- ☑

  Billing is applied to each subscription separately.

  (Correct)

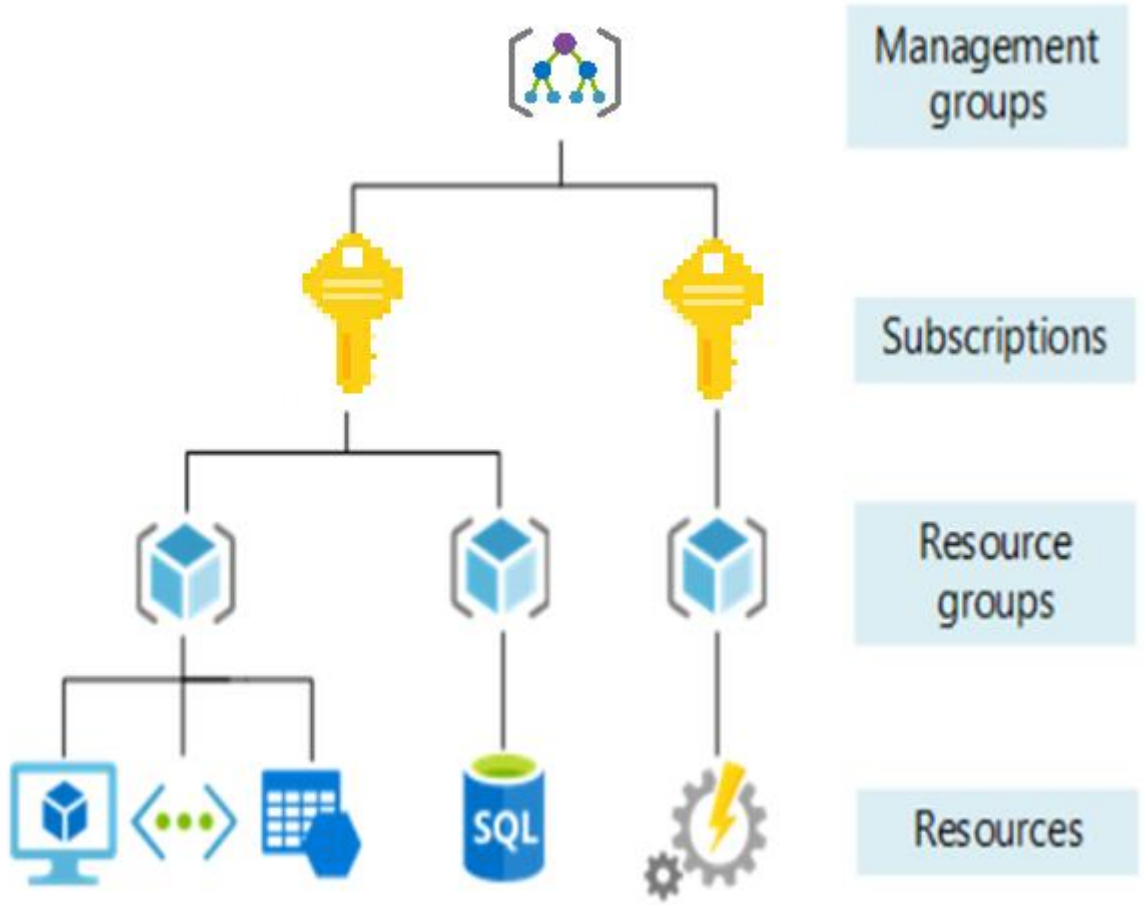
Explanation
Statement ***Billing is applied to each subscription separately*** is correct - One of the benefits of using multiple subscriptions is that each subscription will have its own billing, for resources created under subscription. You can have multiple subscriptions, eg. one for each department. You can use department subscriptions to define boundaries around Azure products, services, and resources and generate separate bill one for each department.

Statement ***Subscription is dependent on a region*** is incorrect - Subscriptions allow you to create resources in multiple regions, so this statement is not correct.

Statement ***Multiple subscriptions can not be created within an Azure account*** is incorrect - You can have multiple subscriptions linked with one Azure account, so this statement is not correct.

Statement ***A single Microsoft account can be used to manage multiple Azure subscriptions*** is correct - You can have multiple subscriptions linked with one Azure account, so this statement is correct.

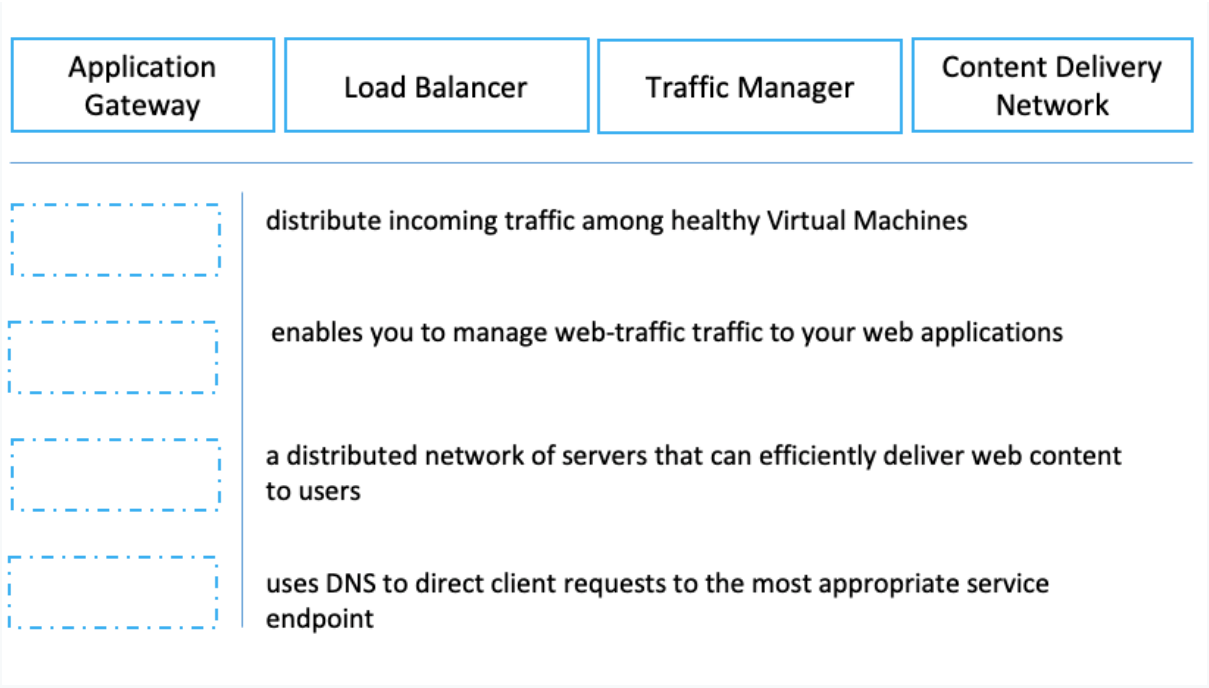
Statement ***An Azure Resource group contains Multiple Azure subscriptions*** is incorrect - Actually, a Subscription contains multiple resource groups, so this statement is not correct.



Reference: https://docs.microsoft.com/en-us/learn/modules/examine-azure-subscriptions/5-explore-management-groups

Question 20: **Correct**

```
1.      Exam notes:
2.      - Drag the appropriate term from the row on the top to its description on the botto
        m.
3.      - Udemy does not support drag & drop, but in actual exam, you will be allowed.
4.      - Each correct selection is worth one point in the main exam.
```



- ***Application Gateway*** **- enables you to manage web-traffic traffic to your web applications**
  Load Balancer **- distribute incoming traffic among healthy Virtual Machines**
  Traffic Manager **- uses DNS to direct client requests to the most appropriate service endpoint**
  Content Delivery Network **- a distributed network of servers that can efficiently deliver web content to users**

  (Correct)

- ***Application Gateway*** **- distribute incoming traffic among healthy Virtual Machines**
  Load Balancer **- a distributed network of servers that can efficiently deliver web content to users**
  Traffic Manager **- enables you to manage web-traffic traffic to your web applications**
  Content Delivery Network **- uses DNS to direct client requests to the most appropriate service endpoint**

- ***Application Gateway*** **- enables you to manage web-traffic traffic to your web applications**
  Load Balancer **- uses DNS to direct client requests to the most appropriate service endpoint**

Traffic Manager **- distribute incoming traffic among healthy Virtual Machines**
Content Delivery Network **- a distributed network of servers that can efficiently deliver web content to users**

- 

Application Gateway **- enables you to manage web-traffic traffic to your web applications**
Load Balancer **- a distributed network of servers that can efficiently deliver web content to users**
Traffic Manager **- distribute incoming traffic among healthy Virtual Machines**
Content Delivery Network **- uses DNS to direct client requests to the most appropriate service endpoint**

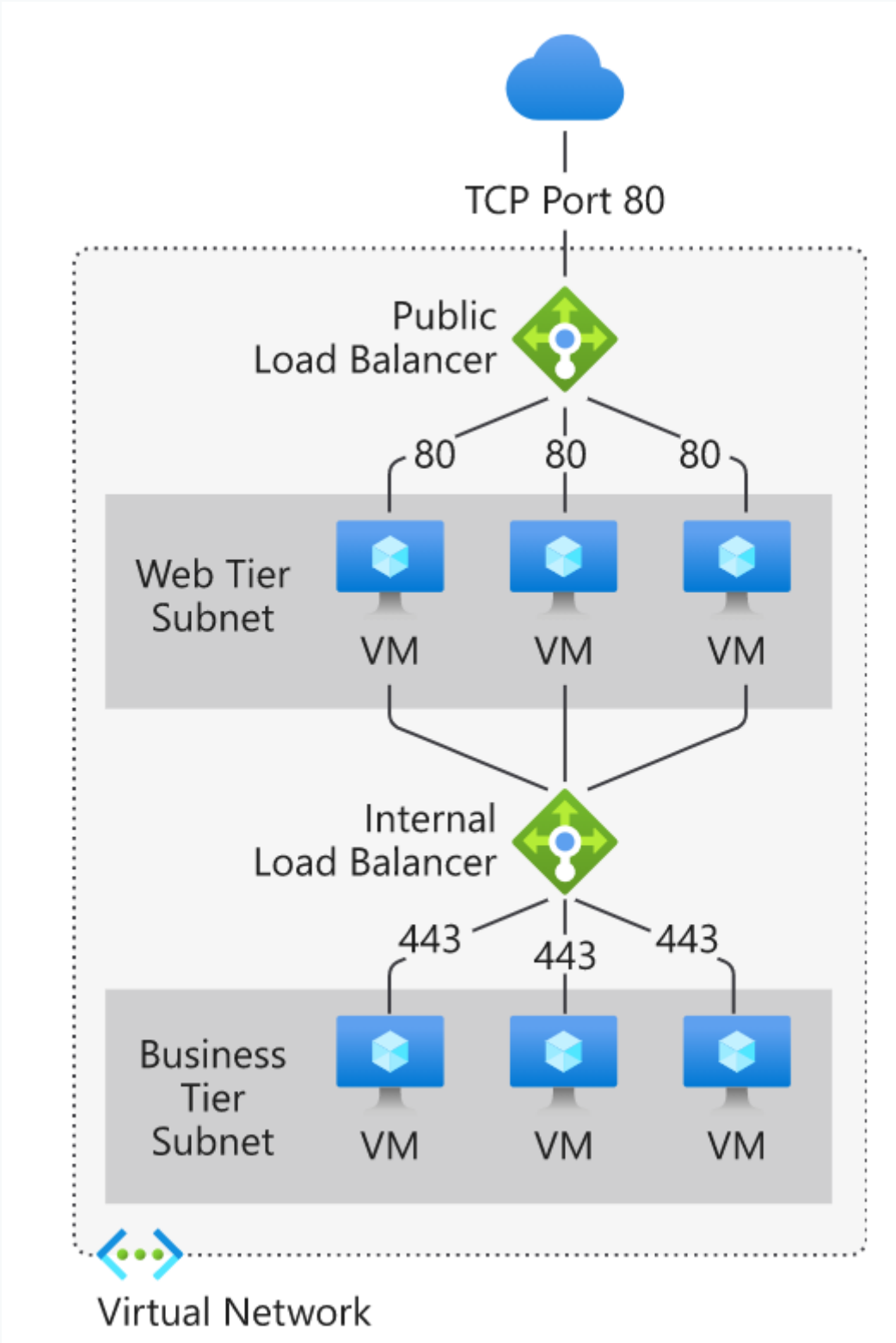
Explanation
Correct answer is option
Application Gateway - enables you to manage web-traffic traffic to your web applications
Load Balancer - distribute incoming traffic among healthy Virtual Machines
Traffic Manager - uses DNS to direct client requests to the most appropriate service endpoint
Content Delivery Network - a distributed network of servers that can efficiently deliver web content to users

Detailed explanation:

Azure Application Gateway is a web traffic load balancer that enables you to manage traffic to your web applications & also perform URL based routing. It is the connection through which users connect to your application.
Reference: https://docs.microsoft.com/en-us/azure/application-gateway/how-application-gateway-works

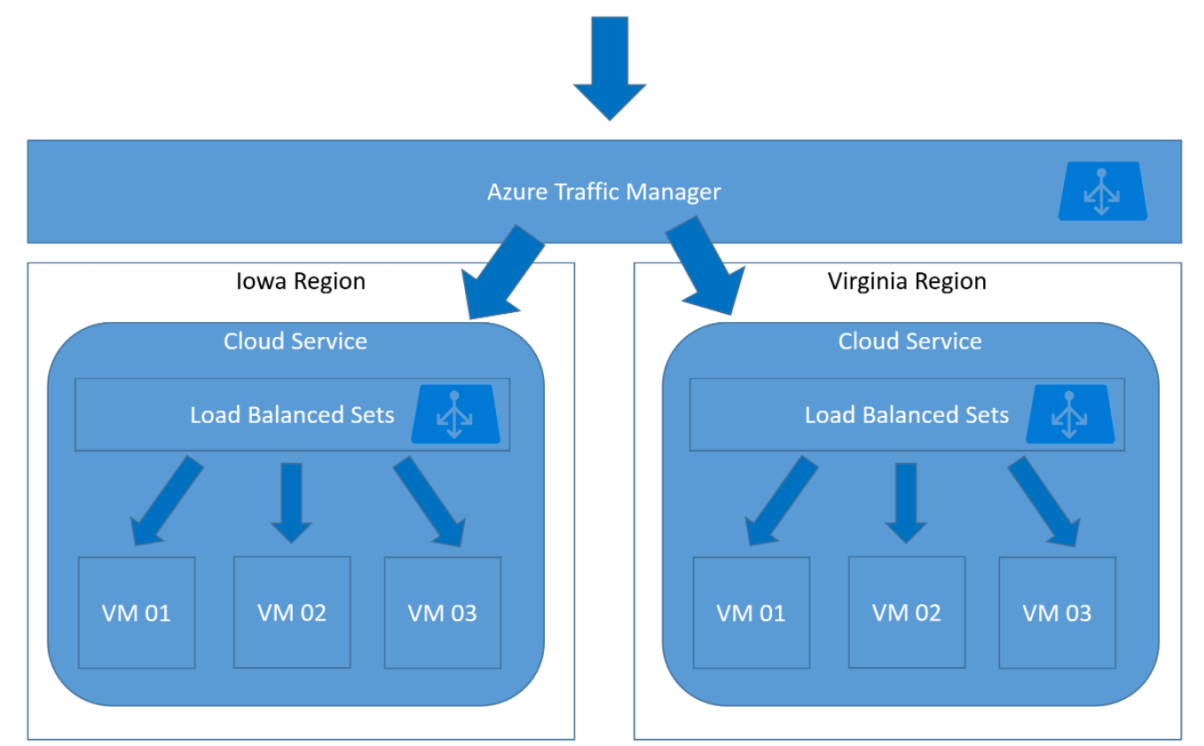
Azure Load Balancer provides high availability by distributing incoming traffic among healthy Virtual Machines. You can use Load Balancer with incoming internet traffic, internal traffic across Azure services, port forwarding for specific traffic, or outbound connectivity for VMs in your virtual network.
Reference: https://docs.microsoft.com/en-us/azure/virtual-

machines/windows/tutorial-load-balancer



Azure Traffic Manager is a **DNS-based traffic load balancer** that enables you to distribute traffic optimally to services across global Azure regions while providing high availability and responsiveness.

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



A Content Delivery Network (CDN) is a distributed network of servers that can efficiently deliver web content to users. It is a way to get content to users in their local region to minimize latency. Typical usage scenarios include web applications containing multimedia content, a product launch event in a region or any event where you expect a high bandwidth requirement in a region.
Reference: https://azure.microsoft.com/en-us/services/cdn/

Other options are not correct.

Question 21: **Correct**
A company has set up an Azure account and subscription. They want to host a solution based on Docker containers, to deploy and manage the container-based solution.

Which of the following service can be used for this requirement?

- **Azure Virtual Machine Scale sets**

- **Azure Kubernetes**

  (Correct)

- **Azure App service**

- **Azure Data Lake Analytics**

Explanation
Keywords: *manage docker, containers => AKS*

Correct answer is option ***Azure Kubernetes***

Kubernetes is open-source orchestration software for deploying, managing, and scaling containers. ***Azure Kubernetes Service (AKS)*** is a fully managed Kubernetes service on azure, which makes easy to deploy n manage containerized applications and remove the burden of managing the underlying infrastructure of Kubernetes deployments
Reference: https://azure.microsoft.com/en-us/topic/what-is-kubernetes/

Other options are not correct.

Option ***Azure App service*** is incorrect - *Azure App Service* enables you to quickly and easily build web and mobile apps for any platform or device. The app service does not manage containers.
Reference: https://docs.microsoft.com/en-us/azure/app-service/overview

Option ***Azure Virtual Machine Scale sets*** is incorrect - *Azure virtual machine scale sets* let you create and manage a group of load-balanced VMs. Containers are hosted on VMs and managed by AKS.
Reference: https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/overview

Option ***Azure Data Lake Analytics*** is incorrect - *Azure Data Lake Analytics* is an on-demand analytics job service that simplifies big data. The analytics service can handle jobs of any scale instantly by setting the dial for how much power you need.

You only pay for your job when it is running, making it more cost-effective.
Reference: https://azure.microsoft.com/en-au/services/data-lake-analytics/

Question 22: **Incorrect**
Your organization has implemented an Azure Policy that restricts the type of Virtual Machine instances you can use.

How can you create a VM that is blocked by the policy?

- **Use an account that has Contributor or above permissions to the resource group**

  (Incorrect)

- **Subscription Owners (Administrators) can create resources regardless of what the policy restricts**

- **Root admin can create any Resource anytime anywhere**

- **The only way is to remove the policy, create the resource and add the policy back**

  (Correct)

Explanation
Correct answer is option ***The only way is to remove the policy, create the resource and add the policy back***

Azure Policy helps to enforce organizational standards and to assess compliance at-scale. Azure Policy evaluates resources in Azure by comparing the properties of those resources to business rules. These business rules, described in JSON format, are known as policy definitions.

You cannot perform a task that violates policy, so you have to remove the policy in order to perform the task.
Reference: https://docs.microsoft.com/en-us/azure/governance/policy/overview

Other options are not correct.

Question 23: **Correct**
You need to identify the type of failure for which an Azure Availability Zone can be used to protect access to Azure services.

What should you identify?

- **An Azure data center failure**

  (Correct)

- **An Azure Region failure**

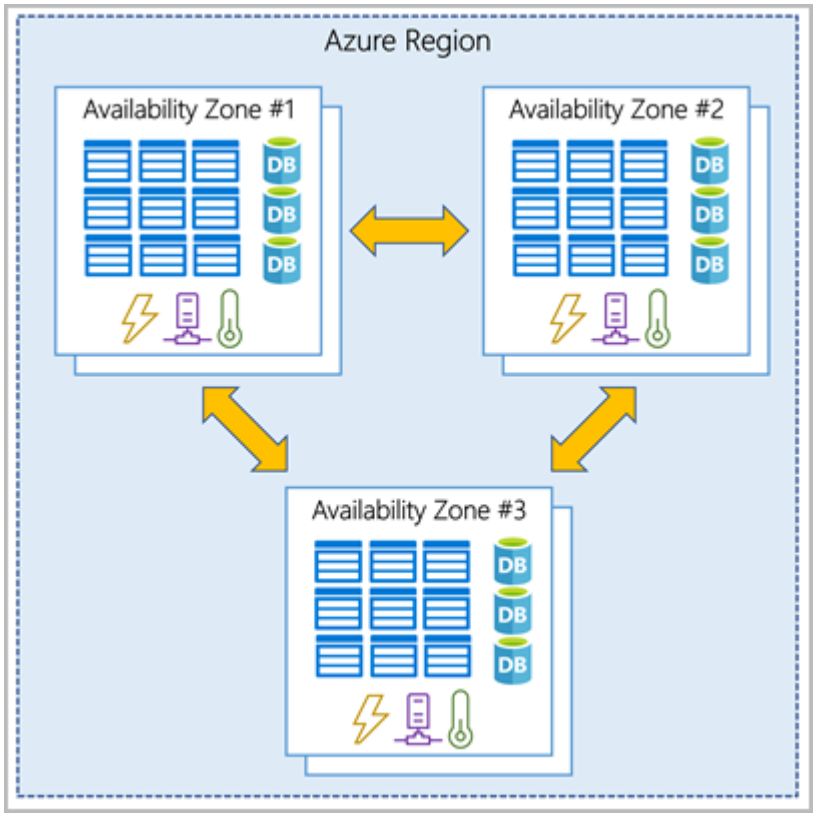
- **A physical server failure**

- **A storage failure**

Explanation
Correct answer is option ***An Azure data center failure***

Availability Zones are physically separate locations with their own power, cooling, and networking, within an Azure region, that use availability sets to provide additional fault tolerance. Azure can help make your app highly available through Availability Zones with 99.99% Azure SLA. Availability zones expand the level of control you have to maintain the availability of the applications and data on your VMs.

By architecting your solutions to use replicated VMs in zones, you can protect your apps and data from the loss of a data center. If one zone is compromised, then replicated apps and data are instantly available in another zone.
Reference: https://docs.microsoft.com/en-us/azure/availability-zones/az-overview



Other options are not correct.

Option ***A physical server failure*** is incorrect - Azure takes care of physical server failure. You can not control it.

Option ***An Azure Region failure*** is incorrect - An Availability Zone is a physically separate zone, within an Azure region. A region usually has 3 or more Availability zone. So if one

If a Region fail (due to regions like a tsunami), means all availability zone in that region failed, and cant be recovered.

Option ***A storage failure*** is incorrect - Azure takes care of storage service failure.

Question 24: **Correct**
How can an Architect easily implement a deny by default policy so that VMs can't connect to each other?

Select the correct option.

- **Azure Firewall**
- **Allocate each VM on its own virtual network**
- **Configure Azure DDoS Protection to limit network access within the virtual network**
- **Create a network security group rule that prevents access from another VM on the same network**

  (Correct)

Explanation
Correct answer is option ***Create a network security group rule that prevents access from another VM on the same network***

A network security group rule enables you to filter traffic to and from Azure resources in an Azure virtual network. An NSG can contain multiple inbound and outbound security rules that enable you to filter traffic to and from resources by source and destination IP address, port, and protocol.
Reference: https://docs.microsoft.com/en-us/azure/virtual-network/security-overview#network-security-groups

Other options are not correct.

Option ***Allocate each VM on its own virtual network*** is incorrect - Although you can isolate each VM by placing it on a separate virtual network, is there an easier way that allows all VMs to safely exist on the same virtual network? NSG is a simple way without changing physical architecture.

Option ***Configure Azure DDoS Protection to limit network access within the virtual network*** is incorrect - DDoS Protection helps protect your Azure resources from DDoS attacks, but it doesn't specify connection rules within a virtual network.

Option ***Azure Firewall*** is incorrect - Azure Firewall applies IP-based restriction to access Azure resources from the internet, but it doesn't specify connection rules within a virtual network.

Question 25: **Correct**

```
1.      Exam notes:
2.      - For each of the following statements, check the checkbox if the statement is corr
        ect.
3.      - Each correct selection is worth one point in the main exam.
```

Statements	Yes	No
1. Azure Pay-as-you-Go pricing is an example of CapEx	○	○
2. Paying electricity for our data center is an example of OpEx	○	○
3. Deploying your own data center is an example of CapEx	○	○

- ☐ **Azure Pay-as-you-Go pricing is an example of CapEx**
- ☑ **Deploying your own data center is an example of CapEx**

  (Correct)
- ☑ **Paying electricity for our data center is an example of OpEx**

  (Correct)

Explanation
Statement ***Azure Pay-as-you-Go pricing is an example of CapEx*** is incorrect - With the pay-as-go model, you pay for services as you use them. This is OpEx (Operational Expenditure), not CapEx (Captial Expenditure). CapEx is where you pay for something upfront. For example, buying a new physical server.

Statement ***Paying electricity for our data center is an example of OpEx*** is correct - Electricity bill is an ongoing expense and categorized as Operational Expenditure (OpEx).

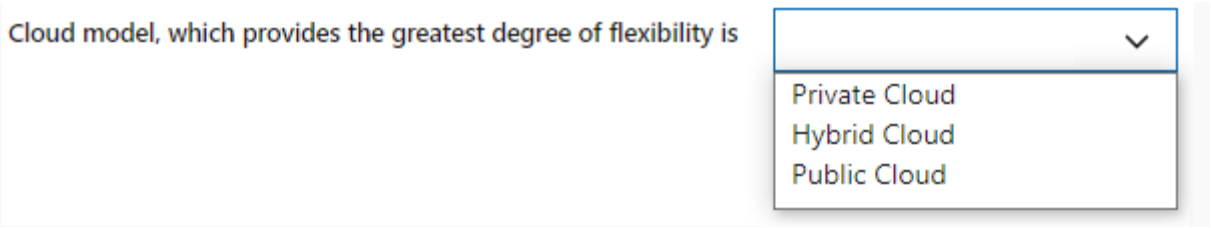
Statement ***Deploying your own data center is an example of CapEx*** is correct - Deploying your own data center is an example of CapEx. This is because you need to purchase all the infrastructure upfront before you can use it.

Capital Expenditure (CapEx) is the upfront spending of money on physical infrastructure and then deducting that upfront expense over time. The upfront cost from CapEx has a value that reduces over time. The following are different costs considered as CapEx:
o Server costs
o Storage costs
o Network costs
o Backup and archive costs
o Organization continuity and disaster recovery costs
o Datacenter infrastructure costs
o Technical personnel
Reference: https://docs.microsoft.com/en-us/azure/architecture/cloud-adoption/business-strategy/financial-models

Operational Expenditure (OpEx) is spending money on services or products now and being billed for them now. You can deduct this expense in the same year you spend it. There is no upfront cost, as you pay for a service or product as you use it. The following are different costs considered as OpEx:
o *Software licensing*.
o Hosting expenses.
o Electric bills.
o Real estate rentals.
o Cooling expenses.
o Temporary staff required for operations.
o Equipment rentals.
o Replacement parts.
o Maintenance contracts.
o Repair services.
o Business continuity and disaster recovery (BCDR) services.
o Other expenses that don't require capital expense approvals.
Reference: https://docs.microsoft.com/en-us/azure/architecture/cloud-adoption/business-strategy/financial-models

Question 26: **Incorrect**

```
1.      Exam notes:
2.      - This question requires you to select the correct option from the dropdown.
3.      - Udemy does not support dropdown selection, but in the actual exam, you will be al
        lowed to use dropdown.
```



- **Public Cloud**
- **Private Cloud**

  (Incorrect)
- **Hybrid Cloud**

  (Correct)

Explanation
Keywords: *greatest degree of flexibility => Hybrid Cloud*

Correct answer is option ***Hybrid Cloud***

Hybrid Cloud provides you the greatest degree of flexibility as you have the option to choose either public or private depending on your requirements.
Reference: https://azure.microsoft.com/en-us/overview/what-is-hybrid-cloud-computing/

Other options are not correct.

Option ***Private Cloud*** is incorrect - *Private Cloud* does not provide flexibility to scale up or down based on demand or agility.
Reference: https://azure.microsoft.com/en-us/overview/what-is-a-private-cloud/

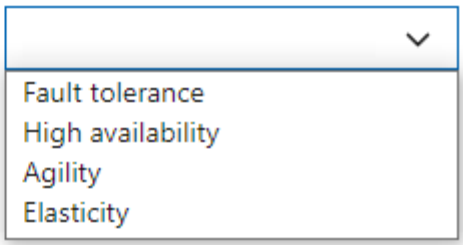
Option ***Public Cloud*** is incorrect - *Public Cloud* does not provide flexibility to you to host applications that need specific hardware. It's good to host applications on shared/public resources.
Reference: https://azure.microsoft.com/en-us/overview/what-is-a-public-cloud/

Question 27: **Incorrect**

```
1.      Exam notes:
2.      - This question requires you to select the correct option from the dropdown.
```

3. - Udemy does not support dropdown selection, but in the actual exam, you will be allowed to use dropdown.

Capability to quickly provision cloud resources is called



- **High availability**

  (Incorrect)

- **Agility**

- **Elasticity**

  (Correct)

- **Fault tolerance**

Explanation
Keywords: *resources, quick provision => Elasticity*

Correct answer is option ***Elasticity***

Elasticity is the ability to automatically or dynamically increase or decrease resources as needed. Elastic resources match the current needs and resources are added or removed automatically to meet future needs when it's needed.
Reference: https://azure.microsoft.com/en-us/overview/what-is-elastic-computing/

Other options are not correct.

Option ***Agility*** is incorrect - *Agility* is the ability to respond to change rapidly based on changes to market or environment, ensuring fast time to market.
Reference: https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/strategy/business-outcomes/agility-outcomes

Option ***Fault tolerance*** is incorrect - *Fault tolerance* is the ability to remain up and running even in the event of a component (or service) no longer functioning. Typically, redundancy is built into cloud services architecture, so if one component fails, a backup component takes its place. This type of service is said to be tolerant of faults.

Option ***High availability*** is incorrect - *High availability* is the ability to keep services up and running for long periods of time, with very little downtime. Workloads are typically spread across different virtual machines to gain high throughput, performance, and to create redundancy in case a service is impacted due to an update or other event.
Reference: https://docs.microsoft.com/en-us/azure/virtual-machines/availability

Question 28: **Incorrect**

```
1.      Exam notes:
2.      - This question requires you to evaluate the text inside [ ] to determine if it is
        correct
3.      - Select "No change needed" if the above statement is correct, otherwise select the
        correct answer.
```

One of the benefits of Azure SQL Data Warehouse is that [*Versioning*] is built into the platform.

- **Automatic Scaling**

  (Correct)

- **Data compression**

  (Incorrect)

- **High Availability**

- **No change needed**

Explanation
Correct answer is option ***Automatic Scaling***

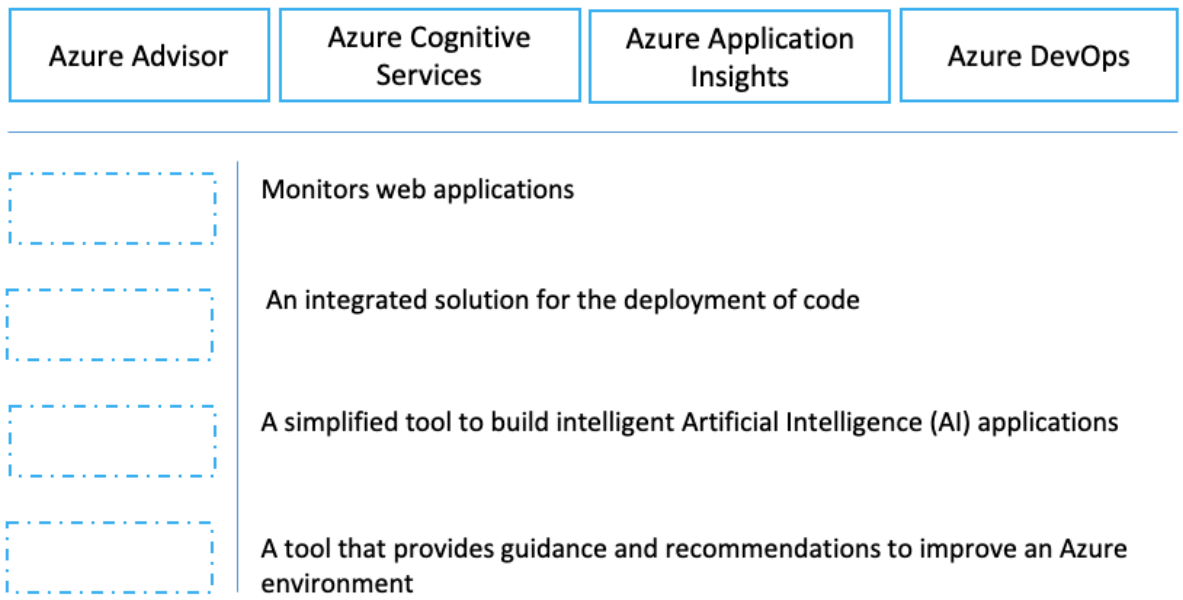
One of the best features of a cloud offering like *Azure SQL Data Warehouse* is its ***elasticity & automatic scaling*** of computing power. For instance, you could scale up on a schedule to support a demanding data load, then scale back down to the normal level when the load is complete. As a result, you can scale compute to meet performance demands independent of data storage.

Reference: https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-manage-compute-overview

Other options are not correct.

Question 29: **Correct**

```
1.      Exam notes:
2.      - Drag the appropriate term from the row on the top to its description on the botto
        m.
3.      - Udemy does not support drag & drop, but in the actual exam, you will be allowed.
4.      - Each correct selection is worth one point in the main exam.
```



-

Azure Advisor - A tool that provides guidance and recommendations to improve an Azure environment
Azure Cognitive Services - A simplified tool to build intelligent Artificial Intelligence (AI) applications
Azure Application Insights - Monitors web applications
Azure DevOps - An integrated solution for the deployment of code

(Correct)

- 

  ***Azure Advisor* - A tool that provides guidance and recommendations to improve an Azure environment**
  ***Azure Cognitive Services* - An integrated solution for the deployment of code**
  ***Azure Application Insights* - Monitors web applications**
  ***Azure DevOps* - A simplified tool to build intelligent Artificial Intelligence (AI) applications**

- 

  ***Azure Advisor* - A simplified tool to build intelligent Artificial Intelligence (AI) applications**
  ***Azure Cognitive Services* - An integrated solution for the deployment of code**
  ***Azure Application Insights* - A tool that provides guidance and recommendations to improve an Azure environment**
  ***Azure DevOps* - Monitors web applications**

- 

  ***Azure Advisor* - A tool that provides guidance and recommendations to improve an Azure environment**
  ***Azure Cognitive Services* - An integrated solution for the deployment of code**
  ***Azure Application Insights* - A simplified tool to build intelligent Artificial Intelligence (AI) applications**
  ***Azure DevOps* - Monitors web applications**

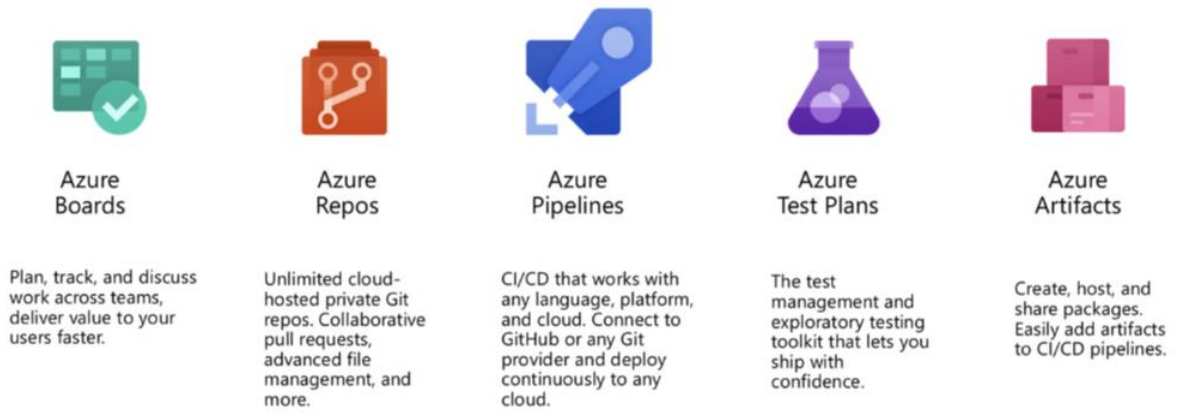
Explanation
Correct answer is option
Azure Advisor - A tool that provides guidance and recommendations to improve an Azure environment
Azure Cognitive Services - A simplified tool to build intelligent Artificial Intelligence (AI) applications
Azure Application Insights - Monitors web applications
Azure DevOps - An integrated solution for the deployment of code

Detailed explanation:

Azure Advisor Hub is a free service built into Azure that provides recommendations on ***high availability, security, performance, operational excellence and cost***. Advisor analyzes your deployed services and looks for ways to improve your environment across those four areas.
Reference: https://docs.microsoft.com/en-us/azure/advisor/advisor-get-started

Cognitive services are a collection of domain-specific pre-trained AI models that can be customized with your data. They are categorized broadly into vision, speech, language, and search.
Reference: https://docs.microsoft.com/en-us/azure/cognitive-services/what-are-cognitive-services

Azure DevOps Services provides development collaboration tools including high-performance pipelines, private Git repositories, configurable Kanban boards, and extensive automated and cloud-based load testing.
Reference: https://docs.microsoft.com/en-us/azure/devops/user-guide/what-is-azure-devops



Other options are not correct.

Question 30: **Correct**
Connecting to a secure resource requires both authentication and authorization. What is the purpose of authentication?

Select the correct option.

- **To validate that the user logging into the resource is who they say they are with a password, fingerprint, or other mechanism.**

  (Correct)

- **To allow the administrator to assign access to a secure resource, to limit the number of users who has access.**

- **To validate the specific resources the user has access to. Then grant them a token to allow access to use the resource requested.**

Explanation
Correct answer is option ***To validate that the user logging into the resource is who they say they are with a password, fingerprint, or other mechanism.***
Authentication uses things like something you know, something you are, and something you have to verify identity.

Other options are not correct.

Question 31: **Correct**
Which of the following Azure features is most likely to deliver the most immediate savings when it comes to reducing Azure costs?

Select the correct option.

- **Using Azure Policy to restrict the user of expensive VM SKUs**

Changing your storage accounts from globally redundant (GRS) to locally redundant (LRS)

- **Auto shutdown of development and QA servers over night and on weekends**

- **Using Azure Reserved Instances for most of your virtual machines**

  (Correct)

Explanation
Keywords: *reducing azure cost => use Reserved Instances*

Correct answer is option ***Using Azure Reserved Instances for most of your virtual machines***

Azure Reservations help you save money by committing to one-year or three-year plans for multiple products. Reservations can significantly reduce your resource costs up to 72%. R
Reference: https://docs.microsoft.com/en-us/azure/cost-management-billing/reservations/save-compute-costs-reservations

Other options are not correct.

Option ***Auto shutdown of development and QA servers overnight and on weekends*** is incorrect - Auto shutdown will help to save you compute cost when resources are not in use, but you will still pay for storage and other costs. Reservation helps to save costs upfront.

Option ***Changing your storage accounts from globally redundant (GRS) to locally redundant (LRS)*** is incorrect - This will help in some saving but increase risk, as your storage won't be highly available.

Option ***Using Azure Policy to restrict the user of expensive VM SKUs*** is incorrect - You should decide SKUs based on your workload, and use reservations to save cost.

Question 32: **Correct**

You have an on-premises network that contains 100 servers. You need to recommend a solution that provides additional resources to your users. The solution must minimize capital and operational expenditure costs.

What should you include in the recommendation?

- **Additional Data Center**
- **Hybrid Cloud**

  (Correct)
- **Complete migration to the public cloud**
- **Private Cloud**

Explanation
Keywords: *existing on-premises servers, need additional servers, save cost => Hybrid cloud*

Correct answer is option ***Hybrid Cloud***

In this scenario, the existing 100 resources can still be hosted in private cloud, and new resources can be hosted on the public cloud to reduce capital expenditure on new resources.

Using a mix of Private and Public cloud is known as **Hybrid cloud** model.
Reference: https://azure.microsoft.com/en-us/overview/what-is-hybrid-cloud-computing/

Other options are not correct.

Option ***Complete migration to the public cloud*** is incorrect - this is not an optimum solution as the migration of existing 100 resources will require additional cost.

Option ***Additional Data Center*** is incorrect - Additional data center will require huge *Capital Expenditure*.

Option ***Private Cloud*** is incorrect - Private cloud to host new resources will require huge *Capital Expenditure*.

Question 33: **Incorrect**

```
1.      Exam note:
2.      - Each correct selection is worth one point in the main exam.
```

You have an Azure environment. How will you create a new Azure virtual machine from an Android laptop?

Select two correct options.

- ☐ **Use the PowerApps portal**
- ☐ **Use PowerShell in Azure Cloud Shell.**

  (Correct)
- ☑ **Use the Azure Portal**

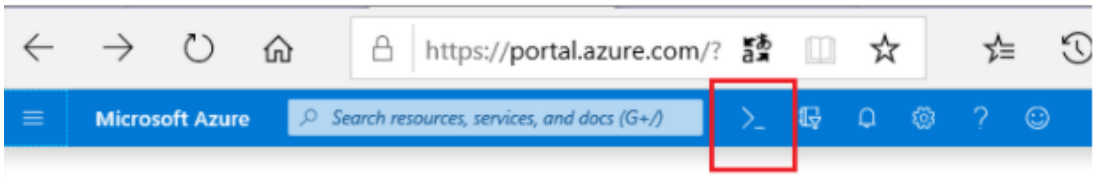
  (Correct)
- ☐ **Azure PowerShell for Windows**
- ☑ **Azure CLI**

  (Incorrect)

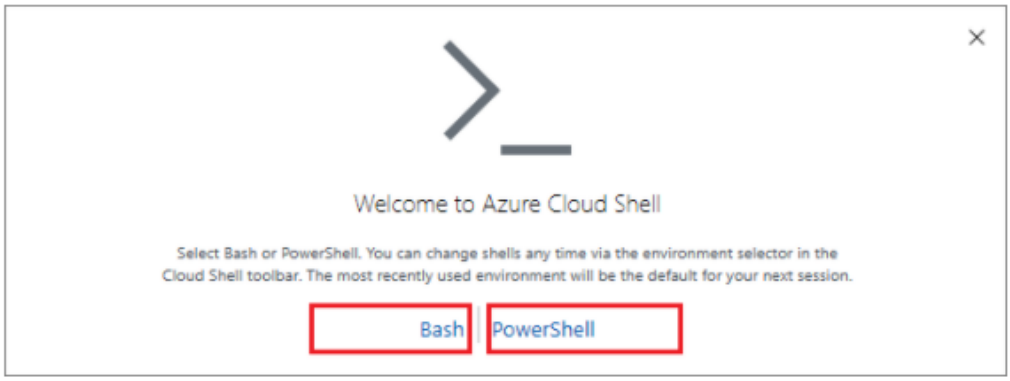
Explanation
Correct answers are

Option ***Use PowerShell in Azure Cloud Shell*** - *Azure Cloud Shell* is a browser-based scripting environment in your portal. Linux users can opt for a *Bash experience*, while Windows users can opt for *PowerShell*.

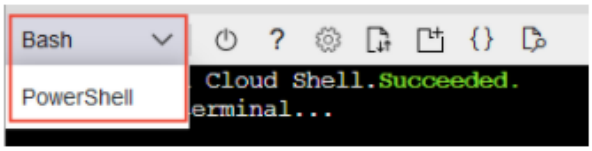
1. Select **Cloud Shell**.



2. Select **Bash** or **PowerShell**.



After first launch, you can use the shell type drop-down control to switch between Bash and PowerShell:



Option ***Use the Azure Portal*** - *Azure portal* is a public website that you can access with any web browser, to *create, manage, and monitor any available Azure services*. It also guides you through complex administrative tasks using wizards and tooltips.
Reference: https://azure.microsoft.com/en-au/features/azure-portal/

Other options are not correct.

Option ***Azure CLI*** is incorrect - *Azure Command Line Interface (CLI)* is a cross-platform command-line program that connects to Azure and executes administrative commands on Azure resources. Cross-platform means that it can be run on Windows, Linux, or macOS only. You can not access CLI from android.
Reference: https://docs.microsoft.com/en-us/cli/azure/what-is-azure-cli

Option ***Use the PowerApps portal*** is incorrect - *Azure Power Apps portal* provides a low-code approach to rapidly build apps for any device, while seamlessly working with your Azure-based services through a rich professional developer extensibility model.

Option ***Azure PowerShell for Windows*** is incorrect - *Azure PowerShell for Windows* can be used in the Windows operating system only.
Reference: https://docs.microsoft.com/en-us/powershell/azure

Question 34: **Correct**
Which feature collects all of the logs from various resources into a central dashboard, where you can run queries, view graphs, and create alerts on certain events?

Select the correct option.

- **Azure Monitor**

  (Correct)

- **Azure Security Center**

- **Azure Portal Dashboard**

- **Event Hub**

Explanation
Keywords: *logs collection, dashboard, graphs, alerts => Azure Monitors*

Correct answer is option ***Azure Monitor***

Azure Monitor maximizes the availability and performance of your applications by delivering a comprehensive solution for collecting, analyzing, and acting on telemetry from your cloud and on-premises environments. It helps you understand how your applications are performing and proactively identifies issues affecting them and the resources they depend on.
Reference: https://docs.microsoft.com/en-us/azure/azure-monitor/overview

Other options are not correct.

Option ***Event Hub*** is incorrect - *Event Hubs* is a 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.
Reference: https://azure.microsoft.com/en-us/services/event-hubs

Option ***Azure Security Center*** is incorrect - *Azure Security Center* is a monitoring service that provides threat protection across all of your services both in Azure, and on-premises.
Reference: https://docs.microsoft.com/en-us/azure/security-center/security-center-introduction

Option ***Azure Portal Dashboard*** is incorrect - *Azure portal* is a public website that allows you to create, manage, and monitor any available Azure services. You can identify a service you're looking for, get links for help on a topic, and deploy, manage, and delete resources.

Question 35: **Correct**
Which one of the following systems are used to determine Azure costs for each billing period?

Select the correct option.

- **Number of created virtual machines**
- **Usage meters**

  (Correct)
- **The Azure website**

The Azure pricing calculator

Explanation
Correct answer is option ***Usage meters***

Azure is billed according to your consumption based on monthly ***usage meters***. Meters are used to track a resource's usage throughout its lifetime. These meters are then used to calculate the bill.
Reference: https://docs.microsoft.com/en-us/azure/cost-management-billing/understand/review-individual-bill

Other options are not correct.

Question 36: **Incorrect**
A team of developers at your company plans to deploy, and then remove, 50 customized virtual machines each week. Thirty of the virtual machines run Windows Server 2016 and 20 of the virtual machines run Ubuntu Linux.

You need to recommend which Azure service will minimize cost and the administrative effort required to deploy and remove the virtual machines.

What should you recommend?

- **Azure DevTest Labs**

  (Correct)
- **Azure virtual machine scale sets**
- **Azure Resource Manager Template (ARM)**

  (Incorrect)
- **Azure Reserved Virtual Machines (VM) Instances**

Explanation
Keywords: *temporary resources (weekly), minimum administrative effort => DevTest Labs*

Correct answer is option ***Azure DevTest Labs***

Azure DevTest Labs provides self-service cloud environments (Windows/Linux) for demo/training purposes to speed up the development process. Developers can quickly provision their development machines on demand, and decommission it if not needed. DevTest labs required minimal effort and less cost comparing to other options.
Reference: https://docs.microsoft.com/en-us/azure/devtest-labs/devtest-lab-overview

Other options are not correct.

Option ***Azure Reserved Virtual Machines (VM) Instances*** is incorrect - *Azure Reservations* help you save money by committing to one-year or three-year plans for multiple products. Committing allows you to get a discount on the resources you use, but require upfront Capital investment, in spite of, if you will use resources or not. So reservation is not a cost-effective solution.
Reference: https://docs.microsoft.com/en-us/azure/cost-management-billing/reservations/save-compute-costs-reservations

Option ***Azure Virtual machine scale sets*** is incorrect - *Azure virtual machine scale sets* let you create and manage a group of VM instances that can automatically increase or decrease in response to demand. Scale set is a good option to save cost for production-like environments, where usage is dynamic.
Reference: https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/overview

Option ***Azure Resource Manager Template (ARM)*** is incorrect - *ARM templates* are JSON files that define the infrastructure and configuration for your project. It's used to automate resource creation but does not help in resource management and cost-saving.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/overview

Question 37: **Incorrect**
A company is planning to use Azure services and they wanted to understand the complete SLA offering provided by Microsoft for these services. Which of the following statement regarding Azure SLA is correct?

Select the correct option.

- **The Azure subscription has a single all-encompassing SLA**
- **Azure preview features are covered by an SLA**

  (Incorrect)
- **Each Azure service offering has a unique SLA**

  (Correct)
- **SLAs are not contractual documents**

Explanation
Correct answer is option ***Each Azure service offering has a unique SLA***

Microsoft maintains its commitment to providing customers with high-quality products and services by adhering to comprehensive operational policies, standards, and practices. Formal documents are known as ***Service-Level Agreements (SLAs)*** capture the specific terms that define the performance standards that apply to Azure.

o SLAs describe Microsoft's commitment to providing Azure customers with certain performance standards.

o ***There are unique SLAs for individual Azure products and services.***

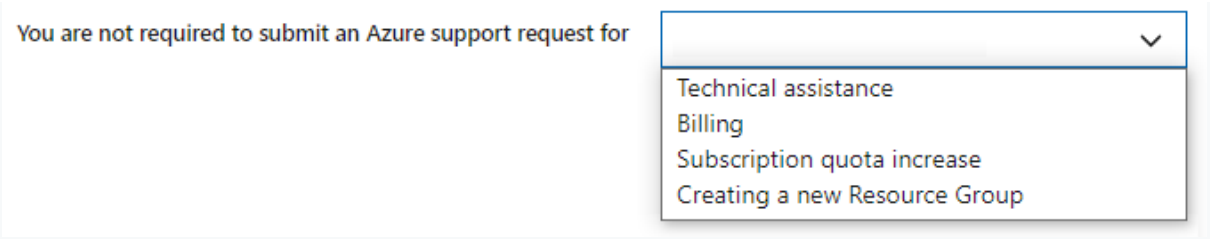
o SLAs also specify what happens if a service or product fails to perform to a governing SLA's specification.

Reference: https://azurecharts.com/sla
Reference: https://azure.microsoft.com/en-us/support/legal/sla/

Other options are not correct.

Question 38: **Incorrect**

```
1.      Exam notes:
2.      - This question requires you to select the correct option from the dropdown.
3.      - Udemy does not support dropdown selection, but in the actual exam, you will be al
        lowed to use the dropdown.
```



- **Billing**
- **Subscription quota increase**
- **Creating a new Resource Group**

  (Correct)
- **Technical assistance**

  (Incorrect)

Explanation
Correct answer is option ***Creating a new Resource Group***

You can create Resource Groups using the Azure portal or CLI/PowerBash. Azure support ticket can be raised for below help

- Technical assistance
- Billing
- Subscription quota increase

Other options are not correct.

Question 39: **Correct**
Your company plans to migrate all on-premises data to Azure. You need to identify whether Azure complies with the company's regional requirements.

What should you use?

- **Azure Marketplace**
- **Azure portal**
- **Azure Trust Center**

  (Correct)
- **Azure Security Center**

Explanation
Keywords: *compliance check => Trust Center*

Correct answer is option ***Azure Trust Center***

Trust Center is a website resource containing information and details about how Microsoft implements and supports security, privacy, compliance, and transparency in all Microsoft cloud products and services.
Reference: https://www.microsoft.com/trustcenter

Other options are not correct.

Option ***Azure portal*** is incorrect - *Azure portal* is a public website that you can access to create, manage, and monitor any available Azure services. The dashboard view provides high-level details about your Azure environment. You can customize the portal view as you need by moving and resizing tiles, displaying particular services of interest, accessing links for help and support, and providing feedback.
Reference: https://azure.microsoft.com/en-au/features/azure-portal/

Option ***Azure Marketplace*** is incorrect - *Microsoft Azure Marketplace* is an online store that offers applications and services either built on or designed to integrate with Microsoft's Azure public cloud. The Marketplace is the premier destination for all your software needs - certified and optimized to run on Azure.
Reference: https://azuremarketplace.microsoft.com/en-us/about

Option ***Azure Security Center*** is incorrect - *Azure Security Center* is a monitoring service that provides threat protection across all of your services both in Azure, and on-premises.
Reference: https://docs.microsoft.com/en-us/azure/security-center/security-center-introduction

Question 40: **Correct**
A company is planning to host a set of resources in Azure. They want to protect their resources against DDoS attacks and also get real-time attack metrics.

Which of the following should the company opt for?

- **DDoS Protection Isolated**
- **DDoS Protection Standard**

  (Correct)
- **DDoS Protection Premium**
- **DDoS Protection Basic**

Explanation
Correct answer is option ***DDoS Protection Standard***

Azure Distributed Denial of Service (DDoS) attacks attempt to overwhelm and exhaust an application's resources, making the application slow or unresponsive to legitimate users. Azure DDoS protection, combined with application design best practices, provide defense against DDoS attacks.

The Standard service tier provides additional mitigation capabilities that are tuned specifically to Microsoft Azure Virtual Network resources. DDoS standard plan provides services like real-time metrics & alerts, always-on availability, and many more.
Reference: https://docs.microsoft.com/en-us/azure/virtual-network/ddos-protection-overview

Feature	DDoS Protection Basic	DDoS Protection Standard
Active traffic monitoring & always on detection	●	●
Automatic attack mitigations	●	●
Availability guarantee		●
Application based mitigation policies		●
Metrics & alerts		●
Mitigation reports		●
Mitigation flow logs		●
Mitigation policy customizations		●
DDoS rapid response support		●

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

Other options are not correct.

Option ***DDoS Protection Basic*** is incorrect - The Basic service tier is automatically enabled as part of the Azure platform. Always-on traffic monitoring and real-time mitigation of common network-level attacks provide the same defenses that Microsoft's online services use. The basic plan does not provide metrics like real time monitoring alert.

Option ***DDoS Protection Isolated*** is incorrect - It's not a valid service plan.

Option ***DDoS Protection Premium*** is incorrect - It's not a valid service plan.

Question 41: **Correct**
A company is planning to use Azure solutions and wants to understand the Azure global infrastructure.

Which statement regarding Azure regions is correct?

- **They are contained within data centers**
- **They are contained within availability zones**

- **Regions contain a maximum of two availability zones**
- **Azure service availability can vary by region**

  (Correct)

Explanation
Correct answer is option ***Azure service availability can vary by region***

All Azure services are not available in all the Azure regions. Service availability varies from region to region.

The region is a geographical area on the planet containing at least one, but potentially multiple data centers that are in close proximity and networked together with a low-latency network.

Reference: https://azure.microsoft.com/en-in/global-infrastructure/services/

Other options are not correct.

Option ***Regions contain a maximum of two availability zones*** is incorrect - A region can have 0 or more AZs. Azure has several Regions without Availability Zone (*eg. Australia Central*), and also has regions with 3 Availability Zones (*eg. UK South, Australia East*).
Reference: https://azure.microsoft.com/en-au/global-infrastructure/geographies

Option ***They are contained within data centers*** is incorrect - *Region* is a geographical area on the planet containing at least one, but potentially ***multiple datacenters*** that are in close proximity and networked together with a low-latency network.

Option ***They are contained within availability zones*** is incorrect - Actually a Region contains Availability Zone, so this statement is not correct.

Question 42: **Correct**
Which of the following is not an example of Infrastructure as a Service?

Select the correct option.

- **Azure SQL Database**

  (Correct)

- **SQL Server in a VM**

- **Virtual Machine Scale Sets**

- **Virtual Machine**

Explanation

Correct answer is option ***Azure SQL Database***

Azure SQL Server Database is a relational database as a service (DaaS) based on the latest stable version of the Microsoft SQL Server database engine. SQL Database is a high-performance, reliable, fully managed, and secure database that you can use to build data-driven applications and websites in the programming language of your choice without needing to manage infrastructure.
Reference: https://docs.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview

Other options are not correct, as ***Virtual Machines, Scale Sets and SQL Server on VM*** *are examples of Infrastructure as a service (IaaS).*

Question 43: **Incorrect**

```
1.      Exam notes:
2.      - This question requires you to evaluate the text inside [ ] to determine if it is
        correct
3.      - Select "No change needed" if the above statement is correct, otherwise select the
        correct answer.
```

You can create an Azure support request from [*Microsoft Support Center*]

- **Azure portal**

(Correct)

- **No change needed**

  (Incorrect)

- **Security & Compliance admin center**

- **Microsoft Knowledge Center**

Explanation
Correct answer is option ***Azure portal***

Azure enables you to create and manage support requests, also known as support tickets. You can create and manage requests in the Azure portal. You can also create and manage requests programmatically, using the Azure support ticket REST API.
Reference: https://docs.microsoft.com/en-us/azure/azure-portal/supportability/how-to-create-azure-support-request

Other options are not correct.

Question 44: **Correct**

```
Exam notes:
- This question requires you to evaluate the text inside [ ] to determine if it is correct
- Select "No change needed" if the above statement is correct, otherwise select the correct answer.
```

When you need to delegate permissions to several Azure virtual machines simultaneously, you must deploy the Azure virtual machines [*to the same Azure Region*]

- **to the same Availability Zone**

- **to the same Resource Group**

(Correct)

- **No change needed**

- **by using the same Azure Resource Manager (ARM) template**

Explanation
Correct answer is option ***to the same Resource Group***

You can apply for permissions at the *Resource Group* level, which will automatically get inherited to all resources created in the resource group.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/overview#resource-groups

Other options are not correct.

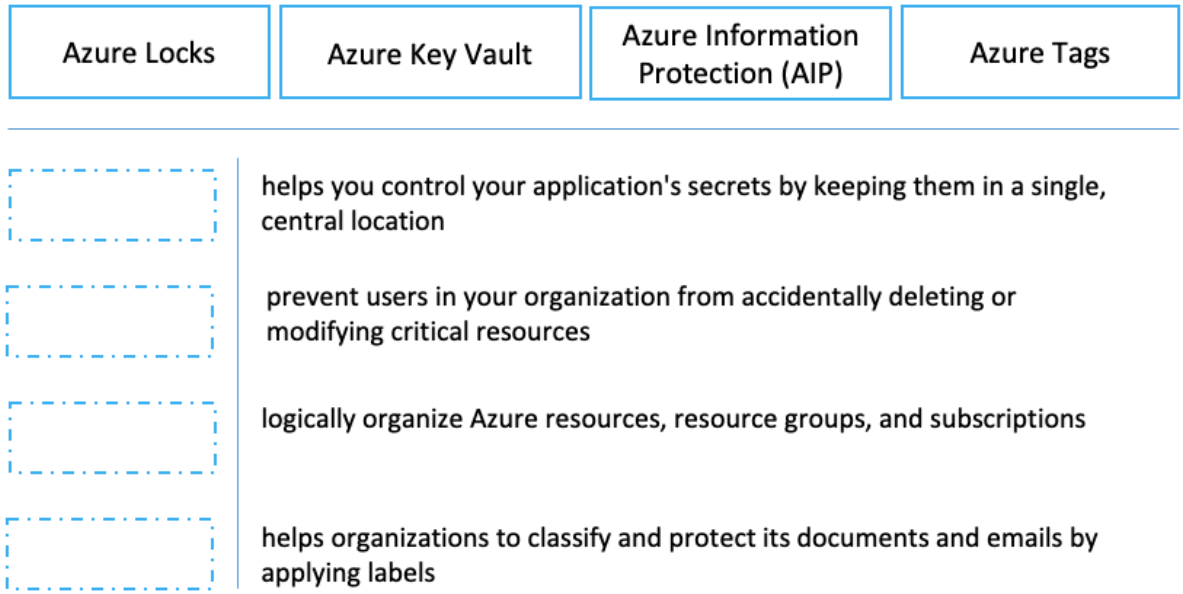
Option ***No change needed*** ie. ***to the same Azure Region*** is incorrect - *Region* level permissions are not possible, so you have to apply for permissions either on Subscription or Resource group level.

Option ***by using the same Azure Resource Manager (ARM) template*** is incorrect - *Azure Resource Manager (ARM) Templates* are JSON files that define the infrastructure and configuration for your project. In the template, you specify the resources to deploy and the properties for those resources.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/templates/overview

Option ***to the same Availability Zone*** is incorrect - *Availability Zones* level permissions are not possible, so you have to apply permissions either on Subscription or Resource group level.
Reference: https://docs.microsoft.com/en-us/azure/availability-zones/az-overview

Question 45: **Correct**

```
1.      Exam notes:
2.      - Drag the appropriate term from the row on the top to its description on the botto
        m.
3.      - Udemy does not support drag & drop, but in the actual exam, you will be allowed.
4.      - Each correct selection is worth one point in the main exam.
```



- ***Azure Locks*** **- helps you control your application's secrets by keeping them in a single, central location**
  Azure Key Vault **- prevent users in your organization from accidentally deleting or modifying critical resources**
  Azure Information Protection (AIP) **- helps organizations to classify and protect its documents and emails by applying labels**
  Azure Tags **- logically organize Azure resources, resource groups, and subscriptions**

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  Azure Tags **- logically organize Azure resources, resource groups, and subscriptions**

  (Correct)

- ***Azure Locks*** **- helps you control your application's secrets by keeping them in a single, central location**
  Azure Key Vault **- helps organizations to classify and protect its documents and emails by applying labels**

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- 

Azure Locks **- helps you control your application's secrets by keeping them in a single, central location**
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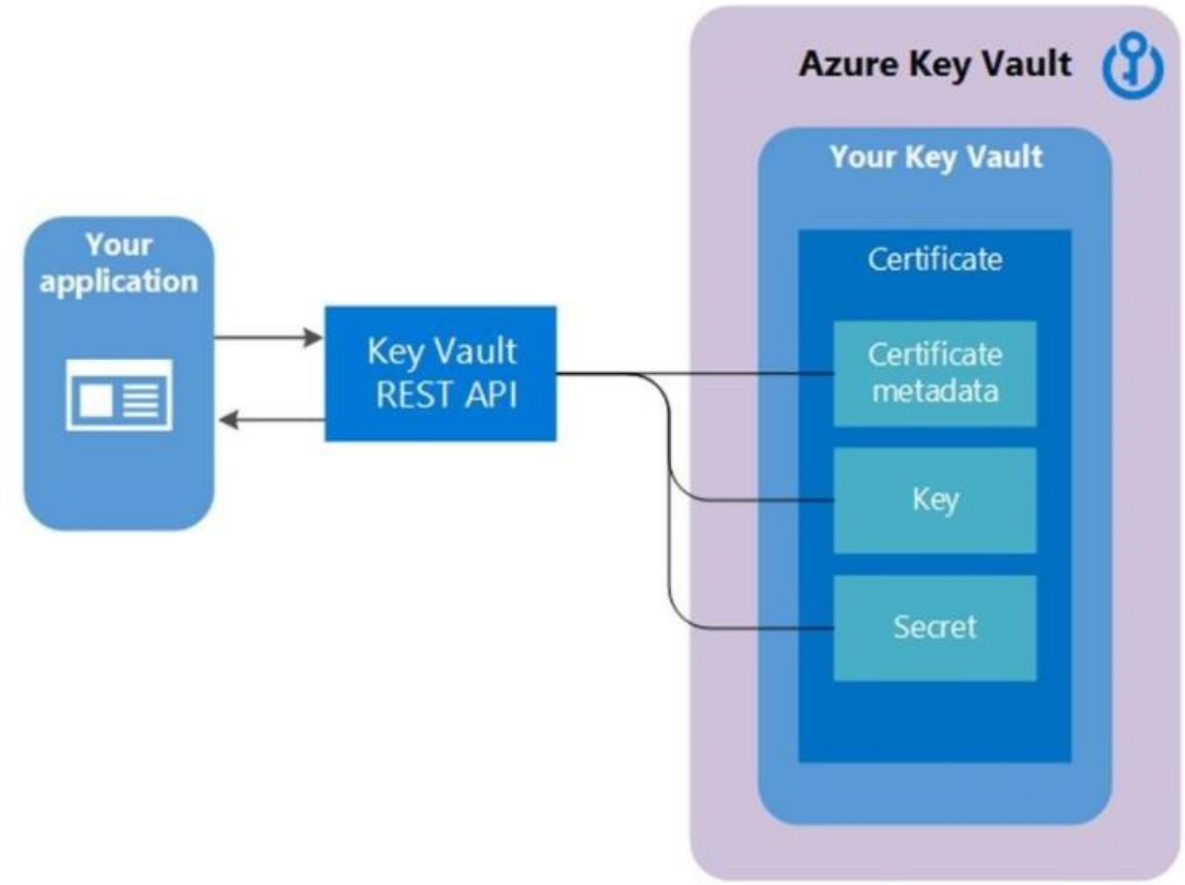
Azure Tags **- helps organizations to classify and protect its documents and emails by applying labels**

Explanation
Correct answer is option
Azure Locks - prevent users in your organization from accidentally deleting or modifying critical resources
Azure Key Vault - helps you control your application's secrets by keeping them in a single, central location
Azure Information Protection (AIP) - helps organizations to classify and protect its documents and emails by applying labels
Azure Tags - logically organize Azure resources, resource groups, and subscriptions

Detailed explanation:

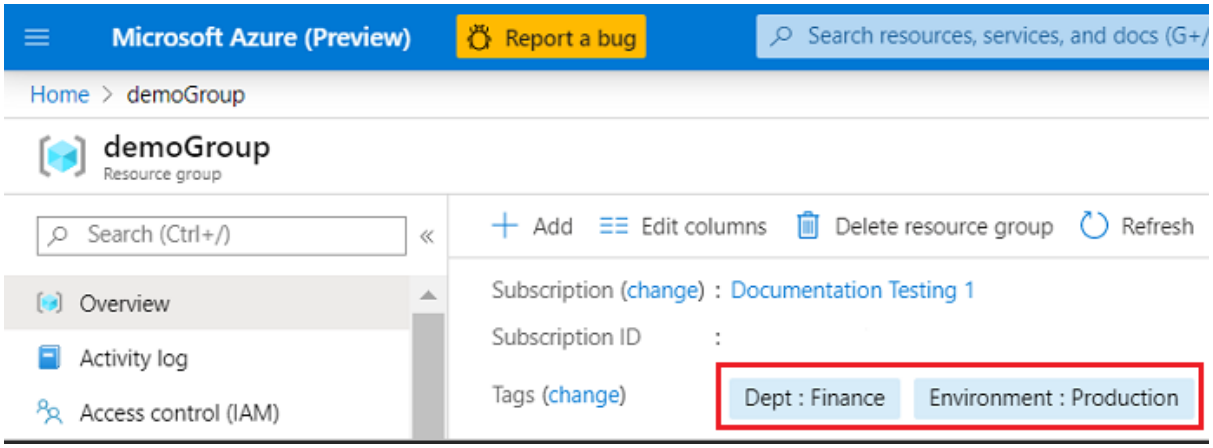
Azure Lock allows locking Azure Resources like subscription, resource group, or other resources to prevent other users in your organization from *accidentally deleting or modifying critical resources*. You can set the lock level to ***CanNotDelete*** or ***ReadOnly***. In the portal, the locks are called Delete and Read-only respectively.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources

Azure Key Vault helps you control your applications' secrets by keeping them in a single, central location and by providing secure access, permissions control, and access logging capabilities. Key usage scenarios for Key vault are *Secrets management, Key management, Certificate management, and to Store secrets backed by hardware security modules (HSMs)*
Reference: https://docs.microsoft.com/en-us/azure/key-vault/general/overview



Azure Information Protection (AIP) is a cloud-based solution that helps organizations 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 with a combination of both (where users are guided by recommendations).
Reference: https://docs.microsoft.com/en-us/azure/information-protection/what-is-information-protection

Tags are used to logically organize Azure resources, resource groups, and subscriptions 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.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/tag-resources



Other options are not correct.

Question 46: **Incorrect**

```
1.      Exam notes:
2.      - For each of the following statements, check the checkbox if the statement is corr
        ect.
3.      - Each correct selection is worth one point in the main exam.
```

Statements	Yes	No
1. Data that is stored in an Azure storage account automatically has at least three copies.	○	○
2. All data that is copied to an Azure storage account is backed up automatically to another Azure data center.	○	○
3. An Azure storage account can contain up to 2 TB of data and up to one million files.	○	○

- ☑

  All data that is copied to an Azure storage account is backed up automatically to another Azure data center.

  (Incorrect)

- ☐

  Data that is stored in an Azure storage account automatically has at least three copies.

  (Correct)

- ☑

  An Azure storage account can contain up to 2 TB of data and up to one million files.

  (Incorrect)

Explanation
Statement ***Data that is stored in an Azure storage account automatically has at least three copies*** is correct - There are different replication options available with a storage account. The minimum replication option is Locally Redundant Storage (LRS). With LRS, data is replicated synchronously three times within the primary region.
Reference: https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy

Statement ***All data that is copied to an Azure storage account is backed up automatically to another Azure data center*** is incorrect - Data has 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 that 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-redundancy

Statement ***An Azure storage account can contain up to 2 TB of data and up to one million files*** is incorrect - The limits are much higher than that. The current storage limit is 2 PB for US and Europe, and 500 TB for all other regions (including the UK) with no limit on the number of files.
Reference: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/azure-subscription-service-limits

Question 47: **Correct**
Which service could help you manage the VMs that your developers and testers need to ensure that your new app works across various operating systems?

Select the correct option.

- ◌

Azure Repos

- **Azure Test Labs**

- **Azure DevTest Labs**

  (Correct)

Explanation
Correct answer is option ***Azure DevTest Labs***

Azure DevTest Labs is used to manage VMs for testing, including configuration, provisioning, and automatic de-provisioning. *Azure DevTest Labs* provides self-service cloud environments (Windows/Linux) for demo/training purposes to speed up the development process. It can be used to implement many key scenarios, but one of the primary scenarios involves using DevTest Labs to host development machines for developers.
Reference: https://docs.microsoft.com/en-us/azure/devtest-labs/devtest-lab-overview

Other options are not correct.

Option ***Azure Test Labs*** is incorrect - Azure Test Labs is used to create automated tests, but not to manage VMs to test across various environments.

Option ***Azure Repos*** is incorrect - Azure Repos is a centralized, source-code management repository. It is not used to manage testing VMs

Question 48: **Correct**
A company is planning to host an application on a set of Virtual Machines in Azure. They want to ensure that the application survives a region-wide failure in Azure. Which of the following concept needs to be considered to fulfill this requirement?

Select the correct option.

- **Disaster Recovery**

(Correct)

- **Agility**
- **Elasticity**
- **Scalability**

Explanation
Keywords: *planning for region-wide failure => plan for disaster recovery*

Correct answer is option ***Disaster Recovery***

Disaster recovery is the ability to recover from an event that has taken down a region-wide cloud service. Cloud services disaster recovery can happen very quickly, with automation and services being readily available to use.
Reference: https://docs.microsoft.com/en-us/azure/architecture/framework/resiliency/backup-and-recovery

Other options are not correct.

Option ***Elasticity*** is incorrect - *Elasticity* is the ability to automatically or dynamically increase or decrease resources as needed. Elastic resources match the current needs and resources are added or removed automatically to meet future needs when it's needed (and from the most advantageous geographic location).
Reference: https://azure.microsoft.com/en-us/overview/what-is-elastic-computing/

Option ***Agility*** is incorrect - *Agility* is the ability to react quickly. Cloud services can allocate and deallocate resources quickly. They are provided on-demand via self-service, so vast amounts of computing resources can be provisioned in minutes.
Reference: https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/strategy/business-outcomes/agility-outcomes

Option ***Scalability*** is incorrect - *Scalability* is the ability to increase or decrease resources for any given workload. You can add additional resources to service a workload (known as scaling out) or add additional capabilities to manage an

increase in demand to the existing resource (known as scaling up). Scalability doesn't have to be done automatically.

Question 49: **Correct**
Which of the following provides a set of tools for monitoring, allocating, and optimizing your Azure cost?

Select the correct option.

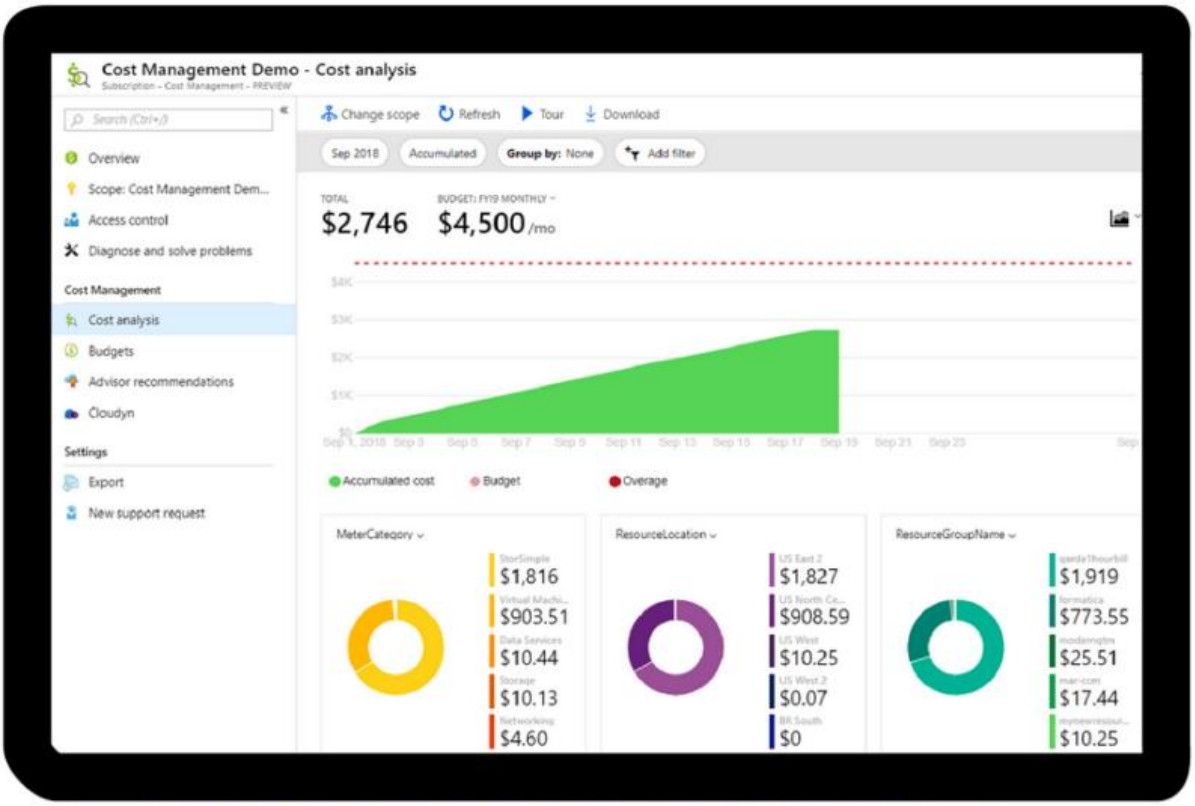
- **Budgets**
- **Azure Cost Management**

  (Correct)
- **Total Cost of Ownership Calculator (TCO)**
- **Azure Pricing Calculator**

Explanation
Keywords: *monitor, allocate, optimize, cost => Azure Cost Management*

Correct answer is option ***Azure Cost Management***.

Cost Management provides a set of tools for monitoring, allocating, and optimizing your Azure costs. The main features of the Cost Management toolset include Reporting, Data enrichment, Budgets, Alerting, Recommendations, and Price.
Reference: https://docs.microsoft.com/en-us/azure/cost-management-billing/cost-management-billing-overview



Reference: https://docs.microsoft.com/en-us/learn/modules/review-planning-managing-costs/10-define-azure-cost-management

Other options are not correct.

Option ***Azure Pricing Calculator*** is incorrect - *Pricing Calculator* is used for estimating the cost of Azure products. It's used to get the cost of azure products before you purchase them, so it can not be used to monitor the usage of your service.
Reference: https://azure.microsoft.com/en-us/pricing/calculator/

Option ***Total Cost of Ownership Calculator (TCO)*** is incorrect - *TCO* helps you use to estimate cost savings you can realize by migrating to Azure. It can not be used to monitor or analyze the cost of existing Azure services.
Reference: https://azure.microsoft.com/en-us/pricing/tco/calculator/

Option ***Budgets*** is incorrect - *Budgets* help you to proactively manage costs and to monitor how spending progresses over time. When the budget thresholds you've created are exceeded, only notifications are triggered. It can not be used to allocate or optimize the cost of services.
Reference: https://docs.microsoft.com/en-us/azure/cost-management-billing/costs/tutorial-acm-create-budgets

Question 50: **Correct**

What is the name of the collective set of APIs that provide machine learning and artificial intelligence services to your applications, like voice recognition, image tagging, and chatbot?

Select the correct option.

- **Cognitive Services**

  (Correct)

- **Azure Machine Learning service**

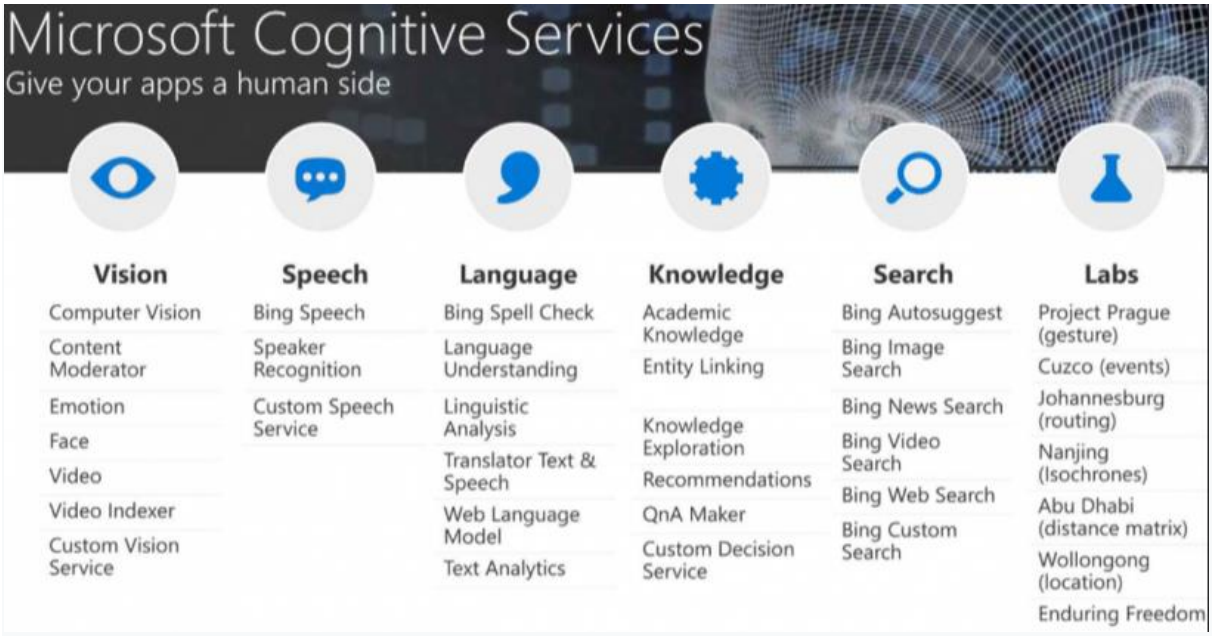
- **Azure HDInsight**

- **Azure Synapse**

Explanation
Keywords: *Machine learning APIs, voice, text, image, chat, search => Cognitive Service*

Correct answer is option ***Cognitive Services***

Cognitive services are a collection of domain-specific pre-trained AI models that can be customized with your data. Azure Cognitive Services enables developers to easily add cognitive features into their applications with cognitive solutions that can see, hear, speak, understand, and even begin to reason.



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

Other options are not correct.

Option ***Azure Synapse*** is incorrect - *Azure Synapse* is a limitless analytics service that brings together enterprise data warehousing and big data analytics. It gives you the freedom to query data on your terms, using either serverless on-demand or provisioned resources - at scale.
Reference: https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-overview-what-is

Option ***Azure HDInsight*** is incorrect - *Azure HDInsight* is an analytics service for enterprises to process massive amounts of data. HDInsight allows you to run popular open-source frameworks and create cluster types such as **Apache Spark**, **Apache Hadoop**, **Apache Kafka.**
Reference: https://docs.microsoft.com/en-us/azure/hdinsight/hadoop/apache-hadoop-introduction

Option ***Azure Machine Learning service*** is incorrect - *Machine Learning service* provides a cloud-based environment that can be used to develop, train, test, deploy, manage, and track machine learning models to implement Artificial Intelligence (AI).
Reference: https://azure.microsoft.com/en-in/services/machine-learning/

Question 51: **Incorrect**

Your team has limited experience with writing custom code, but it sees tremendous value in automating several important business processes.

Which of the following options is your team's best option?

- **Azure Kubernetes Service**
- **Azure App Service**

  (Incorrect)
- **Azure Functions**
- **Azure Logic Apps**

  (Correct)

Explanation
Correct answer is option ***Azure Logic Apps***

Azure Logic Apps is best suited for users who are more comfortable in a visual environment that allows them to automate their business processes. Logic Apps is the best option in this scenario.

Other options are not correct as ***Azure Functions, Azure Kubernetes Service*** & ***Azure App Service*** are best suited for software developers. So these options are not the best option in this scenario.

Question 52: **Correct**
What Azure product allows you to autoscale virtual machines from 1 to 1000 instances, and also provides load balancing services built-in?

Select the correct option.

- **Azure Virtual Machines**
- **Application Gateway**
- **Virtual Machine Scale Sets**

  (Correct)
- **Azure App Services**

Explanation
Keywords: *auto-scaling, load-balancing => use Scale Sets*

Correct answer is option ***Virtual Machine Scale Sets***

Azure virtual machine scale sets let you create and manage a group of load-balanced VMs. The number of VM instances can automatically increase or decrease in response to demand or a defined schedule. Scale sets provide high availability to your applications and allow you to centrally manage, configure, and update a large number of VMs.
Reference: https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/overview

Other options are not correct.

Option ***Azure Virtual Machines*** is incorrect - *Azure Virtual Machines* gives you the flexibility of virtualization for a wide range of computing solutions with support for Linux, Windows Server, SQL Server, Oracle, IBM, SAP, and more. Autoscaling of virtual machines is achieved by using scale sets.
Reference: https://azure.microsoft.com/en-us/services/virtual-machines/

Option ***Azure App Services*** is incorrect - *Azure App Service* enables you to quickly and easily build web and mobile apps for any platform or device. It offers auto-scaling and high availability, supports both Windows and Linux, and enables automated deployments from GitHub, Azure DevOps, or any Git repo.
Reference: https://docs.microsoft.com/en-us/azure/app-service/overview

Option ***Application Gateway*** is incorrect - *Azure Application Gateway* is a web traffic load balancer that enables you to manage traffic to your web applications & also perform URL based routing. It is the connection through which users connect to your application.
Reference: https://docs.microsoft.com/en-us/azure/application-gateway/how-application-gateway-works

Question 53: **Correct**
Azure Services can go through several phases in a Service Lifecycle. What are the three phases called?

Select the correct option.

- **Private Preview, Public Preview, and General Availability**

  (Correct)

- **Development phase, QA phase, and Live phase**

- **Preview Phase, General Availability Phase, and Unpublished**

- **Announced, Coming Soon, and Live**

Explanation
Keywords: *Service lifecycle => Private Preview > Public Preview > General Availability*

Correct answer is option ***Private Preview, Public Preview, and General Availability***

Microsoft offers previews of Azure services, features, and functionality for evaluation purposes. With Azure Previews, you can test pre-release features, products, services, software, and even regions. Previews allow users early access to functionality. Additionally, users providing feedback on the preview features help Microsoft improve the Azure service.
o ***Private preview*** - An Azure feature is available to certain Azure customers for evaluation purposes. You must apply to use them.
o ***Public preview*** - An Azure feature is available to all Azure customers for evaluation purposes. Anyone can use the features available in Public Preview.
o ***General Availability (GA)*** **-** Once a feature is evaluated and tested successfully, it may release to customers as part of Azure. In other words, the feature may be made

available for all Azure customers. A feature released to all Azure customers typically goes to General Availability or GA.

Reference: https://azure.microsoft.com/en-in/support/legal/preview-supplemental-terms/

Other options are not correct as these are not valid phases - Development phase, QA phase, Live phase, Announced, Coming Soon, Live, Preview Phase, and Unpublished phase.

Question 54: **Correct**
You need to predict future behavior based on previous actions.

Which product option should you eliminate as a candidate?

- **Azure Machine Learning**
- **Azure Bot Service**

  (Correct)
- **Azure Cognitive Services**

Explanation
Correct answer is option ***Azure Bot Service***

Azure Bot Service will not help with prediction, as it works with predefined rules in the backend system. So it should be eliminated as a candidate.

Other options are not correct.

Option ***Azure Machine Learning*** is incorrect - Azure Machine Learning enables you to build models to predict the likelihood of a future result. It should not be eliminated as a candidate.

Option ***Azure Cognitive Services*** is incorrect - The Personalizer service is part of Azure Cognitive Services and allows you to build recommendations to predict what a user might want. It should not be eliminated as a candidate.

Question 55: **Correct**
You are planning to deploy a static website to Azure. The website will be accessed by users worldwide and will host large video files. You need to recommend an Azure feature, that must be used to provide the best video playback experience.

What should you recommend?

- **Azure Content Delivery Network (CDN)**

  (Correct)

- **Azure Traffic Manager**

- **Network interface**

- **Application gateway**

Explanation
Keywords: *static content, worldwide access, fast experience => use CDN*

Correct answer is option ***Azure Content Delivery Network (CDN)***

Content Delivery Network (CDN) is a distributed network of servers that can efficiently deliver web content to users. In this scenario, Video files will be cached on CDN edge locations and will be served to users in their local region to minimize latency, which will provide the best video playback experience.
Reference: https://azure.microsoft.com/en-us/services/cdn/

Other options are not correct.

Option ***Application gateway*** is incorrect - *Azure Application Gateway* is a web traffic load balancer that enables you to manage traffic to your web applications. An application gateway is helpful to improve the availability of application (by

distributing load only to healthy application servers), but can not help in application performance and fast user experience.
Reference: https://docs.microsoft.com/en-us/azure/application-gateway/how-application-gateway-works

Option ***Azure Traffic Manager*** is incorrect - *Azure Traffic Manager* is a DNS-based traffic load balancer that enables you to distribute traffic optimally to services across global Azure regions while providing high availability and responsiveness. Traffic managers can improve performance by using a latency-based profile, but in this case, you will need to host application in multiple regions, close to users, which will increase your cost and effort to manage servers.
Reference: https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview

Option ***Network interface*** is incorrect - *A network interface* enables an Azure Virtual Machine to communicate with the internet, Azure, and on-premises resources. It can not help to improve web content delivery to end-users.
Reference: https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-network-interface