#### Question 1: Correct

With Azure public cloud, anyone with a valid credit card can sign up and get services immediately

- FALSE
- TRUE

(Correct)

### **Explanation**

Yes, Azure public cloud is open to the public in all countries that Azure supports.

For more info: https://azure.microsoft.com/en-gb/overview/what-is-a-public-cloud/

#### Question 2: Correct

What happens if Azure does not meet its own Service Level Agreement guarantee (SLA)?

 A discount will be applied to the customer's Azure bill (as a service credit), which is a compensation for an under-performing Azure product or service

(Correct)

- The resource that did not meet the SLA will be free for the remaining month and the next.
- It's not possible. Azure will always meet it's SLA?
- The service will be free that month

### **Explanation**

Microsoft offers a service credit percentage depending on the missed SLA.

For more info: https://docs.microsoft.com/en-us/learn/modules/explore-azure-service-level-agreements/3-explore-slas-for-azure-products-services

# Question 3: Incorrect

Within the context of privacy and compliance, what does the acronym ISO stand for, in English?

- Information Systems Officer
- International Organization for Standardization

(Correct)

- Instead of
- Intelligence and Security Office

(Incorrect)

# **Explanation**

ISO is a standards body, International Organization for Standardization

For more info: https://www.iso.org/about-us.html

Question 4: Correct
What is a DDoS attack?

- An attempt to read the contents of a web page from another website, thereby stealing the user's private information
- A denial of service attack that sends so much traffic to a network that it cannot respond
  fast enough; legitimate users become unable to use the service

(Correct)

- An attempt to guess a user's password through brute force methods
- An attempt to send SQL commands to the server in a way that it will execute them against the database

# **Explanation**

Distributed Denial of Service attacks (DDoS) -a type of attack that originates from the Internet that attempts to overwhelm a network with millions of packets of bad traffic that aims to prevent legitimate traffic from getting through

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

#### Question 5: Correct

Which of the following is something that Azure Cognitive Services API can currently do?

- Recognize text in an image
- Recognize faces in a picture
- Speak text in an extremely realistic way
- All of these! Azure can do it all!

(Correct)

- Create text from audio
- Translate text from one language to another

# **Explanation**

Azure can do all of them, of course.

For more info: https://azure.microsoft.com/en-us/services/cognitive-services/

### Question 6: Incorrect

What benefit does a Content Delivery Network (CDN) provide its users?

- Allows you to keep temporarily session information on the web visitor such as their login
   ID or their name
- Allows you to reduce the traffic coming into a web server for static, unchanging files such as images, videos, and PDFs

- For a small fee, Azure will take over management of your virtual machine, perform OS updates and ensure it's running well
- Allows you to store data that can be retrieved later in an extremely fast and inexpensive manner

### (Incorrect)

#### **Explanation**

Content Delivery Network - allows you to improve performance by removing the burden of serving static, unchanging files from the main server to a network of servers around the globe; a CDN can reduce traffic to a server by 50% or more, which means you can serve more users or serve the same users faster; SaaS

For more info: https://docs.microsoft.com/en-us/azure/cdn/cdn-overview

Question 7: Correct

What feature of a system makes it elastic?

The ability of it to add and reduce capacity based on actual demand

(Correct)

- The ability to heal itself after a crash
- The ability of it to stay up (available) while updates are being made to the system
- The ability to withstand denial of service attacks

#### **Explanation**

Elasticity - the ability of a system to automatically grow when maximum capacity is reached, and automatically shrink to minimize waste

For more info: https://azure.microsoft.com/en-us/overview/what-is-elastic-computing/

**Ouestion 8: Correct** 

What does it mean if a service is in Private Preview mode?

· You have to apply to get selected in order to use that service

(Correct)

- Anyone can use the service but it must not be for production use
- Anyone can use the service for any reason
- . The service is generally available for use, and Microsoft will provide support for it

### **Explanation**

Private Preview means you have to apply to use a service, and you may or may not be selected

For more info: https://azure.microsoft.com/en-us/support/legal/preview-supplemental-terms/

Question 9: Incorrect

What are Resource Groups in Azure?

- Automatically assigned groups of resources that all have the same type (virtual machine, app service, etc)
- Within the Azure security model, users are organized into groups, and those groups are granted permissions to resources

# (Incorrect)

 A folder structure in Azure in which you organize resources like databases, virtual machines, virtual networks, or almost any resource

(Correct)

Based on the tag assigned to a resource by the deployment script, it is assigned to a group

### **Explanation**

Resource Groups - a folder structure in Azure in which you organize resources like databases, virtual machines, virtual networks, or almost any resource

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

**Question 10: Correct** 

What is Azure's preferred Identity/authentication service?

• Azure Active Directory

(Correct)

- Live Connect
- Network Security Group
- Facebook Connect

# **Explanation**

Azure Active Directory (Azure AD) - Microsoft's preferred Identity as a Service solution

For more info: https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-whatis

#### Question 11: Correct

How does Multi-Factor Authentication make a system more secure?

• It requires the user to have access to an additional device for identity verification

(Correct)

- It doesn't make it more secure
- It is another password that a user has to memorize, making it more secure
- It allows the user to log in without a password because they have already previously been validated using a browser coookie

# **Explanation**

Multi-Factor Authentication (MFA) - the concept of having something additional to a "password" that is required to log in; passwords are findable or guessable; but having your mobile phone on you to receive a phone call, text or run an app to get a code is harder for a unknown hacker to get

For more info: https://docs.microsoft.com/en-us/azure/active-directory/authentication/concept-mfa-howitworks

Question 12: Correct

True or false: You cannot have more than one Azure subscription per company

FALSE

(Correct)

TRUE

### **Explanation**

You can have multiple subscriptions, as a way to seperate out resources between billing units, business groups, or for any reason you wish.

For more info: https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/ready/azure-best-practices/scale-subscriptions

#### **Ouestion 13: Correct**

What type of documents does the Microsoft Service Trust Portal provide?

- A tool that helps you manage your compliance to various standards
- A list of standards that Microsoft follows, pen test results, security assessments, white papers, faqs, and other documents that can be used to show Microsoft's compliance efforts

(Correct)

- Documentation on the individual Azure services and solutions
- Specific recommendations about your usage of Azure and ways you can improve

### **Explanation**

A list of standards that Microsoft follows, pen test results, security assessments, white papers, faqs, and other documents that can be used to show Microsoft's compliance efforts

For more info: https://servicetrust.microsoft.com/

#### Question 14: Correct

What is the default amount of credits that you are given when you first create an Azure Free account?

- You can create 1 Linux VM, 1 Windows VM, and a number of other free services for the first year.
- The default is US\$200

- Azure does not give you any free credits when you create a free account
- You are given \$50 per month, for one year towards Azure services

There are some other benefits to a free account, but you get US\$200 to spend in the first month.

For more info: https://azure.microsoft.com/en-us/free/

Question 15: Correct

What is the recommended way within Azure to store secrets such as private cryptographic keys?

- In an Azure Storage account private blob container
- Within the application code
- Azure Advanced Threat Protection (ATP)
- Azure Key Vault

(Correct)

# **Explanation**

Azure Key Vault - the modern way to store cryptographic keys, signed certificates and secrets in Azure

For more info: https://docs.microsoft.com/en-us/azure/key-vault/

Question 16: Correct

What does it mean if a service is in General Availability (GA) mode?

- You have to apply to get selected in order to use that service
- Anyone can use the service but it must not be for production use
- The service is available for use by some, and Microsoft will provide support for it
- Anyone can use the service for any reason

(Correct)

# **Explanation**

Anyone can use a GA service. It is fully supported and can be used for production.

For more info: https://azure.microsoft.com/en-us/support/legal/preview-supplemental-terms/

Question 17: Incorrect

Which Azure AD licenses (select two) are made available through Azure?

- Business Tier 1
- Basic

(Incorrect)

Azure Active Directory Free

(Correct)

Office 365

Enterprise Tier 2

(Incorrect)

### **Explanation**

Azure Active Directory provides the following licenses: Free, Office 365, Premium P1, and Premium P2.

For more info: Azure Active Directory Pricing | Microsoft Security

Question 18: Incorrect

What Azure tool gives you the ability to manage multiple subscriptions into nested hierarchies?

- RBAC
- Management Groups

(Correct)

- Azure Active Directory
- Resource Groups

(Incorrect)

### **Explanation**

Management Groups - a hierarchy of subscriptions; can have many subscriptions, and group them, and put those groups into other groups

For more info: https://docs.microsoft.com/en-us/azure/governance/management-groups/overview

Question 19: Correct

What are Azure Availability Zones?

- A folder structure in Azure in which you organize resources like databases, virtual machines, virtual networks, or almost any resource
- A feature of Azure that allows you to manually specify into which data center your virtual machines are placed, which allows you to achieve higher availability than any other option.

(Correct)

- This is the same as a region
- Within each individual data center, certain racks of servers have been architected by Azure
  to have higher uptime than the others. If you place your apps onto this rack, you'll get
  higher uptime than if you let Azure do it.

# **Explanation**

Availability Zones - Unique physical locations within an Azure region, made up of one or more data centers; there is a minimum of three zones in each region; you can manually place your resources in an availability zone for highest availability

For more info: https://docs.microsoft.com/en-us/azure/availability-zones/az-overview

#### Question 20: Correct

Which of the following services would NOT be considered Infrastructure as a Service?

- Virtual Machine
- Virtual Network
- Azure Functions App

(Correct)

Virtual Network Interface Card (NIC)

### **Explanation**

Functions are small pieces of code that you give to Azure to run for you, and you have no access to the underlying infrastructure.

For more info: https://azure.microsoft.com/en-us/overview/what-is-iaas/

#### **Question 21: Incorrect**

Which feature within Azure 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?

Azure Monitor

(Correct)

Azure Portal Dashboard

(Incorrect)

- Storage Account or Event Hub
- Azure Security Center

# **Explanation**

Azure Monitor - a centralized dashboard that collects all the logs, metrics and events from your resources

For more info: https://docs.microsoft.com/en-us/azure/azure-monitor/overview

# Question 22: Correct

What Azure resource allows you to evenly split traffic coming in and direct it to several identical virtual machines to do the work and respond to the request?

Load Balancer or Application Gateway

- Azure Logic Apps
- Azure App Services

Virtual Network

#### **Explanation**

This is the core feature of either a Load Balancer or Application Gateway

For more info: https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview

Question 23: Correct

Which tool within the Azure Portal will make specific recommendations based on your actual usage for how you can improve your use of Azure?

- Azure Dashboard
- Azure Monitor
- Azure Advisor

(Correct)

Azure Service Health

### **Explanation**

Azure Advisor - a tool that will analyze your use of Azure and make you specific recommendations based on your usage across availability, security, performance and cost categories

For more info: https://docs.microsoft.com/en-us/azure/advisor/

Question 24: Incorrect

Which of the following elements is considered part of the "perimeter" layer of security?

• Use a firewall

(Correct)

Locks on the data center doors

(Incorrect)

- Separate servers into distinct subnets by role
- Keep operating systems up to date with patches

# **Explanation**

Firewall is part of the perimeter security

Question 25: Correct

What types of resources are defined as "compute resources"?

Resources that perform some type of task that requires CPU cycles to perform the work

- All resources that are listed in the Azure Marketplace
- Only Virtual Machines

Compute Services - a category of services in Azure that provides CPU cycles for rent. Virtual Machines are only one type of compute resource. The Marketplace contains many types of resources, not just compute.

For more info: https://azure.microsoft.com/en-us/product-categories/compute/

#### Question 26: Correct

What is the concept of Big Data?

- A small sensor or a similar device that constantly sends its status and other data to the cloud
- A form of artificial intelligence (AI) that allows systems to automatically learn and improve from experience without being explicitly programmed
- An extremely large set of data that you want to ingest and do analysis on; traditional software like SQL Server cannot handle Big Data as efficiently as specialized products

(Correct)

 A set of Azure services that allow you to use execute code in the cloud but don't require (or even allow) you to manage the underlying server

# **Explanation**

Big Data - a set of open-source (Apache Hadoop) products that can do analysis on millions and billions of rows of data; current tools like SQL Server are not good for this scale

For more info: https://docs.microsoft.com/en-us/azure/architecture/guide/architecture-styles/big-data

## Question 27: Correct

Which feature within Azure alerts you to service issues that happen in Azure itself, not specifically related to your own resources?

• Azure Service Health

(Correct)

- Azure Security Center
- Azure Monitor
- Azure Portal Dashboard

### **Explanation**

Azure Service Health - lets you know about any Azure-related service issues including region-wide downtime

For more info: https://docs.microsoft.com/en-us/azure/service-health/overview

Question 28: Incorrect

What is the benefit of economies of scale?

Prices of cloud servers and services are always going down. It'll be cheaper next year than
it is this year.

# (Incorrect)

- Big companies don't need to make a profit on the first product they sell you, because they will on the second
- Big companies don't need to make a profit on every sale
- The more you buy of something, the cheaper it is for you

(Correct)

# **Explanation**

Economies of scale - the more you buy something, the cheaper it is per unit to buy

For more info: https://www.microsoft.com/en-us/microsoft-365/business-insights-ideas/resources/how-economies-of-scale-affect-small-businesses

Question 29: Incorrect

Which of the following scenarios would Azure Policy be a recommended method for enforcement?

- Allow only one specific roles of users to have access to a resource group
- Prevent certain Azure Virtual Machine instance types from being used in a resource group

(Correct)

• Add an additional prompt when creating a resource without a specific tag to ask the user if they are really sure they want to continue?

(Incorrect)

Require a virtual machine to always update to the latest security patches

# **Explanation**

Azure Policy can add restrictions on storage account SKUs, virtual machine instance types, and rules relating to tagging of resources and groups. It cannot prompt a user to ask them if they are sure.

Question 30: Correct

What does ARM an abbreviation for in Azure?

- Advanced RISC Machine
- Azure Resource Manager

- Availability, Reliability, Maintainability
- Account Resource Manager

Azure Resource Manager (ARM) - this is the common resource deployment model that underlies all resource creation or modification; no matter whether you use the portal, PowerShell or the SDK, the Azure Resource Manager takes those commands and executes them

For more info: https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/overview

Question 31: Incorrect

What operating systems does Microsoft supply Azure Virtual Machine images for?

- macOS
- Windows
- Windows, Linux and macOS

(Incorrect)

- Linux
- Windows and Linux

(Correct)

### **Explanation**

Azure Virtual Machines support Windows and Linux

For more info: https://azure.microsoft.com/en-ca/services/virtual-machines/

Question 32: Correct

Approximately how many regions does Azure have around the world?

- 25
- 10
- 100
- Was 54, now 60+

(Correct)

# **Explanation**

They keep adding them all the time. There are now over 60 Azure regions, in 10 geographies

For more info: https://azure.microsoft.com/en-us/global-infrastructure/regions/

Question 33: Correct

True or False: Under the Infrastructure as a Service model, Azure is responsible for managing the physical host, physical network, and physical datacenter.

TRUE

#### FALSE

#### **Explanation**

Yes, Azure still manages the hardware itself, the hypervisor and all of the physical elements behind the scenes

For more info: https://docs.microsoft.com/en-us/azure/security/fundamentals/shared-responsibility

Question 34: Correct

True or false: Azure Active Directory is a network gateway that load balances user logins using a CDN (Content Delivery Network).

FALSE

(Correct)

TRUE

## **Explanation**

No, Azure Active Directory is an enterprise identity service that provides single sign-on and multifactor authentication.

For more info: https://azure.microsoft.com/en-us/services/active-directory/

Question 35: Correct

Why is Azure App Services considered Platform as a Service?

 You give Azure the code and the configuration, and you have no access to the underlying hardware

(Correct)

- You are responsible for keeping the operating system up to date with the latest patches
- You can decide on what type of virtual machine it runs A-series, or D-series, or even H-series
- Azure App Services is not PaaS. It is Software as a Service.

### **Explanation**

PaaS - You give Azure the code and the configuration, and you have no access to the underlying hardware

For more info: https://azure.microsoft.com/en-us/overview/what-is-paas/

Question 36: Incorrect

For tax optimization, which type of expense is preferable?

CapEx

(Incorrect)

OpEx

# (Correct)

## **Explanation**

Operating Expenditure is thought to be preferable because you can fully deduct expenses when they are incurred

For more info: <a href="https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/strategy/business-outcomes/fiscal-outcomes#capital-expenses-and-operating-expenses">https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/strategy/business-outcomes/fiscal-outcomes#capital-expenses-and-operating-expenses</a>

Question 37: Correct

True or false: you can create your own policies if built-in Azure Policy is not sufficient to your needs

- FALSE
- TRUE

(Correct)

#### **Explanation**

True, you can create custom policies using JSON

For more info: https://docs.microsoft.com/en-us/azure/governance/policy/overview

Question 38: Incorrect

What two types of DDoS protection services does Azure provide? Select two.

- Advanced
- Basic

(Correct)

Standard

(Correct)

Premium

(Incorrect)

#### **Explanation**

Azure DDos Protection Basic is free, while you can upgrade to Standard for a fee.

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

Question 39: Correct

Which of the following elements is considered part of the "network" layer of network security?

Separate servers into distinct subnets by role

- Use a firewall
- Locks on the data center doors
- Keep operating systems up to date with patches

Subnets is part of network security

For more info: https://docs.microsoft.com/en-us/azure/security/fundamentals/network-overview

**Question 40: Correct** 

True or false: Azure charges for bandwidth used "inbound" to Azure

- TRUE
- FALSE

(Correct)

### **Explanation**

Ingress bandwidth is free. You pay for egress (outbound).

For more info: https://azure.microsoft.com/en-us/pricing/details/bandwidth/

Question 41: Correct What is Single Sign-On?

- When you sign into an application, it remembers who you are the next time you go there.
- The ability to log in once and use the existing userid and password to sign in other applications, and not have to create/memorize a new one.

(Correct)

When an application outsources (federates) it's identity service to a third-party platform

# **Explanation**

Single-Sign On - the ability to use the same user id and password to log into every application that your company has; enabled by Azure AD

For more info: https://docs.microsoft.com/en-us/azure/active-directory/manage-apps/what-is-single-sign-on

### Question 42: Correct

Where do you go within the Azure Portal to find all of the third-party virtual machines and other offers?

- Azure mobile app
- Azure Marketplace

(Correct)

Choose an image when creating a VM

Bing

#### **Explanation**

Azure Marketplace contains thousands of services you can rent within the cloud

For more info: https://azuremarketplace.microsoft.com/en-us

Question 43: Correct

What does it mean if a service is in Public Preview mode?

- You have to apply to get selected in order to use that service
- Anyone can use the service for any reason
- Anyone can use the service but normal service level agreements do not apply

(Correct)

The service is generally available for use, and Microsoft will provide support for it

## **Explanation**

Public Preview is for anyone to use, but it is not supported nor guaranteed to continue to be available

For more info: https://azure.microsoft.com/en-us/support/legal/preview-supplemental-terms/

Question 44: Correct

True or False: Azure is a public cloud, and has no private cloud offerings

FALSE

(Correct)

• TRUE

# Explanation

Some aspects of Azure are not open to the public and require a private agreement with Microsoft such as Azure Government and DoD services

For more info: https://azure.microsoft.com/en-us/overview/what-are-private-public-hybrid-clouds/

Question 45: Correct

Which of the following would be an example of an Internet of Things (IoT) device?

- A web application that people use to perform their banking tasks
- A video game, installed on Windows clients around the world, that keep user scores in the cloud.
- A mobile application that is used to watch online video courses
- A refrigerator that monitors how much milk you have left and sends you a text message when you are running low

An IoT device is not a standard computing device but connects to a network to report data on a regular basis. A web server, a personal computer, or a mobile app is not an IoT device.

For more info: https://docs.microsoft.com/en-us/azure/iot-fundamentals/iot-introduction

Question 46: Correct

What is the basic way of protecting an Azure Virtual Network subnet?

- Application Gateway with WAF
- Azure Firewall
- Azure DDos Standard protection
- Network Security Group

(Correct)

# **Explanation**

Network Security Group (NSG) - a fairly basic set of rules that you can apply to both inbound traffic and outbound traffic that lets you specify what sources, destinations and ports are allowed to travel through from outside the virtual network to inside the virtual network

For more info: https://docs.microsoft.com/en-us/azure/virtual-network/security-overview

Question 47: Correct

Why would someone prefer a Consumption-based pricing model as opposed to a Time-based (Fixed) pricing model?

 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)

- The pricing model is simpler and easier to understand
- It is always cheaper to pay for consumption than to pay by the hour
- You can easily predict the cost of the service into the future

### **Explanation**

Consumption-Based Model - paying for something based on how much you used, as opposed to paying for something no matter if you use it or not.

For more info: https://docs.microsoft.com/en-us/azure/architecture/framework/cost/design-price

Question 48: Incorrect

What are the two features that Azure AD provides? Choose two.

Logic Apps

(Incorrect)

Application management

# (Correct)

- Logs Analytics
- Azure DDoS Protection
- Authentication

(Correct)

Functions

## **Explanation**

Azure AD provides many features, but only the two are listed.

Reference: https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-whatis

Question 49: Correct

True of false: Azure Powershell scripts and Command Line Interface (CLI) scripts are entirely compatible with each other?

FALSE

(Correct)

TRUE

# **Explanation**

No, PowerShell is it's own language, different than CLI

For more info: https://devblogs.microsoft.com/premier-developer/choosing-the-right-tooling-for-azure-and-side-by-side-azure-cli-and-powershell-commands/

Question 50: Correct

True or false: Azure Cloud Shell allows access to the CLI and Powershell consoles in the Azure Portal

• TRUE

(Correct)

FALSE

# **Explanation**

Cloud Shell - allows access to the CLI and Powershell consoles in the Azure Portal

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