The Tech BlackBoard

1

You have an on-premises network that contains several servers. You plan to migrate all the servers to Azure. You need to recommend a solution to ensure that some of the servers are available if a single Azure data center goes offline for an extended period. **What should you include in the recommendation?**

a) Availability Set

b) Fault tolerance

c) Scalability

d) elasticity

e) low latency

Fault tolerance is the ability of a system to continue to function in the event of a failure of some of its components.

2

In Azure what do you understand by Application availability?

a) Application is available to high end users

b) The individual SLA of each resource

c) The overall time that a system is functional and working

3

Your company plans to start using Azure and will migrate all its network resources to Azure. You need to start the planning process by exploring Azure. **What should you create first?**

a) a subscription

b) a resource group

c) a virtual network

d) a management group

Hierarchy given on Microsoft documentation: 'Management Group' --> 'Subscription' --> 'Resource group' --> 'Resources'.

Management groups provide a governance scope above subscriptions; however, Management group is not a mandatory component in Azure.

They help you to efficiently manage access, policies, and compliance for those subscriptions.

The Tech BlackBoard

4

You plan to build an enterprise data warehouse in Azure to perform business data analysis. The requirement is to build an integrated environment that will support the development of end-to-end analytical solutions. Which service should you use for this?

a) Azure Machine learning

b) Azure Synapse Analytics

c) Azure Database for PostgreSQL

a) Azure Machine Learning is incorrect because it does not provide enterprise data warehouse services. Azure Machine Learning is a development platform for coding machine learning.

b) Azure Synapse Analytics is a data analytics platform that combines data integration, enterprise data warehousing, and big data analytics. It is possible to build a data warehouse that can be used for BI and machine learning by integrating data collection, exploration, preparation, and management. It also significantly reduce the time it takes to develop your project with an integrated experience that supports the development of end-to-end analytics solutions.

c) Azure Database for PostgreSQL is a relational database service based on the open-source Postgres database engine. It is not used to build a data warehouse.

5

You are the data engineer for your company. An application uses a NoSQL database to store data. The database uses the key-value and wide-column NoSQL database type. Developers need to access data in the database using an API. You need to determine which API to use for the database model and type. **Which two APIs should you use?**

a) Cassandra API

b) Table API

c) SQL API

d) Gremlin API

e) MongoDB API

Both Cassandra API and MongoDB API has key value pair

6

Which two types of customers are eligible to use Azure Government to develop a cloud solution? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

a) a Canadian government contractor

b) a European government contractor

c) a United States government entity

d) a United States government contractor

e) a European government entity

7

A Hybrid cloud is part of Public cloud.

| Yes | No → |

8

A Public cloud is part of Hybrid cloud.

| Yes → | No |

Hybrid Cloud – Use case

Your application resides on-premises or in a private cloud. Many times, sudden spikes in demand overload the capacity of you application like season events like online shopping or tax filing. Organizations can tap into additional computing resources in the public cloud, sometimes called "cloud bursting"- where the hybrid cloud environment allows the on-premises infrastructure to "burst through" to the public cloud.

Many customers take advantage of the hybrid cloud to achieve global scale, increased reliability.

In highly regulated industries, data residency requirements may mandate that certain sets of data must be kept on-premises, while other workloads can reside in the public cloud.

9

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?

a) a complete migration to the public cloud

b) an additional data center

c) a private cloud

d) a hybrid cloud

10

Define availability set?

a) Group of instances of your application in an availability zone

b) A logical grouping of VMs that allows Azure to understand how your application is built to provide for redundancy and availability.

c) Set of resources

11

Your company plans to deploy an Artificial Intelligence (AI) solution in Azure. **What should the company use to build, test, and deploy predictive analytics solutions?**

a) Azure Logic Apps

b) Azure Machine Learning Studio

c) Azure Batch

d) Azure Cosmos DB

12

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

a) Azure Event Hubs

b) Azure Analysis Services

c) Azure Monitor

d) Azure Log Analytics

The Tech BlackBoard

13

Your Azure environment contains multiple Azure virtual machines. You need to ensure that a virtual machine named VM1 is accessible from the Internet over HTTP.
Solution: You modify an Azure firewall. Does this meet the goal?

Yes → No

14

Your Azure environment contains multiple Azure virtual machines. You need to ensure that a virtual machine named VM1 is accessible from the Internet over HTTP.
Solution: You modify a DDoS protection plan. Does this meet the goal?

Yes   No →

15

Your Azure environment contains multiple Azure virtual machines. You need to ensure that a virtual machine named VM1 is accessible from the Internet over HTTP.
Solution: You modify an Azure Traffic manager profile. Does this meet the goal?

Yes   No →

16

Which of the following correctly define Edge Computing?

a) Edge computing allows you to secure your application on multiple locations.

b) Edge computing allows customers to run VMs, containers and data services at edge locations.

c) Edge computing allows you to create scalable web applications.

17

Azure Key Vault is used to store secrets for <u>Azure Active Directory (Azure AD) user accounts</u>.
Instructions: Review the underlined text. If it makes the statement correct, select "No change is needed". If the statement is incorrect, select the answer choice that makes the statement correct.

a) No change is needed

b) Azure Active Directory (Azure AD) administrative accounts

c) Personally Identifiable Information (PII)
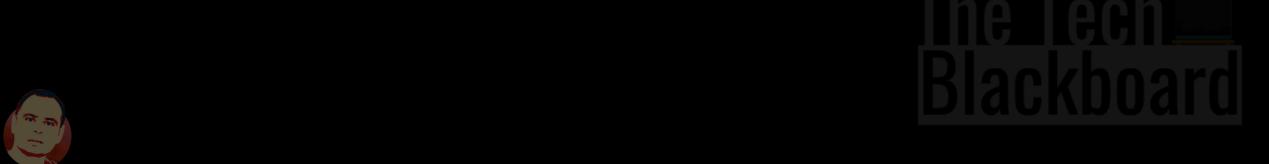
d) server applications

18

From <u>Azure Cloud Shell</u>, you can track your company's regulatory standards and regulations, such as ISO 27001.

Instructions: Review the underlined text. If it makes the statement correct, select 'No change is needed', If the statement is incorrect, select the answer choice that makes the statement correct.

a) No change is needed.

b) The Microsoft Cloud Partner Portal

c) Compliance Manager

d) The Trust Center

The Tech BlackBoard

19

The only way to use Azure resources is to purchase an Azure account before you can use them?

True   False →

20

Azure Active Directory can be used to grant or deny access based on the originating IP address.

True   False →

21

Azure Firewall can be used to grant or deny access based on the originating IP address.

→ True   False

22

Your company plans to deploy several million sensors that will upload data to Azure. You need to identify which Azure resources must be created to support the planned solution. Which two Azure resources should you identify? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

a) Azure Data Lake

b) Azure Queue storage

c) Azure File Storage

d) Azure IoT Hub

---

a) Data Lake can be used to store the data from devices and sensors.

b) Queue is exclusively for messages, but here we're collecting data.

c) Azure Files is a cloud storage service designed for sharing files, development or debugging tools, and applications that rely on native file systems.

d) IoT Hub for the data processing.

23

Which Azure service you can use for quickly sending millions of notifications to iOS, Android, Windows, or Kindle devices, working with APNs (Apple Push Notification service), GCM (Google Cloud Messaging), WNS (Windows Push Notification Service), and more.

a) IoT Hub

b) Azure Notification Hubs

c) Azure Machine Learning

d) Azure Monitor

Azure Notification Hubs is a massively scalable mobile push notification engine for quickly sending millions of notifications to iOS, Android, Windows, or Kindle devices, working with APNs (Apple Push Notification service), GCM (Google Cloud Messaging), WNS (Windows Push Notification Service), and more.

24

To what should an application connect to retrieve security tokens?

a) Azure Storage account

b) Azure Active Directory (Azure AD)

c) Azure security center

d) Azure Key vault

Azure AD authenticates users and provides access tokens. An access token is a security token that is issued by an authorization server. Security Token is not a Secret. Password, Private Keys, Certificates, etc., are secrets. Tokens are generated when request is made and they change with almost each request and valid for short duration only. So, there is no point in protecting the token by storing it in the vault to use it when needed, it is not a static value.

25

You need to be aware of the latest Azure security standards to protect your data. **Which of the following services should you use to ensure this?**

a) Azure Government

b) Online Terms of Service

c) Trust center

d) Azure compliance documentation

---

a) Azure Government addresses the security and compliance needs of US federal agencies, state and local governments, and their solution providers.

b) The Online Terms of Service (OST) is agreement between Microsoft and you. The OST details the obligations of both parties regarding the processing and security of customer and personal data.

c) The Trust Center implements Microsoft's principles for maintaining data integrity in the cloud and Microsoft implements security, privacy, compliance, and transparency in all Microsoft cloud products and services.

d) The Azure Compliance Document provides detailed documentation on Azure legal and regulatory standards and compliance. You can also see the reference blueprints that can be applied directly to your Azure subscription.

The Tech BlackBoard

26

Azure Pay-As-You-Go pricing is an example of CapEx.

True	**False**

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.

27

Deploying your own datacenter is an example of CapEx.

True	False

Deploying your own datacenter is an example of CapEx. This is because you need to purchase all the infrastructure upfront before you can use it

28

Azure Reserved VM Instances are an example of OpEx.

True   False

A reserved instance is where you pay upfront for the use of a virtual machine for a period of time (1 or 3 years). This can save you money as you receive a discount on the cost of a VM if you pay upfront for a reserved instance. However, as this is an upfront payment, it will be classed as CapEx, not OpEx.

29

Azure Cosmos DB is an example of which cloud offering.

a) platform as a service (PaaS)

b) infrastructure as a service (IaaS)

c) serverless

d) software as a service (SaaS)

30

A Microsoft SQL Server database that is hosted in the cloud and has software updates managed by Azure is an example of:

a) disaster recovery as a service (DRaaS).

b) infrastructure as a service (IaaS).

c) platform as a service (PaaS).

d) software as a service (SaaS).

31

Your network contains an Active Directory forest. The forest contains 5,000 user accounts. Your company plans to migrate all network resources to Azure and to decommission the on-premises data center. You need to recommend a solution to minimize the impact on users after the planned migration. **What should you recommend?**

a) Implement Azure Multi-Factor Authentication (MFA).

b) Sync all the Active Directory user accounts to Azure Active Directory (Azure AD).

c) Instruct all users to change their password.

d) Create a guest user account in Azure Active Directory (Azure AD) for each user.

Azure Active Directory (Azure AD) is Microsoft's cloud-based identity and access management service, which helps your employees sign in and access resources in:
- External resources: such as Microsoft Office 365, the Azure portal, and thousands of other SaaS applications.
- Internal resources: such as apps on your corporate network and intranet, along with any cloud apps developed by your own organization.

32

Which of the following best explains cloud computing?

a) Delivery of computing services over the internet.

b) Setting up your own datacenter.

c) Scalable computing

33

Which of the following is not a feature of Cloud computing?

a) Latest technology

b) A limited pool of services

c) flexible resources

d) economies of scale

34

You plan to extend your company's network to Azure. The network contains a VPN appliance that uses an IP address of 131.107.200.1. You need to create an Azure resource that identifies the VPN appliance. Which Azure resource should you create?

a) Virtual networks

b) Load balancers

c) Virtual network gateways

d) DNS zones

e) Local Network Gateway

f) Traffic Manager profiles

g) Network Watcher

h) Application network gateways

i) CDN profiles

j) ExpressRoute circuits

35

You plan to implement an Azure database solution. You need to implement a database solution that meets the following requirements:
- Can add data concurrently from multiple regions
- Can store JSON documents

Which database service should you deploy?

a) Azure Cosmos DB

b) Azure Database for MySQL servers

c) SQL Servers

d) SQL data warehouse

e) Azure Database for PostgreSQL servers

36

Which of the following best explains cloud computing?

a) Delivery of computing services over the internet.

b) Setting up your own datacenter.

c) Scalable computing

37

Which of the following is not a feature of Cloud computing?

a) Latest technology

b) A limited pool of services

c) flexible resources

d) economies of scale

38

Which of the following is not a Cloud computing?

a) Public Cloud

b) Scalable Cloud

c) Private Cloud

d) Hybrid Cloud

39

If Microsoft plans to end support for an Azure service that does NOT have a successor service, Microsoft will provide notification at least <u>12 months</u> before.

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

a) No change is needed.

b) 6 months

c) 90 days

d) 30 days

40

You have an application that is comprised of an Azure web app that has a Service Level Agreement (SLA) of 99.95 percent and an Azure SQL database that has an SLA of 99.99 percent. The composite SLA for the application is the product of both SLAs, <u>which equals 99.94 percent.</u> Instructions: Review the underlined text. If it makes the statement correct, select "No change is needed". If the statement is incorrect, select the answer choice that makes the statement correct.

a) No change is needed.

b) the lowest SLA associated to the application, which is 99.95 percent

c) the highest SLA associated to the application, which is 99.99 percent

d) the difference between the two SLAs, which is 0.05 percent

99.95% × 99.99% = 99.94%

41

When you need to delegate permissions to several Azure virtual machines simultaneously, you must deploy Azure virtual machines to which of the following?

a) Azure region

b) Azure availability Zone

c) Azure resource group

d) Azure resource manager template

42

One of the benefits of <u>Azure SQL Data Warehouse</u> is that high availability is built into the platform. Instructions: Review the underlined text. If it makes the statement correct, select "No change is needed". If the statement is incorrect, select the answer choice that makes the statement correct.

a) No change is needed

b) automatic scaling

c) data compression

d) versioning

The Tech BlackBoard

43

Authorization to access Azure resources can be provided only to Azure Active Directory (Azure AD) users.

True   False

44

Identities stored in Azure Active Directory (Azure AD), third-party cloud services, and on-premises Active Directory can be used to access Azure resources.

True   False

45

Azure has built-in authentication and authorization services that provide secure access to Azure resources.
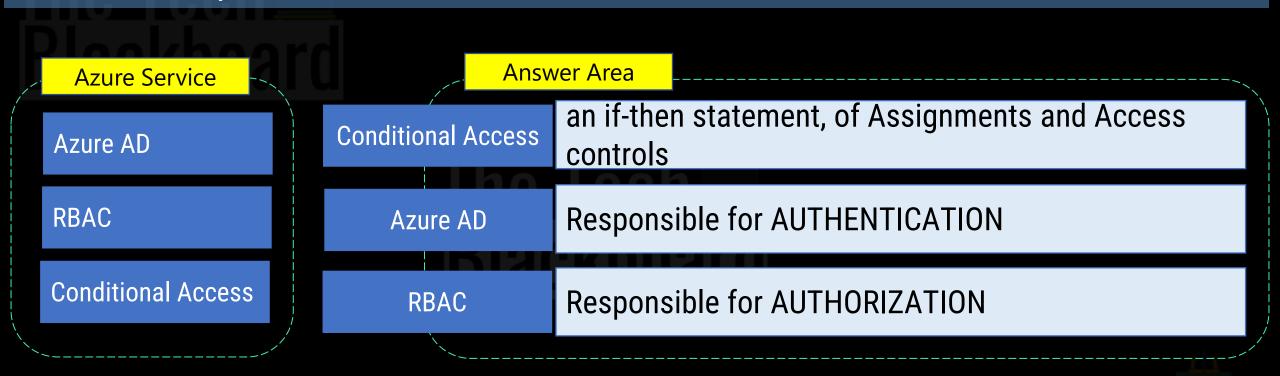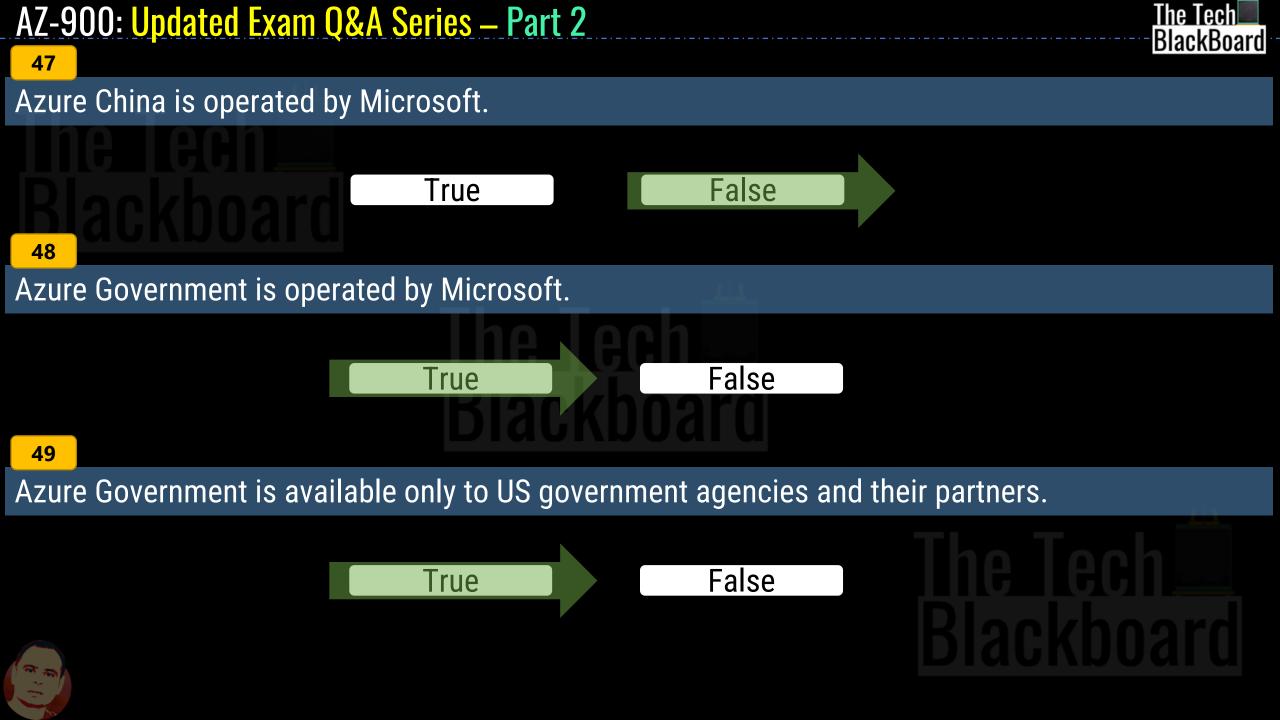
True   False

46

To answer, drag the appropriate benefit from the column on the left to its description on the right. Each benefit may be used once, more than once, or not at all.

Azure Service

| Azure AD |
| RBAC |
| Conditional Access |

Answer Area

Conditional Access	an if-then statement, of Assignments and Access controls
Azure AD	Responsible for AUTHENTICATION
RBAC	Responsible for AUTHORIZATION

47

Azure China is operated by Microsoft.

True   **False** →

48

Azure Government is operated by Microsoft.

True →   False

49

Azure Government is available only to US government agencies and their partners.
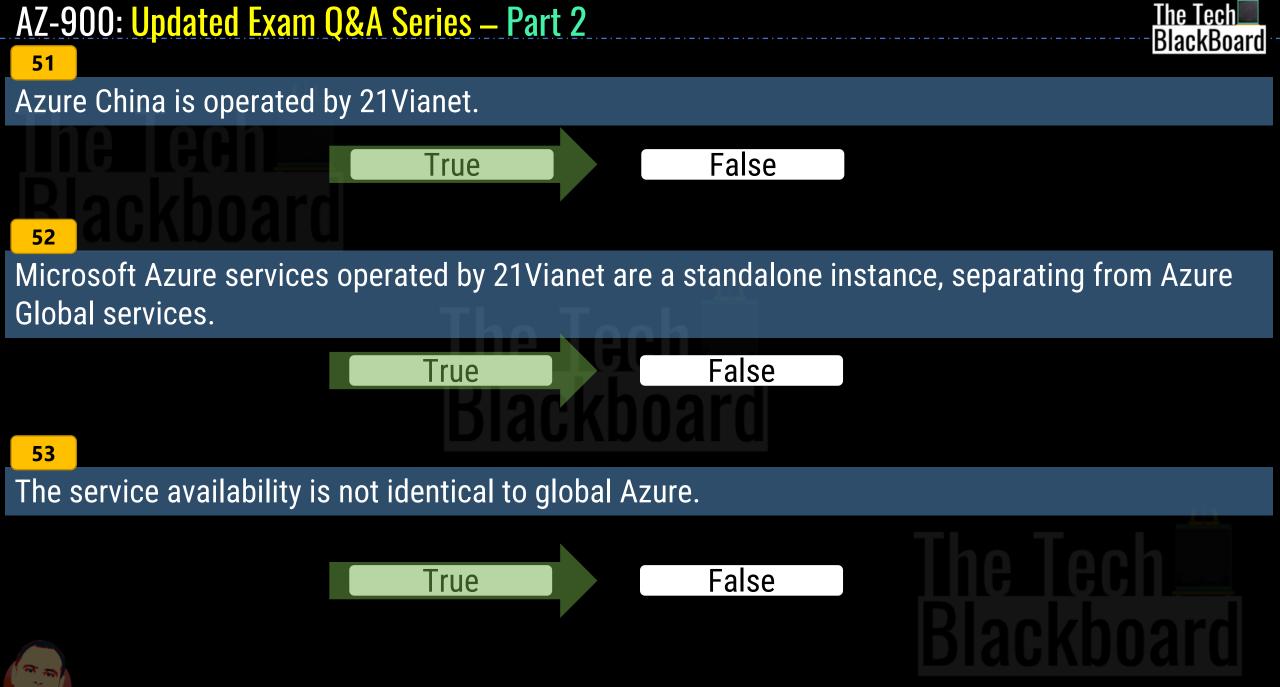
True →   False

Your company implements <u>Azure policies</u> to automatically add a watermark to Microsoft Word documents that contain credit card information.

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

a) No change is needed.

b) DDoS protection

c) Azure Information Protection

d) Azure Active Directory (Azure AD) Identity Protection

Azure Information Protection is used to automatically add a watermark to Microsoft Word documents that contain credit card information. You use Azure Information Protection labels to apply classification to documents and emails. When you do this, the classification is identifiable regardless of where the data is stored or with whom it's shared. The labels can include visual markings such as a header, footer, or watermark. Labels can be applied automatically by administrators who define rules and conditions, manually by users, or a combination where users are given recommendations. In this question, we would configure a label to be automatically applied to Microsoft Word documents that contain credit card information. The label would then add the watermark to the documents.

51

Azure China is operated by 21Vianet.

True → False

52

Microsoft Azure services operated by 21Vianet are a standalone instance, separating from Azure Global services.

True → False

53

The service availability is not identical to global Azure.

True → False

54

Azure Government is designed for:

a) Any Government worldwide

b) US Government

c) UK Government

55

Microsoft Office 365, Xbox Live, and Microsoft Intune is an example of:

a) Software as a service (SaaS)

b) Infrastructure as a service (IaaS)

c) Platform as a service (PaaS)

56

You have a resource group named RG1. You plan to create virtual networks and app services in RG1. You need to prevent the creation of virtual machines only in RG1. The solution must ensure that other objects can be created in RG1. What should you use?

a) a lock

b) an Azure role

c) a tag

d) an Azure policy

Azure policies can be used to define requirements for resource properties during deployment and for already existing resources. Azure Policy controls properties such as the types or locations of resources.
Azure Policy is a service in Azure that you use to create, assign, and manage policies. These policies enforce different rules and effects over your resources, so those resources stay compliant with your corporate standards and service level agreements.
In this question, we would create an Azure policy assigned to the resource group that denies the creation of virtual machines in the resource group.
You could place a read-only lock on the resource group. However, that would prevent the creation of any resources in the resource group, not virtual machines only. Therefore, an Azure Policy is a better solution.

57

Azure Advisor provides recommendations on how to improve the security of an Azure Active Directory (Azure AD) environment.

True   **False** →

58

Azure Advisor provides recommendations on how to configure the network settings on Azure virtual machines.

True   **False** →

59

Azure Advisor provides recommendations on how to reduce the cost of running Azure virtual machines.

True →   False

60

After you create a virtual machine, you need to modify the <u>network security group (NSG)</u> to allow connections to TCP port 8080 on the virtual machine. **Instructions: Review the underlined text. If it makes the statement correct, select "No change is needed". If the statement is incorrect, select the answer choice that makes the statement correct.**

a) No change is needed

b) virtual network gateway

c) virtual network

d) Route table

When you create a virtual machine, the default setting is to create a NSG attached to the network interface assigned to a virtual machine. A NSG works like a firewall. You can attach a network security group to a virtual network and/or individual subnets within the virtual network. You can also attach a NSG to a network interface assigned to a virtual machine. You can use multiple NSG within a virtual network to restrict traffic between resources such as virtual machines and subnets. You can filter network traffic to and from Azure resources in an Azure virtual network with a network security group. A network security group contains security rules that allow or deny inbound network traffic to, or outbound network traffic from, several types of Azure resources. In this question, we need to add a rule to the network security group to allow the connection to the virtual machine on port 8080.

The Tech BlackBoard

61

Several support engineers plan to manage Azure by using the computers shown in table below:

Name	Operating system
Computer 1	Windows 10
Computer 2	Ubuntu
Computer 3	MacOS Mojave

You need to identify which Azure management tools can be used from each computer. What should you identify for each computer? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Computer 1
The Azure CLI and the Azure portal
The Azure portal and Azure PowerShell
The Azure CLI and Azure PowerShell
The Azure CLI, the Azure portal, and Azure PowerShell

Computer 2
The Azure CLI and the Azure portal
The Azure portal and Azure PowerShell
The Azure CLI and Azure PowerShell
The Azure CLI, the Azure portal, and Azure PowerShell

Computer 3
The Azure CLI and the Azure portal
The Azure portal and Azure PowerShell
The Azure CLI and Azure PowerShell
The Azure CLI, the Azure portal, and Azure PowerShell

- Azure CLI can be installed everywhere
- Azure portal can be accessed everywhere (using a browser)
- And Azure PowerShell can be run on every system

62

Azure Germany can be used by <u>legal residents of Germany only</u>.

Instructions: Review the underlined text. If it makes the statement correct, select 'No change is needed'. If the statement is incorrect, select the answer choice that makes the statement correct.

a) no change is needed

b) only enterprises that are registered in Germany

c) only enterprises that purchase their azure licenses from a partner based in Germany

d) any user or enterprise that requires its data to reside in Germany

Azure Germany is available to eligible customers and partners globally who intend to do business in the EU/EFTA, including the United Kingdom.

Azure Germany offers a separate instance of Microsoft Azure services from within German datacenters. The datacenters are in two locations, Frankfurt/Main and

Magdeburg. This placement ensures that customer data remains in Germany and that the datacenters connect to each other through a private network. All customer data is exclusively stored in those datacenters. A designated German company--the German data trustee--controls access to customer data and the systems and infrastructure that hold customer data.

63

Authorization to access Azure resources can be provided only to Azure Active Directory (Azure AD) users.

True   False →

64

Identities stored in Azure Active Directory (Azure AD), third-party cloud services, and on-premises Active Directory can be used to access Azure resources.

True   False →

65

Azure has built-in authentication and authorization services that provide secure access to Azure resources.

True →   False

66

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?

a) Azure AD Connect Health

b) Azure AD Privileged Identity Management

c) Azure Advanced Threat Protection (ATP)

d) Azure AD Identity Protection

67

Which two types of customers are eligible to use Azure Government to develop a cloud solution? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

a) A Canadian government contractor.

b) A European government contractor.

c) A United States government entity.

d) A United States government contractor.

e) A European government entity.

68

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?

a) Infrastructure as a Service (Iaas)

b) Database as a Service (Daas)

c) Software as a Service (Saas)

d) Platform as a Service (Paas)

69

What can Azure Information Protection encrypt?

a) network traffic

b) documents and email messages

c) an Azure Storage account

d) an Azure SQL database

70

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

a) The Knowledge Center website.

b) The Advisor blade from the Azure portal.

c) Compliance Manager from the Security Trust Portal.

d) The Security Center blade from the Azure portal

- Azure Security Center helps you prevent, detect, and respond to threats with increased visibility into and control over the security of your Azure resources. It provides integrated security monitoring and policy management across your subscriptions, helps detect threats that might otherwise go unnoticed, and works with a broad ecosystem of security solutions.
- Azure Security Center is enabled with your Microsoft Azure subscription and accessed from the Azure portal. (Sign into the portal, select Browse, and scroll to Security Center)
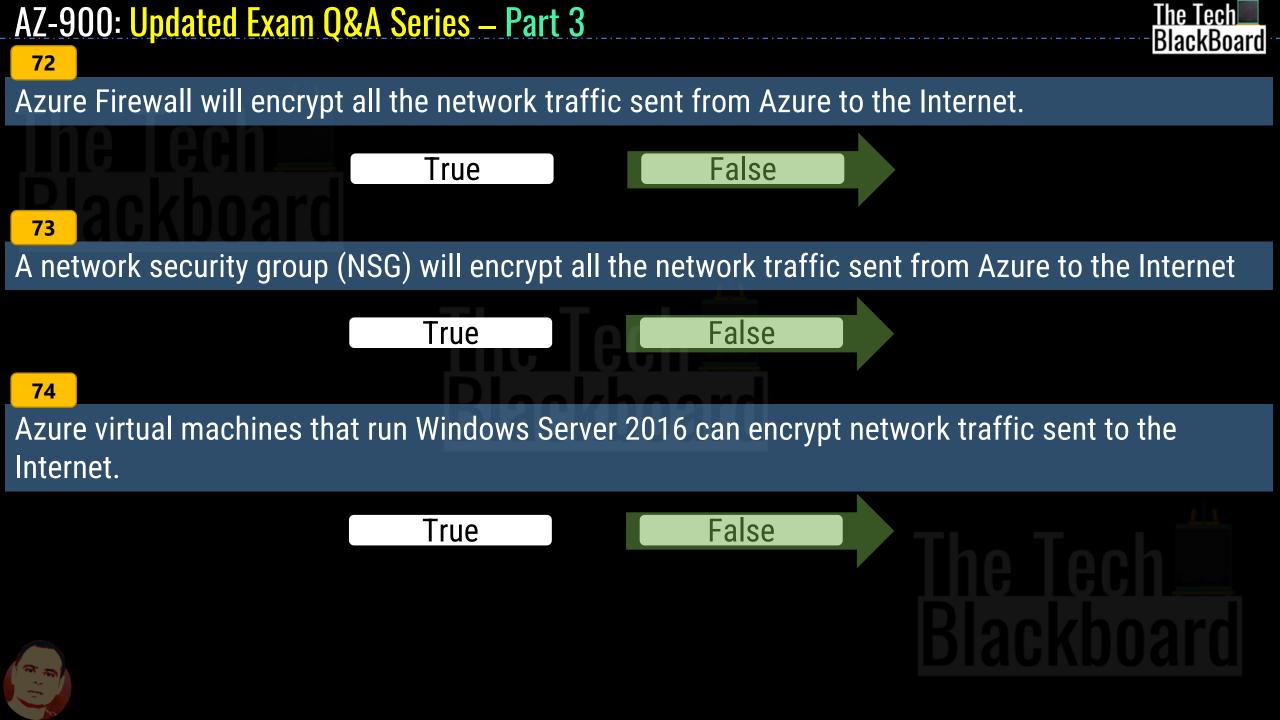
71

You have an Azure virtual network named VNET1 in a resource group named RG1. You assign an Azure policy specifying that virtual networks are not an allowed resource type in RG1. <u>VNET1 is deleted automatically.</u>

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

a) No change is needed.

b) Is moved automatically to another resource group.

c) Continues to function normally.

d) Is now a read-only object.

72

Azure Firewall will encrypt all the network traffic sent from Azure to the Internet.

True   False

73

A network security group (NSG) will encrypt all the network traffic sent from Azure to the Internet

True   False

74

Azure virtual machines that run Windows Server 2016 can encrypt network traffic sent to the Internet.

True   False

75

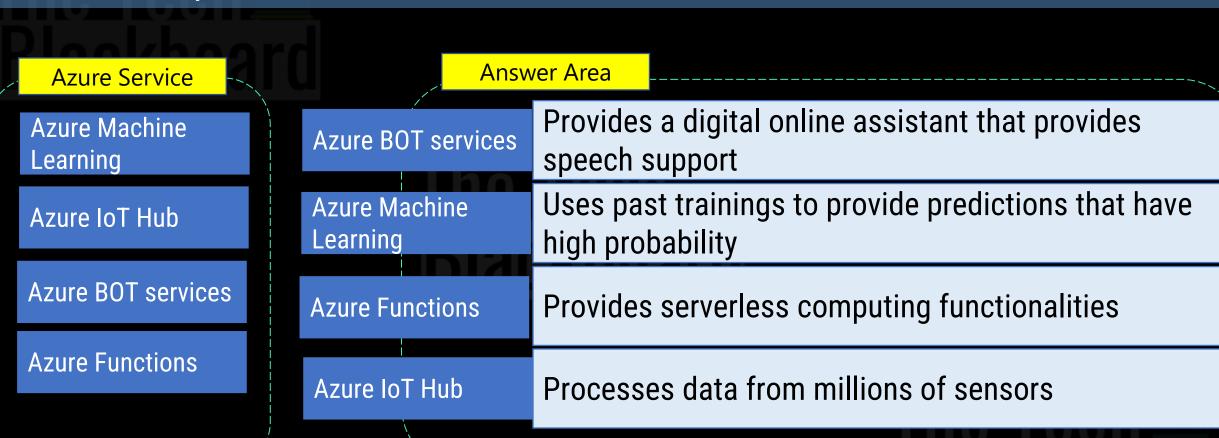Which of the following describes Platform as a Service (PaaS)?

a) Users are responsible for purchasing, installing, configuring, and managing their own software (operating systems, middleware, and applications).

b) Users create and deploy applications quickly without having to worry about managing the underlying infrastructure.

c) Users pay an annual or monthly subscription.

PaaS lets users create and deploy applications quickly without having to worry about managing the underlying infrastructure.

76

To answer, drag the appropriate benefit from the column on the left to its description on the right. Each benefit may be used once, more than once, or not at all.

Azure Service

Azure Machine Learning

Azure IoT Hub

Azure BOT services

Azure Functions

Answer Area

Azure BOT services	Provides a digital online assistant that provides speech support
Azure Machine Learning	Uses past trainings to provide predictions that have high probability
Azure Functions	Provides serverless computing functionalities
Azure IoT Hub	Processes data from millions of sensors

77

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 in the country where their office is located. You need to create the Azure resource that must be used to meet the policy requirement. What should you create?

a) A read-only lock.

b) An Azure policy.

c) A management group.

d) A reservation.

Azure Policy is a service in Azure that you use to create, assign, and manage policies. These policies enforce different rules and effects over your resources, so those resources stay compliant with your corporate standards and service level agreements. Azure Policy meets this need by evaluating your resources for non-compliance with assigned policies. For example, you can have a policy to allow only a certain SKU size of virtual machines in your environment. Once this policy is implemented, new and existing resources are evaluated for compliance. With the right type of policy, existing resources can be brought into compliance.

78

You need to configure an Azure solution that meets the following requirements:
- Secures websites from attacks.
- Generates reports that contain details of attempted attacks.

What should you include in the solution?

a) Azure Firewall.

b) A network security group (NSG).

c) Azure Information Protection.

d) DDoS protection.

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

79

Your company has datacenters in Los Angeles and New York. The company has a Microsoft Azure subscription. You are configuring the two datacenters as geo-clustered sites for site resiliency.
You need to recommend an Azure storage redundancy option.
You have the following data storage requirements:
a) Data must be stored on multiple nodes.
b) Data must be stored on nodes in separate geographic locations.
c) Data can be read from the secondary location as well as from the primary location
Which of the following Azure stored redundancy options should you recommend?

a) Geo-redundant storage

b) Read-only geo-redundant storage

c) Zone-redundant storage

d) Locally redundant storage

80

You are building an application using a virtual machine in Azure. As a security requirement, it is necessary to apply Azure Multi-Factor Authentication (MFA) based on certain conditions.
Which Azure service should you choose?

a) Azure Monitor

b) Azure Advanced Threat Protection (ATP)

c) Azure Active Directory ID Protection

d) Azure Security Center

a) Azure Monitor is incorrect because this is for collecting what is known as "application monitoring data"

b) Azure ATP is incorrect because it is used to monitor and analyze user activity an information across the network, such as permissions and group membership.

c) Azure Active Directory ID Protection allows you to apply MFA with conditions. It is also used to detect risks such as anonymous IP address logins, unfamiliar sign-ins, and credential leaks.

d) Azure Security Center is an integrated infrastructure security management system that enhances the security structure of the data center. It's an advanced threat protection feature that protects your entire hybrid workload, both on the cloud and on-premises. With this option, you can't use MFA.

81

An Azure administrator plans to run a PowerShell script that creates Azure resources. You need to recommend which computer configuration to use to run the script. Which three computers can run the script?
Each correct answer presents a complete solution NOTE: Each correct selection is worth one point.

a) a computer that runs Windows 10 and has the Azure PowerShell module installed

b) a computer that runs macOS and has PowerShell Core 6.0 installed

c) a computer that runs Linux and has the Azure PowerShell module installed.

d) a computer that runs Linux and has the Azure CLI tools installed

e) a computer that runs Chrome OS and uses Azure Cloud Shell

82

Your Azure environment contains multiple Azure virtual machines. You need to ensure that a virtual machine named VM1 is accessible from the Internet over HTTP. What are two possible solutions? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

a) Modify an Azure Traffic Manager profile

b) Modify a network security group (NSG)

c) Modify a DDoS protection plan

d) Modify an Azure firewall

A NSG works like a firewall. You can attach a NSG to a virtual network and/or individual subnets within the virtual network. Additionally, you can also attach a NSG to a network interface assigned to a virtual machine. You can use multiple NSGs within a virtual network to restrict traffic between resources such as virtual machines and subnets.

83

For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Statement	Yes	No
a) Each Azure subscription can contain multiple account administrators.	○	●
b) Each Azure subscription can be managed by using a Microsoft account only	○	●
c) An Azure resource group contains multiple Azure Subscriptions	○	●

a) You can have 1 Account Administrator and 1 Service Administrator, but you can have 200 Co-Administrators per subscription

b) You need an Azure Active Directory account to manage a subscription, not a Microsoft account. An account is created in the Azure Active Directory when you create the subscription. Further accounts can be created in the Azure Active Directory to manage the subscription.

c) Resource groups are logical containers for Azure resources. However, resource groups do not contain subscriptions. Subscriptions contain resource groups.

84

Which of the following provides a command platform for deploying objects to your Cloud infrastructure and maintaining consistency throughout your Azure environment.

a) Azure policy

b) Resource group

c) Azure resource manager ➔

d) Management group

Azure Resource Manager is a service that provides a management layer that allows you to create, update, and delete Azure resources, all while maintaining consistency across your Azure environment.

85

Which of the following is a logical unit of Azure services that links to an Azure account?

a) Azure Subscription

b) Management Group

c) Resource Group

86

Which of the following can be used to help you enforce resource tagging so you can manage billing?

a) Azure Policy

b) Azure Service Health

c) Compliance Manager

87

Which of the following refers to spending money upfront and then deducting that expense over time?

a) Capital expenditure

b) Operational expenditures

c) Supply and demand

88

From the choices below, what is one of the advantages of moving your infrastructure to Azure?

a) The move reduces Capital Expenditures. (CapEx)

b) The move reduces Operational Expenses (OpEx).

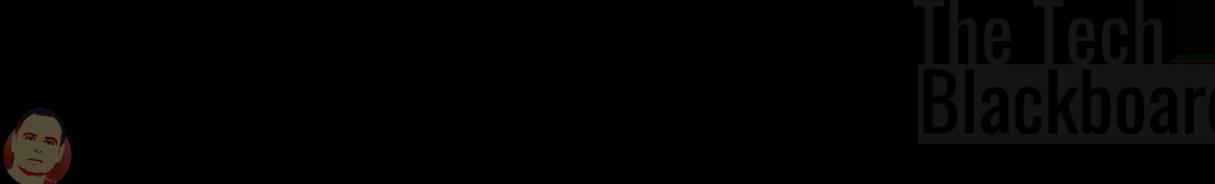c) The move allows for complete control of infrastructure resources.

89

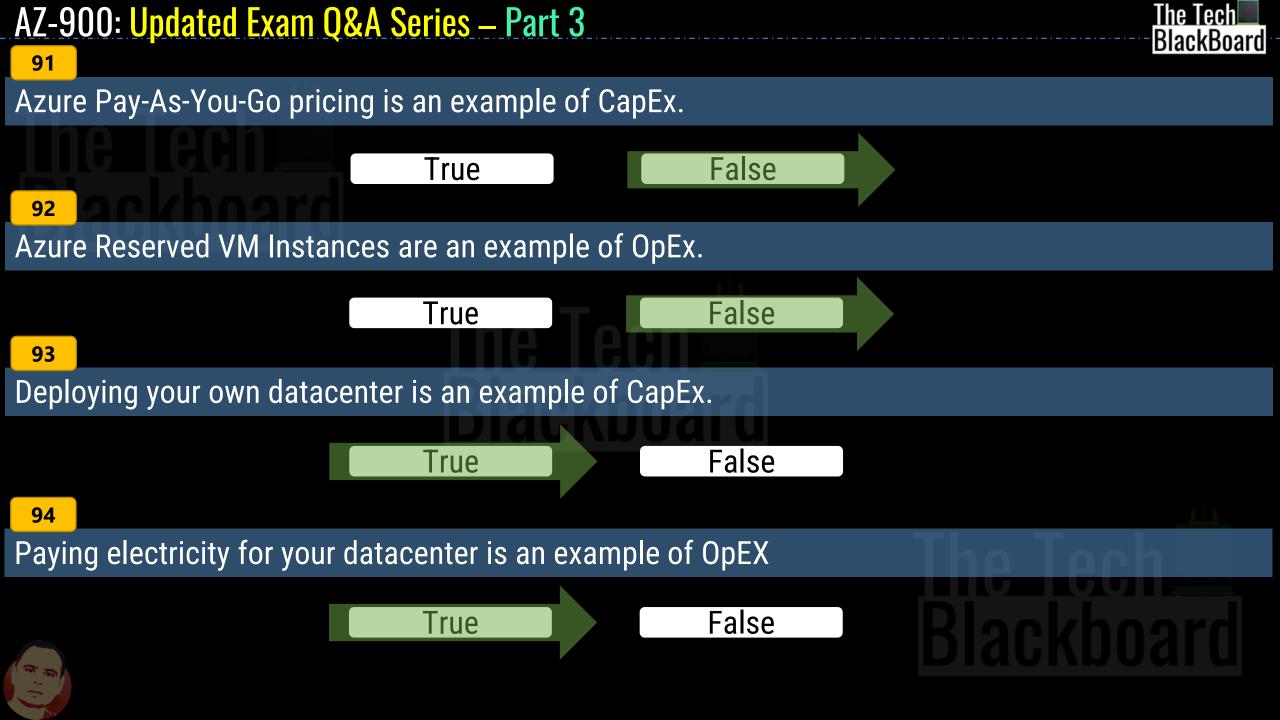Which cloud model provides the greatest degree of ownership and control?

a) Hybrid

b) Private

c) Public

90

Which cloud model provides the greatest degree of flexibility?

a) Hybrid

b) Private

c) Public

91

Azure Pay-As-You-Go pricing is an example of CapEx.

True   False →

92

Azure Reserved VM Instances are an example of OpEx.

True   False →

93

Deploying your own datacenter is an example of CapEx.

True →   False

94

Paying electricity for your datacenter is an example of OpEX

True →   False

95

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?

a) a virtual network gateway

b) a load balancer

c) an application gateway

d) a virtual network

e) a gateway subnet

96

Your company is planning to move from an on-premises environment to Azure and you have decided to develop your application using Docker as the development environment.
Which of the following is the best service to use for this scenario?

a) Azure AppService

b) Azure Container Instances

c) Azure Functions

d) Azure virtual machine

Azure Container Instances is a service that runs Docker containers on demand within your Azure environment. It can operate inside a separate container without orchestration and run event-driven applications, deploy quickly from the container development pipeline, and run data processing and build jobs.

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97

You can use 'Azure Policy' to download published audit reports and how Microsoft builds and operates its cloud services?

True   False →

98

You can use 'Service Trust Portal' to download published audit reports and how Microsoft builds and operates its cloud services?

True →   False

99

Choose an international organization that develops international standards for privacy and compliance.

a) International, Governmental & Defense Agencies

b) GDPR

c) International Civil Defence Organization

d) International Organization for Standardization (ISO)

100

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?

a) a storage failure

b) an Azure region failure

c) a physical server failure

d) an Azure data center failure

101

North America is represented by a single Azure region.

| True | → False → |

> North America has several Azure regions, including West US, Central US, South Central US, East Us, and Canada East.

102

Azure web app, Azure logic app and Azure SQL database are all examples of Platform as a Service (Paas).

| → True → | False |

103

DNS server runs on a virtual machine is PaaS.

True | False →

In general, PaaS (Platform-as-a-Service) is about a platform where a developer can design and deploy an application. So, a regular DNS server runs on a virtual machine is not PaaS. An Azure virtual machine is considered IaaS as it offers computing resources.

104

SQL Server installed on a virtual machine is SaaS.

True | False →

If you install SQL Server on a virtual machine manually or by using out of the box image, it is still a virtual machine. This means customers you still need to manage all of the platform aspects. In simple words you have to maintain the operating system settings, patches, middleware, SQL Server runtime settings, etc.

The Tech
BlackBoard

105

Azure SQL database is an example of PaaS.

True **False**

Customers who purchase Azure SQL Database don't need to maintain anything related to SQL platform because Microsoft manages that. They just use it by deploying their tables and data and consuming it with their applications That's why this is a Platform as a Service model. Its not Software as a Service because they still need to maintain the database in order tor their applications to work.

106

Azure files is an example of SaaS.

True **False**

Azure Files is a PaaS (platform-as-a-service) offering provided by Microsoft Azure that is built on top of Azure Storage. It provides fully managed file shares over a protocol called SMB (Server Message Block).

108

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?**

a) a storage failure

b) an Azure region failure

c) a physical server failure

d) an Azure data center failure

Availability zones expand the level of control you have to maintain the availability of the applications and data on your VMs. An Availability Zone is a physically separate zone, within an Azure region.

109

Use DDoS Protection service in combination with a web application firewall (WAF) for protection both at the ---------- (layer 3 and 4, offered by DDoS Protection Standard) and at the ---------- (layer 7, offered by a WAF).

a) Physical security

b) Identity and access

c) Perimeter

d) Network

e) Compute

f) Application

g) Data

110

A company is planning on deploying Microsoft Azure resources to a Resource Group (RG). But the resources would belong to different locations. Can you have resources that belong to the same resource group but be in multiple locations?

Yes → No

Answer is Yes. Because when creating a resource group, you need to provide a location for that resource group. You may be wondering, "Why does a resource group need a location? And, if the resources can have different locations than the resource group, why does the resource group location matter at all?"

111

A company is planning on hosting an application on a set of Virtual Machines. The Virtual Machines are going to be running for a prolonged duration of time. Which of the following should be considered to reduce the overall cost of Virtual Machine usage?

a) Premium Disks

b) Virtual Machine Scale sets

c) Azure Reservations

d) Azure Resource Groups

112

What are two characteristics of the public cloud? Each correct answer presents a complete solution.

a) Dedicated hardware.

b) Unsecured connections.

c) Limited storage.

d) Metered pricing.

e) Self-service management.

a)   In Public cloud you don't have dedicated hardware. It is shared among multiple customers.
b)   Connections to the public cloud are secure.
c)   Storage is not limited. You can have as much storage as you like.
d)   Cloud does provide metered pricing, as you pay for the resources you use.
e)   Cloud provides a self-managed service, as you can use the portal to add, change and remove the resources you need when you need them.

113

NSG can be applied to what level?

a) Subscription level

b) Subnet level

c) Management group level

d) Virtual Machine / NIC Level

NSG is mainly used for filtering traffic in and out of the Virtual Network (VNET) in Azure.

NSG can be applied at two levels : -
a) **Subnet**: If you implement NSG at the subnet level all VMs in that subnet will be applied with the rules imposed in NSG.
b) **VM / NIC**: If you apply at VM/NIC level , the rule will be implemented only for that VM.

114

What are different level of access tiers for blob data, select all applicable options?

a) Hot Tier

b) Cold Tier

c) Archive Tier

d) Permanent Tier

Hot – frequently accessed data

Cool – infrequently accessed data (lower availability, high durability)

Archive – rarely (if-ever) accessed data

115

What is Azure policy initiative?

a) a collection of policy definitions

b) collection of Azure policy definition assignments

c) group of Azure Blue Prints definition

d) group of role based access control (RBAC)?

116

What is guaranteed in an Azure Service Level Agreement (SLA) for virtual machines?

a) uptime

b) feature availability

c) bandwidth

d) performance

117

Which statement accurately describes the Modern Lifecycle Policy for Azure services?

a) Microsoft provides mainstream support for a service for five years.

b) Microsoft provides a minimum of 12 months' notice before ending support for a service.

c) After a service is made generally available, Microsoft provides support for the service for a minimum of four years.

d) When a service is retired, you can purchase extended support for the service for up to five years.

118

For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Statement	Yes	No
a) Most Azure services are introduced in private preview before being introduced in public preview and then in general availability	●	○
b) Azure services in public preview can be managed only by using Azure CLI	○	●
c) The cost of an Azure service in private preview decrease when the service becomes generally available	○	●

119

For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Statement	Yes	No
a) With a consumption-based plan, you pay a fixed rate for all data sent to or from virtual machines hosted in the cloud.		●
b) With a consumption-based plan, you reduce overall costs by paying only for extra capacity when it is required.	●	
c) Serverless computing is an example of a consumption-based plan.	●	

120

Azure services in public preview can be managed using which of the management tools?

a) Azure Portal

b) Azure CLI

121

For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Statement	Yes	No
a) You can associate a network security group (NSG) to a virtual network subnet.	●	●
b) You can associate a network security group (NSG) to a virtual network.	●	●
c) You can associate a network security group (NSG) to a network interface.	●	●

You can associate zero, or one, network security group to each virtual network subnet and network interface in a virtual machine

122

You can enable just in time (JIT) VM access by using:

a) Azure Bastion

b) Azure Firewall

c) Azure Front Door

d) Azure Security Center

The just-in-time (JIT) virtual machine (VM) access feature in Azure Security Center allows you to lock down inbound traffic to your Azure Virtual Machines. This reduces exposure to attacks while providing easy access when you need to connect to a VM.

123

A company is using containers for deploying all of its web applications. During a security audit, you notice that Microsoft Defender for Cloud is not being used properly to provide misconfigurations related to containers. For which resource can you NOT use Microsoft Defender for Cloud to secure the containers?

a) Azure Kubernetes Service (AKS)

b) Container hosts (VMs running Docker)

c) Azure Container Registry (ACR)

d) Azure Container Instance (ACI)

Azure Container Instance (ACI) does not use Microsoft Defender for Cloud. ACI is a service that allows you to run containers in the cloud without using VMs.

124

You have an Azure environment. You need to create a new Azure virtual machine from a tablet that runs the Android operating system. **What are three possible solutions? Each correct answer presents a complete solution.** NOTE: Each correct selection is worth one point.

a) Use Bash in Azure Cloud Shell.

b) Use PowerShell in Azure Cloud Shell.

c) Use the PowerApps portal.

d) Use the Security & Compliance admin center.

e) Use the Azure portal.

125

Azure Site Recovery provides fault tolerance for virtual machines. Instructions: Review the underlined text. If it makes the statement correct, select "No change is needed." If the statement is incorrect, select the answer choice that makes the statement correct.

a) No change is needed.

b) disaster recovery

c) elasticity

d) high availability

Azure Site Recovery helps ensure business continuity by keeping business apps and workloads running during outages. Site Recovery replicates workloads running on physical and virtual machines (VMs) from a primary site to a secondary location.

126

An Availability Zone in Azure has physically separate locations [across two continents.] Instructions: Review the underlined text. If it makes the statement correct, select "No change is needed." If the statement is incorrect, select the answer choice that makes the statement correct.

a) No change is needed.

b) within a single Azure region

c) within multiple Azure regions

d) within a single Azure datacenter

Availability Zones is a high-availability offering that protects your applications and data from datacenter failures. Availability Zones are unique physical locations within an Azure region.

127

A systems ability to scale dynamically is called:

a) Agility

b) Elasticity

c) Extendibility

When the system is elastic that means it can adjust its processing power to match the demand. This means the system can allocate and deallocate resources dynamically.

128

Horizontal Scaling and Vertical Scaling are two types of scaling in Azure?

True ➤ **False**

Horizontal vs vertical scaling

Auto-scale only scales horizontally, which is an increase ("scale out") or decrease ("scale in") in the number of VM instances.

Horizontal is more flexible in a cloud situation as it allows you to run potentially thousands of VMs to handle load.

In contrast, vertical scaling is different. It keeps the same number of VMs but makes the VMs more ("scale up") or less ("scale down") powerful.

129

Which of the following is correct Lifecyle of Azure Services:

1 | **Private preview** > **Public preview** > **Generally available (GA)**

2 | **Dev preview** > **Public preview** > **Generally available (GA)**

130

You can create Group Policies in Azure Active Directory (Azure AD).

True → False

131

You can join Windows 10 devices to Azure Active Directory (Azure AD).

True → False

132

You can join Android devices to Azure Active Directory (Azure AD).

True   False →

133

Which resources can be used as a source for a Network security group inbound security rule?

a) Application security groups only

b) IP Address only

c) Service Tags only

d) IP Addresses, Service tags and Application security groups

134

You have an Azure subscription named Subscription1. You sign into the Azure portal and create a resource group named RG1. From Azure documentation, you have the following command that creates a virtual machine named VM1.

```
az vm create --resource-group RG1 --name VM1 --image UbuntuLTS --generate-ssh-keys
```

You need to create VM1 in Subscription1 by using the command.

Solution: From the Azure portal, launch Azure Cloud Shell and select Bash. Run the command in Cloud Shell.

Does this meet the goal?

Yes ➔   No

135

You have an Azure subscription named Subscription1. You sign into the Azure portal and create a resource group named RG1. From Azure documentation, you have the following command that creates a virtual machine named VM1.

```
az vm create --resource-group RG1 --name VM1 --image UbuntuLTS --generate-ssh-keys
```

You need to create VM1 in Subscription1 by using the command.

Solution: From a computer that runs Windows 10, install Azure CLI. From a command prompt, sign into Azure and then run the command.

Does this meet the goal?

Yes ➔ No